Examining the Effect of Context on Responses to Social Interaction

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Examining the Effect of Context on Responses to Social Interactions

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy
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Abstract

The ambiguous nature of social interactions between coeds may lead to under reporting of sexual harassment. Sexual harassment has been studied using mostly cross-sectional methods for over 30 years. However, despite decades of research, prevalence rates of sexual harassment have been found to vary considerably across and within studies. This inconsistency in findings makes drawing conclusions about the prevalence of sexual harassment challenging. Thus, the focus of the field should shift to identifying what behaviors are perceived to be sexual harassment and how that perception may vary by context. To reduce the ambiguity surrounding the labeling of an interaction as sexual harassment, experiments are needed to isolate unique facets of an interaction. Developing a greater understanding of what occurs when someone is sexually harassed is warranted given that the occurrence of sexual harassment has numerous negative consequences for everyone involved. Cognitive appraisals and changes in negative emotional affect were examined in undergraduate women. Participants were randomly assigned to either a control (non-sexual harassment interaction) or experimental (sexual harassment) condition that utilized validated video stimuli developed by the researcher. Context was also manipulated as both behavioral interactions took place in a classroom setting and a party setting. Learning the internal processes that occur during the event-moment of sexual harassment can lead to the development and dissemination of guidelines for college students regarding what constitutes sexual harassment within and across contexts. Results from this line of research can inform prevention programming for college students.
Negative Consequences of Sexual Harassment

Over 100 universities and colleges are under investigation for violations in their handling of reported sexual violence or harassment, i.e. violating Title IX (Bagenstos, 2015). Title IX is a law from the 1972 Education Amendments that specifically seeks to protect against gender-based violence and harassment in educational settings (20 U.S.C. 1681(a)). Title IX of the Education Amendment actually prohibits a range of behaviors considered to be sexual discrimination in education, encompassing gender discrimination and sexual harassment of students as well. It is an extension of Title VII of the Civil Rights Act of 1964 (EEOC, 2009) which defines sexual harassment as gender harassment, unwanted sexual attention, direct requests for sexual favors, and sexual coercion such as *quid pro quo* requests for sexual favors. In 2011, Title IX received a considerable amount of media attention as universities began facing lawsuits for the mishandling of sexual harassment and sexual assault allegations (Ali, 2011). The Assistant Secretary of the Unites States defined sexual harassment as also encompassing a number of sexually violent acts including sexual battery, coercion, and assault (Ali, 2011). This drastically increased the breadth of what legally falls under the umbrella term of sexual harassment. Sexual harassment has been studied using epidemiological and cross-sectional methods since these laws have been enacted. However, despite decades of research, prevalence rates of sexual harassment have been found to vary considerably across studies and this is not necessarily a reflection of changing patterns of behavior but potentially a reflection on the actual research that has been conducted. This inconsistency in findings across studies makes sexual harassment research very challenging. The purpose of this study is to examine observers’ judgments of potential sexual harassment using a
vignette methodology in an analog laboratory situation, in an attempt to connect several disparate literatures. The design of the study is driven by the Cognitive Relational Theory of Stress (CRTS) which emphasizes the interaction between a person and their environment when a stressor occurs in order to understand the eventual psychological outcome.

Thus, the field needs to take a step back and focus on increasing understanding of what exactly sexual harassment is and how it may vary by context. Additionally, the immediate effects of sexual harassment have surprisingly not been studied. Developing a more intricate understanding of what occurs when someone is sexually harassed is warranted given that there are extensive assertions that the occurrence and claims of sexual harassment are costly to those harassed, those accused, and institutions that have a responsibility for the safety and success of their students.

Extant research on sexual harassment has focused on a number of different issues including associated negative consequences which inherently have gender differences and are impacted by differing definitions. Sexual harassment has been documented to be associated with a number of negative consequences. In terms of negative consequences, there are societal costs, via reduced work-place productivity, lawsuits, and educational attainment, not to mention the costs to the individuals directly involved. Previous research on sexual harassment has demonstrated relationships to negative outcomes for targets, often referred to as victims, and has noted work-related negative consequences (Bartlett & Bartlett, 2011; EEOC Annual Report, 2010; Fasting, Chroni, & Knorre, 2014). There is also a body of research about initiators, often referred to as perpetrators, of sexual harassment and associated negative consequences. Men have historically been identified as being more likely to engage in sexual harassment than women, resulting in the majority of research on the topic focusing on women as the targets.
(Hendrix, Rueb, & Steel, 1998). However, men were more likely to be perceived as engaging in sexual harassment when compared to women engaging in the same behavior in a study on perceptions of sexual harassment in the Air Force (Hendrix, 2000). In the same study, men were less likely to perceive a situation as sexual harassment than women. This suggests that definitions of sexual harassment and therefore the perception of its occurrence differ by gender which can put men who are accused at a particular disadvantage. The occurrence of sexual harassment can have negative consequences on targets, initiators, businesses, institutions, and society at large.

**Negative Consequences for Targets**

Sexual harassment of targets has been associated with a range of negative consequences from an increased sense of loneliness to increased rates of psychopathology and even physical illness (Cortina, Swan, Fitzgerald, & Waldo, 1998; Huerta, 2006). Research on college students who have experienced sexual harassment has identified symptoms of PTSD and anxiety, and feelings of powerlessness and hopelessness (deLara, 2012; MacKusick & Minick, 2010). Depression as a negative outcome for employees who are sexually harassed is well documented (Willness et al., 2007; Murdoch, Pryor, Polusny, & Gackstetter, 2007; DeWall, Gilman, Sharif, Carboni, & Rice, 2012). Feelings of loneliness have been suggested to occur when targets think they are the only ones being harassed or that they are the only ones reacting negatively (Hitlan, Schneider, & Walsh, 2006). Further, research suggests that these consequences can be long lasting and detrimental to one’s self-image (McMullin, Worth, & White, 2007).
There is also support for the association between sexual harassment and a number of suicide-related behaviors (SRBs) across diverse populations. Most recently, a study on college women found moderate associations between sexual harassment and suicidal ideation, making a suicide attempt, and non-suicidal self-injury (NSSI) (Brown Hangartner, 2015). A study of European physicians found that women who reported experiencing sexual harassment were more than three times as likely to report experiencing suicidal ideation in the six months following the experience than those who did not report experiencing sexual harassment (Fridner et al., 2009). This study demonstrated that even women who are highly educated and in respected fields could experience the most negative consequences associated with sexual harassment. A 10-year follow-up study on veterans found that those who reported experiencing sexual harassment while in the military were 2.8 times more likely to make a suicide attempt in the decade following their experience than those who did not experience sexual harassment while in the military (Gradus et al., 2012). In a study on Swedish adolescents, those who experienced sexual harassment had an increased likelihood of engaging in self-harm behavior than those who did not (Landstedt & Gadin, 2011).

The costs to students who are sexually harassed have also been documented. An important factor that affects the success of women in college is experiencing sexual victimization. A study looking at the relationship between academic performance and sexual victimization found that those who were victimized during their first year in college were three times more likely to have a grade point average (GPA) below 2.5 (Jordan, Combs, & Smith, 2014). Additionally, the level of psychological distress experienced by women was found to be related to drop-out rates (Smith, White, & Holland, 2003).
**Negative Consequences for Initiators**

Although less often considered, sexual harassment may also have negative consequences beyond just the target but on initiators and even suspected initiators (Watkins, Smith, & Aquino, 2013). Men and women have reported feeling fearful of being accused of sexual harassment when the definition adopted by an organization is written too broadly (Hersch, 2011, SHRM, 2006). Furthermore, when a workplace romance dissolves, there is a risk of a sexual harassment complaint, and some research suggests that males and those in a position of power are at greater risk of being accused of sexual harassment (Pierce & Aguinis, 2001). Those who are accused of sexual harassment face the possibility of losing their jobs, living with tarnished reputations, and even going to jail (Omonijo, Uche, Nwadiafor, & Rotimi, 2013; Sbraga & O'donohue, 2000; European Commission, 1998). This highlights the importance of ensuring everyone at an organization or institution understands what behaviors constitute sexual harassment through training and education (Watkins, et al., 2013). Finally, an accusation can leave a permanent mark on the initiator’s reputation, even when an investigation finds no evidence of sexual harassment.

**Workplace Costs**

Negative consequences go beyond just the target and the initiator in a possible sexual harassment interaction. There is extensive research on the costs of sexual harassment in the
workplace (Pina & Gannon, 2012). Reduced job satisfaction of all employees has been frequently cited (Lapierra, Spector, & Leck, 2005) following sexual harassment whether they were directly involved or not (Schneider, Swan, & Fitzgerald, 1997). It has also been suggested that when one becomes less satisfied with their job, they are also likely to feel less loyal and committed to the organization where they work (Willness, et al, 2007). According to the meta-analysis by Willness and colleagues (2007), less commitment to one’s workplace has been associated with higher rates of absenteeism and task avoidance which inevitably results in lower productivity (Lenghick-Hall, 1995). At the extreme end, targets of sexual harassment have reported engaging in counter-productive work behaviors like stealing, being uncooperative with co-workers, and neglecting responsibilities which can directly cost organizations (Gruber & Smith, 1995).

As mentioned, depression is often experienced by targets of sexual harassment (Willness et al., 2007) and there is research that estimates the cost of depression to workplaces to be $51 billion in 2000 (Birnbaum, Leong, & Greenberg, 2003). Efforts have been made to quantify the costs of psychiatric disorders and even sexual harassment. An employee living with depression related to sexual harassment is a “cost” to the organization even if they do not initiate a lawsuit. It is estimated that the cost to an organization is $22,500 in productivity per person sexually harassed in an organization (Roth, Bobko, & Mabon, 2001) and that does not even take into account legal costs. The costs associated with sexual harassment lawsuits have been estimated to be $6.7 million per Fortune 500 company (Sandroff, 1988).

There are numerous costs of sexual harassment in addition to how it affects targets and initiators. While lawsuits first come to mind when considering the costs of sexual harassment, society as a whole is detrimentally affected when productivity at work and educational
attainment is negatively impacted. However, all of these negative consequences are based on an unstable foundation because it is unclear what the prevalence of sexual harassment actually is. Clarifying the ambiguity of what constitutes sexually harassing behaviors across contexts is an important first step to mitigating these consequences.
Prevalence of Sexual Harassment

In order to determine the prevalence of any phenomenon, it must be carefully operationalized and accurately measured. However, this is challenging given that the definition of sexual harassment has been in flux since 1964. Thus, it is not surprising that reported prevalence rates for sexual harassment have varied dramatically. To explore why prevalence rates are so inconsistent in the literature, an overview of various issues in methodology that are believed to impact reported prevalence rates is presented here. Some of the problematic issues (e.g. possible under or over reporting) in the determination of sexual harassment prevalence have been priming effects of definitions, culture and stigma, choice of instrumentation, instructions provided to participants, maturation effects, and settings where sexual harassment has taken place. Each of these factors will be discussed in the context of how ambiguity over what is perceived to be sexual harassment is an underlying issue.

Over Reporting

Several of these problematic issues may contribute to “over reports” of the prevalence of sexual harassment. It is unknown whether over reporting or accurate reporting of sexual harassment is occurring when participants are primed by being provided the legal definition of sexual harassment prior to being asked to report on prevalence. Participants can be primed to respond a certain way because they are aware of the purpose of the study and want to provide responses for which they believe the researcher is looking, known as response bias (Furnham,
Participants may also have a limited understanding of what constitutes sexual harassment that a provided definition broadens at the time data is collected, however many definitions of sexual harassment exist and examples are not always provided. Furthermore, a meta-analysis on the differences between legal definitions of sexual harassment and self-generated definitions of sexual harassment found only moderate overlap (Saunders, Huynh, & Goodman-Delahunty, 2007). The authors found that lay persons’ self-generated definitions of sexual harassment did not include the issue of power differential, frequency of sexual harassing behaviors, or persistence; three consistent points in legal definitions of sexual harassment. This suggests that when presented with these additional considerations in the conceptualization of sexual harassment, participants may report higher rates. However, rates from studies that provide definitions may not be tapping into whether participants feel they have been sexually harassed. This is an important distinction as the very definition of sexual harassment includes the specifier “unwelcome” according to Title VII of the Civil Rights Act of 1964 (EEOC, 2002). One study looked directly at the effect of providing a definition to participants on prevalence rates. Interestingly, after study participants read the legal definition of sexual harassment, prevalence rates in a college sample increased from 57% to 77% (Hull, Sheplavy, & Hull, 2015), suggesting that changing knowledge about what constitutes sexual harassment can lead to elevated reporting rates.

Instrumentation or the measures chosen by a research team can lead to potential over-estimates of sexual harassment. Prevalence rates of sexual harassment can be higher when measures using behavioral indicators are used exclusively (Nielsen, Matthiesen, & Einarsen, 2010). A couple of reasons using behavioral indicators may lead to higher reported rates is that participants feel more comfortable endorsing objective experiences without having to identify as
a victim. In effect, this methodology allows participants to circumvent any of their own negative attributions that they might have about having possibly been a victim, thereby bypassing any subjective perspective which might lead them to justify behavior directed toward them as appropriate and thus not report the behavior as sexual harassment. It’s been suggested that behavioral indicators can lead to higher reporting by allowing the participant to report on experiences without actually having felt that they were a victim (Kokubin, 2007). Measures of the prevalence of sexual harassment that use behavioral indicators also can be conceptualized as objective measures (Salin, 2001). Objective measures have been reported to result in higher reporting (Neilsen et al, 2010). In fact, in a study on middle school students, it was estimated, based only on the endorsement of at least one of nine potentially sexual harassing behaviors experienced, that 80% of students will have experienced sexual harassment before graduating high school (Peterson & Hyde, 2010). In a study on college women and peer sexual harassment, 81% of the sample endorsed at least one behavioral indicator of sexual harassment (Brown Hangartner, 2015). Similarly, another study on college students reported an astonishing prevalence rate of 97% when using a behavioral item to measure sexual harassment (Yoon, Stiller Funk, & Kropf, 2010).

Instructions presented to participants regarding how they should respond to questions about sexual harassment can lead to varying rates of endorsement. When researchers specify a specific time period for participants to refer to when reporting sexual harassment, it is likely that the longer the time period that a participant is expected to refer to is going to result in higher reported prevalence rates. This could be due to the fact that with more time, there is more opportunity for the occurrence of sexual harassment. There is also evidence that retrospective reporting of symptoms tend to be higher than ecological momentary assessments (EMA) of the
same symptoms, which would indicate that retrospective reporting may lead to over reporting (Van den Bergh & Walentynowicz, 2016). This assertion, however, likely warrants empirical investigation. It is possible that retrospective reporting of sexual harassment may be subject to the same biases. For example, the astonishingly high rate of 97% was reported in a study that asked about the lifetime occurrence of sexual harassment (Yoon, et al 2010). This appears to likely be an example of over reporting especially when compared to another study on university students that reported a prevalence rate of 33% when students were asked to refer back to all of their experiences from the time of the study back to the age of 16 (Klein, Apple, & Kahn, 2011). Perhaps, providing a more focused time period with time anchors better aided recall of experiences while the vague lifetime experience could have contributed to greater struggles in trying to remember. It seems unlikely that the difference between the two studies is due to extensive harassment prior to the age of 16. Exposure to definitions and how sexual harassment is measured may increase or alleviate the ambiguity surrounding sexually harassing behaviors.

**Under Reporting**

On the other hand, a number of problematic issues can contribute to lower endorsements of sexual harassment. Priming can lead to under-reporting of sexual harassment. For example, if the phrase “sexual harassment” appears on the consent form or in the instructions given to participants, how they respond to measures might be affected by typical preconceived notions about the construct. It is possible that even when presented with the definition of sexual harassment, reports of its prevalence are lower because of the tendency of most individuals to think of sexual harassment as quid pro quo and not include the less overt forms in one’s internal schema (Dillon, Adair, & Brase, 2015). An example of a behavior that is frequently not reported
as sexual harassment because it is not included on standard measures is when someone is treated differently because of their gender such as when women receive accolades at work based on their appearance rather than on their productivity (Dellinger & Williams, 1997). Hence, measures that list only extreme behavioral indicators of sexual harassment may not be all inclusive as they may miss more subtle sexual harassment that is not easily recognized (Neuberger, 1999). Saunders and colleagues (2007) found that lay persons’ self-generated definitions of sexual harassment come with more qualifiers that limit what counts as sexual harassment. Three main differences were that lay persons included in their definition the importance of intent of the initiator, fairness and respect, and appropriateness for the behavior given the context. It has also been suggested that the sexual harassment construct’s association with the legal system is a primary reason why those who are sexually harassed are primed to not be comfortable labeling their experience as such (Fitzgerald, Swan, & Magley, 1997). Research has shown that there is an emotional cost to victims who label an experience as sexual harassment so underreporting when seeing the phrase “sexual harassment” may actually be a protective mechanism triggered by seeing the phrase (Barak, Fisher, & Houston, 1992). If, when participating in a study, an individual feels that they are being forced to identify as a victim of sexual harassment, they may under report their experiences to avoid secondary victimization (Ullman, Townsend, Filipas, & Starzynski, 2007). Neilsen and colleagues’ (2010) meta-analysis on methodological issues in the study of sexual harassment noted lower endorsements when participants are asked to self-label their experience as sexual harassment. Several studies have reported the drastic differences in prevalence rates obtained via objective behavioral indicators and subjective measures that require a participant to indicate that sexual harassment had occurred. For example, while 81% of a sample of college women endorsed having experienced behavioral indicators of sexual harassment, only 27%
responded positively to a question asking if they had been sexually harassed (Brown Hangartner, 2015).

Priming can lead to lower endorsements of sexual harassment as a result of participants’ previous experiences that interact with stimuli presented during a study on prevalence rates. Individuals in sexualized environments, where there is frequent sexual talk and/or sex-based conversation, may be primed to believe that a certain level of gender-based or sex-based conversation is normal. These individuals will then be primed to have a higher threshold for labeling an experience as sexual harassment (O’Donohue, 1997). Individuals with traditional gender roles have been found to report lower rates of sexual harassment than those with more egalitarian views (Herzog, 2007). Those with traditional gender roles may find certain interactions that reinforce gender inequality to be acceptable, especially behaviors that would be considered gender harassment. A meta-analysis suggested that one is less likely to label an experience as sexual harassment if they are primed by having not witnessed the initiator harassing other targets at their organization (Stockdale, Vaux, & Cashin, 1995). Targets, when faced with potentially sexually harassing behaviors from an initiator, may assume they have done something to be singled out by the initiator and then may be uncomfortable reporting their experience as sexual harassment because they have not seen the initiator engage in those behaviors toward others. All of these mitigating factors might add ambiguity to what otherwise may have been defined as sexual harassment.

Interestingly, providing participants the legal definition of sexual harassment prior to asking them to report on sexual harassment prevalence can lead to lower reporting too by priming participants to conceptualize sexual harassment in a potentially narrow way. Research on sexual harassment prevalence in Australia found that providing the legal definition to
respondents resulted in lower rates of reported sexual harassment (AHRC, 2009). The argument can be made that providing a definition to participants might lead to lower endorsement of sexual harassment, as personal conceptualizations of sexual harassment may be broader than legal definitions and rarely overlap (Saunders et al., 2007). For example, the importance of intent or malice on the part of the initiator has been found to be an important variable when labeling an interaction as sexual harassment and standard definitions do not include any mention of intent (Zapf & Einarsen, 2004). Additionally, when a potentially sexually harassing experience takes place in a context that lacks proscribed behavior limits, such as a party or bar, targets may be less likely to label their experience as sexual harassment. Sexual harassment definitions often refer to work environments and personal understandings may not extend proscribed behaviors from a work environment to other contexts. The context in which sexual harassment takes place may in itself add ambiguity.

According to some researchers, it is possible that reported prevalence rates are underestimates due to stigma and fear stemming from culture. Cultural differences may provide an understanding for why some participants are reluctant to report being sexually harassed. Cultures that are patriarchal in nature systematically place female figures under the power of male figures (Gneezy, Leonard, & List, 2009). In these cultures, targets may not believe that they have a right to complain about their treatment or believe their treatment is reportable as a result of cultural messages that male figures actions are considered justifiable and/or that male figures actions can be triggered by inappropriate behavior of female figures (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). One study found that there were specific behaviors reported as sexual harassment in the U.S. but not in Latin America (Shupe, Cortina, Ramos, Fitzgerald, & Salisbury, 2002). For example a number of studies have cited that Latina women,
members of a patriarchal culture, are less likely to report being sexually harassed (Sigal et al., 2005; Schwartz & Hunt, 2011). It’s been noted that some patriarchal Latina cultures discourage females to be assertive or question males’ treatment of them (Schwartz & Hunt, 2011). Cultural norms may also reinforce men to be initiators and aggressors in romantic situations, and as such should be taken into account in cross-cultural research. Other patriarchal cultures that have been identified in the field of sexual harassment are Turkish and Pakistani (Wasti et al., 2000).

Within the U.S., a comparatively egalitarian country, fear and ambiguity have been found to play a role in the under reporting of sexual harassment (Toker, 2016). The sociocultural theory of sexual harassment (Malovich & Stake, 1990) considers sexism to be the underlying cause. The theory posits that gender inequality is the driving force of sexual harassment, as it is a mechanism to use fear induction to manage gender norms (Thomas & Kitzinger, 1997). In fact, an environment high in sexism has been found related to higher rates of acceptance of rape myths (Begany & Milburn, 2002). Belief in rape myths by women is related to more tolerance towards potentially ambiguous sexually harassing behavior by men (Chapleau, Oswald, & Russell, 2007). Thus, ambiguity, fear, and perceived gender norms can lead to the under reporting of sexual harassment. Cantalupo (2011, p. 213) has reported “fears that they will not be believed” and “lack of proof” as major reasons targets do not report sexual harassment. The more ambiguous the event of potential sexual harassment is the more fear there is in reporting it (Fiske, et al., 1995). Fear of retaliation has also been reported as an explanation for the under reporting of sexual harassment (Bergman, Langhout, Palmieri, Cortina, & Fitzgerald, 2002). A study on employees who had been sexually harassed found that 95% were too scared to formally report their experience (Raynor, 1999). If almost the entire sample reported being too afraid to formally report their experience, it’s possible that the reported prevalence of sexual harassment
(18%) was an under report for fear of their responses getting back to their harasser or superiors at work (Brener, Billy, & Grady, 2003). Studies on the lack of reporting sexual harassment have noted that some respondents will minimize an experience that made them uncomfortable and therefore not label it as sexual harassment leading to possible under estimates of sexual harassment (Collinson & Collinson, 1996).

Interestingly, instructions provided to participants by researchers can also result in lower reporting of sexual harassment. Instructions provided can provide strict boundaries on the role of the initiator, frequency of sexual harassment necessary to be counted as sexual harassment, duration of harassment needed to be counted, time period referenced, and environment to which the target refers. For example, when initiator characteristics are specified when asking about prevalence rates, reports may fail to include all possible sources of sexual harassment. Huerta and colleagues (2006) compared prevalence of sexual harassment by role of initiator and found that of the women who reported being sexually harassed, 75% identified the initiator as a peer and 25% identified the initiator as staff or faculty. The overall prevalence of sexual harassment in this sample could be portrayed in two very different ways had the researchers only asked the students to report on sexual harassment by peers or by faculty, or did not ask for this additional information. In fact, rates of sexual harassment reported by Folkman and colleagues (1988) are presented as conclusions about sexual harassment in higher education; yet their survey failed to ask about initiators who were students or peers, just faculty and superiors, likely resulting in an under estimate of sexual harassment in this setting. Similarly, a study on sexual harassment in restaurants reported rates for this setting; but only asked study participants about sexual harassment by employees, disregarding sexual harassment from customers (Giuffre & Williams, 1994). Instructions provided by researchers can also lead to under reporting of sexual
harassment if the instructions focus on a very specific duration and frequency of behaviors that needs to occur in order to count as sexual harassment (Arvey & Cavanaugh, 1995). In a study that used an operational definition of harassment that specified a frequency of one act per week for at least six months in order to qualify as sexual harassment, a prevalence rate of only 14% was reported and when using any even stricter definition of two experiences of sexual harassment per week in order to qualify as sexual harassment, a rate of 7.8% was reported (Mikkelsen, & Einarsen, 2001). As presented, numerous studies demonstrate how instructions can result in lower or higher reporting of sexual harassment prevalence rates.

Additionally, researchers who use a single item to assess the prevalence of sexual harassment are also potentially reporting under estimates. A national study on college women reported a prevalence of 51%; however that study asked a single question regarding hearing sexist remarks while on campus (Fisher, Cullen, & Turner, 2000). A sexist remark is one of many behaviors that can be considered sexual harassment. Due to the use of a single item and not asking about a number of other sexually harassing behaviors, it’s likely the prevalence rate reported by the authors is an underestimate. Another study that compared prevalence rates between using an individual item and behavioral indicators found a very large discrepancy (Fitzgerald, Magley, Drasgow, & Waldo, 1999). In this latter study, when participants were asked if they had been sexually harassed, only .06% responded in the affirmative, while 29% responded in the affirmative to a list of behavioral items.

As can be seen from these examples of studies with different prevalence rates of sexual harassment, research on the prevalence of sexual harassment is fraught with methodological variations involving definitions used, instrumentation, instructions provided to participants, and target characteristics; the evidence suggests that these variations influence the rate of
endorsement of sexual harassment. The vast majority of research on sexual harassment is also cross-sectional thus retrospective in nature and heavily based on memory recall (Arvey, et al., 1995). Some authors have suggested limiting the time period to which participants refer, to just 12 months for greater accuracy (Arvey, et al., 1995). In the same study, examining methodological issues in sexual harassment research, the authors suggested that events may not be considered sexual harassment at the time, but could later be categorized and reported as such. This change in personal appraisal of a past experience has been noted in more recent research too (Blackstone, Houle, & Uggen, 2014). This points out how reported prevalence rates based on retrospective reports may not accurately reflect the experience of actual sexual harassment based on the moment of the occurrence of the interaction. In summary, most research on sexual harassment over the last 30 years has been retrospective and it is still unclear whether we know enough about prevalence of these behaviors and the ways that women are experiencing them.

The unfortunate reality of the sexual harassment literature is that very little research has actually looked at the event-moment, or what can be described as the real time experience of potentially sexually harassing behavior when it is occurring. What is “known” about sexual harassment in the literature is based on participant recall biases, hindsight appraisals, and a number of confounding variables that may affect how someone responds to a measure of sexual harassment at a later time. This suggests that the field of sexual harassment research has proceeded too quickly without first clearly defining and understanding what sexual harassment actually is and what needs to be measured. It appears that an important step in studying any phenomenon, operationalization and accuracy of measurement, needs to the immediate priority in the field of sexual harassment.
Very little is known about how an observer appraises a sexually harassing experience in the moment and the myriad of responses that can follow. In order to advance sexual harassment prevention efforts and prevent the consequences of sexual harassment, research is needed to better understand how people conceptualize sexual harassment and what are the processes that occur in the event moment of sexual harassment. Thus, the field needs to back-up and do a better job of understanding what sexual harassment is and the logical place for this is to more closely examine the event-moment when the presumed sexual harassment behaviors occur. Two theoretical approaches that will be used to guide this current study and identify important processes in the event moment of putative sexual harassment behaviors are the Cognitive Relational Theory of Stress (CTRS) (Lazarus & Folkman, 1987) (see Figure 1.) and the psychological contract (Rousseau, 1990). Examining the event moment of sexual harassment using these theoretical approaches is an important first step to conducting an a priori, empirical investigation that is theory driven.
Theoretical Approach to Studying Sexual Harassment

Previous research on how targets respond to sexual harassment has explored appraisals of stress, though predominately in cross-sectional designs (Cantisano, Dominguez, & Depolo, 2008). Because every definition of sexual harassment includes the qualifiers “unwanted” or “unwelcome”, an appraisal that the behavior is bothersome is an essential part. However, a behavior or interaction may be unwelcome for a number of reasons such as that it is threatening, challenging, or boring. Each of these cognitive appraisals is likely to lead to different emotional responses. Other research on sexual harassment has found that the reappraisal that follows an emotional response and subsequent evaluation of one’s coping resources may intensify or diminish their original cognitive appraisal (Nurius, Norris, Young, Graham, & Gaylord, 2000). As the time between the event (sexual harassment) and the reporting on cognitive appraisals and emotional responses increases, other factors are likely influencing what a target reports as their response to sexual harassment and whether they even label the experience as such. Examples of other factors that targets take into consideration are the environment’s climate regarding social interactions (Malamut & Offerman, 2001) and the target’s perception of what they can expect within an organization or with another person, known as the psychological contract (Robinson & Rousseau, 1994).
Cognitive Relational Theory of Stress (CRTS)

The CRTS suggests that when a stressor occurs in a given environment, a number of processes occur that taken together result in the emotional response and thus an associated psychological outcome. There are three meta-theoretical assumptions in the CRTS: transaction, process, and context. The transaction assumption is based on the premise that a person interacts with their environment and that this interaction is reciprocal in nature. Appraisals and coping are processes that are never static because of the continual interaction between a person and their environment. Finally, the context assumption underscores the interdependency of variables that are involved in the emotional response to a stressor. Person variables noted to impact how one responds to stress include personal values, commitments, goals and general beliefs; which can be
further broken down to self-esteem, mastery, sense of control, tendency to trust, and existential beliefs (Lazarus, 1990). Commitments and beliefs have been conceptualized as being especially relevant with respect to personal resources (Lazarus, 1991). Very few of these person variables have been measured with the intent to empirically demonstrate their impact on appraisals though. Locus of control and mastery are the exceptions, as they have been directly related to appraisals of stress whereas an internal locus of control and high sense of mastery are inversely related to stress appraisals (Chang, 1998; Nahum-Shani, Henderson, Lim, & Vinokur, 2014). Environment variables said to influence stress appraisals consist of demands, constraints, temporal aspects, and resources, which encompasses the social support network (Lazarus, 1990). Additionally, the CRTS has been expanded upon whereas certain characteristics have been identified about demands in an environment that are more likely to lead to perceptions of threat (i.e. demands that are difficult, unexpected, ambiguous, something that which cannot be prepared for, has a time pressure) (Jerusalem, 1990).

The CRTS is based on the premise that to understand an emotional response, the relationship between a person and their environment must be looked at or in other words, considering one without the other is to ignore the transactional process of responses to stress (Lazarus, et al, 1987). Historically, this theory has been used to understand threatening events which can only be understood to be threatening given a specific person and their environment. To say “person A feels threatened” fails to provide insight into when, where, and possibly why person A feels threatened. It is an incomplete statement that fails to capture the underlying transactional process on which the CRTS is based. The interaction itself is not threatening; rather a person will appraise a situation as such based on their own history, emotional response, assessment of the environment, and their coping resources. The CRTS purports that this
interaction between a person (person-factors) and their environment (environmental-factors) is mediated by two processes, cognitive appraisals and emotional responses.

**Cognitive Appraisals**

Cognitive appraisals are one’s interpretation of an event and the effect it may have on their well-being, given their perception of one’s own abilities in the context of an event. Appraisals are subjective in nature and have been found to be strongly associated to emotional responses (Yap & Tong, 2009). Appraisals were first conceptualized as consisting of three dimensions, perceived valence of an event, either positive or negative, how activating the event is (i.e. if the person is aroused or relaxed), and the individual’s perception of the amount of power that they have over the event, either dominant or submissive (Block, 1957). Further research has conceptualized appraisals as being separate from emotion which implies a need to reassess the original dimensions of appraisals. The concept of appraisal valence has expanded to three broad categories: stressful, benign, or irrelevant (Lazarus, 1990). Other researchers have identified a number of other appraisals that incorporate the other dimensions (i.e. controllability now replaces perceived individual power) (Peacock & Wong, 1990; Smith & Ellsworth, 1985). Further differentiation comes in the form of distinguishing primary versus secondary appraisals, the latter of which takes into account one’s coping resources and physiological response (i.e. activation) (Folkman et al, 1986). While appraisals are often discussed in the context of stress and coping, Lazarus (1990) delineates the order of constructs as such that an emotional response follows a primary cognitive appraisal of a situation/stressor and then a second appraisal occurs which now incorporates one’s coping resources. For example, first an event occurs, then a
person cognitively appraises the situation and based on that appraisal, the person may engage in coping if the appraisal results in an assessment of the event as stressful. This initial appraisal of a situation is referred to as the primary appraisal and is often affected by a number of factors like whether the event requires one’s attention, perceived control, how predictable the situation is, and perceived obstacles (McHugo, Smith, & Lanzetta, 1982; Scherer, 1982, Lazarus, 1990).

**Emotional Responses**

Several questions are raised when trying to define emotions; the most basic ones being: what are emotions, should physiological states be included in the definition, and are they best understood as categories or dimensional (Lazarus, 1991). There is no agreed upon definition of emotions; however there are some overlapping components from different disciplines (Mulligan & Scherer, 2012). Emotions are complex and involve multiple systems. They are involuntary and can be triggered by both internal and external stimuli (Kleinginna & Kleinginna, 1981). These stimuli often trigger an affective state which can then be followed by physiological arousal; but some argue that cognitive systems sometimes lead to automatic or conscious labeling of one’s physiological arousal and this process triggers the subjective experience of an affective state (Rogan & LeDoux, 1996). Some examples of emotional responses include “angry”, “frightened”, and “guilty”. In the CRTS, emotional responses are viewed in the context of a system of continuous processes involving the person-environment interaction, cognitive appraisals, and coping (Lazarus, 1987). Additionally, given that the CRTS is an ongoing set of processes, consequences or short-term outcomes of an emotional response require consideration as emotional responses are inextricably linked to coping, which are linked to secondary
appraisals and thus are transient. A discussion of emotional responses in the context of the CRTS would be incomplete without acknowledging the relationship to coping. For example, first a stressor occurs in a given environment, then a person engages in a primary appraisal of the situation which may be based on their physiological response or cognitive interpretation and based on that appraisal, the person may engage in coping if the appraisal results in an assessment of the event as stressful, thus evoking an emotional response. Should the coping strategy used prove to be ineffective at regulating the emotional response, then a secondary appraisal is engaged, taking into account the lack of coping resources, which can intensify the emotional response and/or lead to long-term effects of the stressor. According to Lazarus and Folkman (1987), coping is seen as a mediator of emotional responses to a stressor. Coping is conceptualized as providing two functions, to change the person-environment interaction and to regulate an emotional response.

**Previous Applications of the CRTS**

The CRTS has usually been applied when studying potentially threatening stressors like sexual aggression, combat, and specific situations that occur in law enforcement training (Chan, Lam, Chow, & Cheung, 2008; McCarty & Lawrence 2016; Nurius et al., 2000; Waldrep & Benight, 2015), though a brief review will demonstrate its applicability to varying types of stressors and populations. The relationship among the person-environment interaction, cognitive appraisals, emotional responses, and coping as proposed by the CRTS has been supported in research on high-stakes testing, graduate school demands, workplace aggression, cancer diagnoses, and the prospect of exposure to HIV (Bowling & Eschleman, 2010; Jerusalem, 1990;
Kaufman, 2006; Laubmeier, Zakowski, & Bair, 2004; Peacock, et al., 1990). The CRTS has also been supported when applied to a variety of populations such as working adults, college athletes, professional Chinese athletes, parents, and problem internet users (Anshel, & Si, 2008; Mackler, Kelleher, Shanahan, Calkins, Keane, & O'Brien, 2015; Nicholls, Polman, & Levy, 2012; Oliver & Brough, 2002; Senol-Durak & Durak, 2016; Suls & Fletcher, 1985). Given the longevity of its application and its versatility, one would expect that the CRTS would also be applicable to looking at a person’s interpretation/response to potentially harassing behavior.
CRTS Applied to Sexual Harassment

Person Factors

Any person has an innumerable number of characteristics that they bring with them to the person-environment interaction, including their general disposition, history of similar stressors, and personal ideology/expectations which may affect how they appraise and respond to a stressor (Oliver et al., 2002). For example, a student may be likely to have the expectation that they receive attention based on their academic interests and only be approached by their peers regarding assignments or homework. Rousseau (1990) has referred to the process of how a person develops expectations about the behaviors of others in a given environment/organizational setting as the psychological contract. Included in their expectations may be the freedom to obtain their education without being sexually harassed (DeDreu, 1995). Similarly, having a history encountering a similar stressor has also been found to predict responses, especially in the area of sexual harassment. Specifically, participants who had been sexually harassed before responded to a video portraying sexual harassment in such a way as to suggest lingering post traumatic symptoms while participants with no such history responded in such a way as to suggest no symptomatology (McDermut, Haaga, & Kirk, 2000). An additional person-factor that has been researched and found to be predictive of responses to sexual harassment is holding feminist beliefs (Holland, et al., 2013). Targets who identify as feminists are more likely to label an experience as sexual harassment (Brooks & Perot, 1991), though it is
unknown if their appraisal and emotional response is similar to targets who do not identify as feminists. Finally, general disposition towards life is another person-factor that has been found related to target appraisals of stressors (Fletcher, Parker, & Manicavasagar, 2013; Thompson, & Kingree, 2010). Someone who generally finds their environment to be a dangerous place is more likely to appraise a stressor as threatening than someone who approaches their life less fearfully. This person-factor leads to the inevitability that some person-factors are specific to an event and/or environment; while others are less relevant.

**Environment Factors**

The environment or context, in which an interaction takes place, will consist of its own supports, constraints, demands, and temporal aspects that will have an effect on the person-environment interaction (Lazarus et al., 1987). Additional factors that have been cited to influence the person-environment interaction include perceived environmental tolerance of sexual harassment, gender of the initiator and degree of power differential between target and initiator (Settles, & O’Connor, 2014). A number of studies that have looked at perceived organizational tolerance of sexual harassment have found that environments perceived to be more tolerant of sexual harassment are related to persons in those environments reporting more negative appraisals of sexual harassment (Cortina, Fitzgerald, & Drasgow, 2002; Wasti et al., 2000). When a workplace is perceived to be tolerant of sexual harassment, it is possible that the person’s environmental expectations may not have been met, such as expected support for those who report being harassed. Inherent constraints of an environment perceived to be tolerant of sexual harassment might include narrow avenues of reporting a grievance that force a target to
directly address the initiator or provide incontrovertible proof (Rederstorff, Buchanan, & Settles, 2007). When an environment does not provide adequate support and/or includes constraints upon a person’s ability to cope, there is an increased likelihood of the person making stressful appraisals, having increased physiological arousal, having negative emotional responses, and engaging in maladaptive coping (Lazarus et al., 1987). In addition, when the demands of an environment exceed a person’s coping resources, appraisals of stress are likely to result (Felton, Revenson, & Hinrichsen, 1984). Demands within one’s place of work or school may include emotional display rules. These are setting rules on what emotions are considered appropriate in any given context (Grandey, 2000). A strong emotional response to being sexually harassed could violate the emotional display rule, which pressures the target to suppress negative feelings and display positive, integrative feelings even if they do not feel that way. People who experience this emotional dissonance between how they are feeling and what they are supposed to show are more likely to have difficulties regulating their emotions (Martínez-Íñigo & Totterdell, 2016). However, the same event in a different context, like in the privacy of one’s home would not include the same emotional display rules. As the environment has changed, so have the demands. This same example can also demonstrate how temporal issues play a role in cognitive appraisals. Appraisals of stressors have been found to change over time; both in the short-term and the long-term (Kidder, Lafleur, & Wells, 1995). If someone were sexually harassed at work, then hours later, when they were no longer in the environment in which the harassment occurred, their cognitive appraisal of the situation and their emotional response might be different as a result of a reappraisal. This might occur because, as proposed in the CRTS, the imminence of the perceived threat has been reduced (Lazarus et al., 1987). Thus, asking about cognitive appraisals and emotional responses in the immediacy of the stressor is
likely to reveal different information then asking about the same stressor at a later time. A later assessment of these constructs may not detect the initial response to the stressor; but instead be detecting the reappraisal of the stressor.

Cognitive Appraisals of Sexual Harassment

There are numerous cognitive appraisals a target can have when experiencing a potentially sexually harassing event. Given the multitude of factors that make every person-environment interaction unique according to the CRTS (Lazarus et al., 1987), each dimension of an event (i.e. time, place, others involved, expectations of normative behavior) may encompass a different cognitive appraisal. Because of its focus on processes and transactions, it’s not surprising that other researchers have assessed how sexual harassment is cognitively appraised within the framework of the CRTS in a number of ways. There is an abundant amount of research on the relationship between type of cognitive appraisal and various characteristics of sexually harassing behavior; though most has been cross-sectional and placed a greater focus on the relationships between appraisals, emotional responses, and coping strategies (Folkman, et al., 1986; Hitlan, et al., 2006; Malamut, et al., 2001; O'Leary-Kelly, Bowes-Sperry, Bates, & Lean, 2009; Rosen & Martin, 1998; Settles, Harrell, Buchanan, & Yap, 2011). In these retrospective studies, sexually harassing behaviors perceived to be more overt, less ambiguous, and occurring at greater frequency were more likely to be appraised as bothersome. Additionally, when the target perceived there to be more at stake for them to lose or greater risk to their safety, they were more likely to appraise the behavior as threatening (Settles, et al., 2011). Each of these studies used the CRTS as a guide for understanding how sexual harassment is appraised and how
those appraisals relate to emotional responses and coping. Cognitions of whether one should feel threatened or challenged during a potentially sexually harassing event and the importance or centrality of the event have been found to be predictive of coping strategy and emotional responses (Ysseldyk, Matheson, & Anisman, 2009). Unfortunately, most of the research on cognitive appraisals of sexual harassment is based on cross-sectional methodology which is fraught with issues of memory distortion, recall bias, and a lack of differentiation between primary and secondary appraisals (Knapp, Faley, Ekeberg, & Dubois, 1997). Evidence for the applicability of the CRTS in sexual harassment research also lies in longitudinal studies that suggest the experience of sexual harassment is reappraised overtime. With each reappraisal, a different emotional response may result as coping strategies are evaluated based on the outcome. The process of considering one’s coping strategies and their impact on an outcome is also known as secondary appraisals, according to the CRTS (Fitzgerald, et al., 1997; Glomb, Munson, Hulin, Bergman, & Drasgow, 1999). Secondary appraisals consider factors such as perceived capability in handling a sexually harassing event and obstacles that may be present in the environment that limit their perceived control over the situation (Baillien, Neyens, & De Witte, 2008). Baillien and colleagues (2008), in their study, again demonstrate the predictive validity of the CRTS in the context of sexual harassment by noting how coping strategies and constraints in the environment can change how one appraises sexual harassment, resulting in secondary appraisals that are quite different from primary appraisals. Cognitive appraisals of sexual harassment have also been found to mediate the relationship between sexual harassment and negative outcomes via emotional responses and coping (Langhout, Bergman, Cortina, Fitzgerald, Drasgow, & Williams, 2005).
Emotional Responses to Sexual Harassment

There is an abundance of research on the emotional impact of sexual harassment (Schneider, et al., 1997; Willness et al., 2007). However, emotional impact and a target’s emotional response to sexual harassment are not synonymous. The necessity to examine the emotional response to sexual harassment stems from the inherent transactional dynamic of a person in a given environment, interacting with an initiator who encompasses their own set of characteristics, and the process in which a target having a particular cognitive appraisal and emotional response, engages in certain coping strategies. The eventual emotional outcome/impact is not necessarily the same as the emotional response because of the additional cognitive appraisals and coping attempts that follow the initial emotional response. Emotional responses are not an end to a sequence of events, nor are they the beginning to understanding negative outcomes from sexual harassment. As Lazarus and Folkman (1987) explained, the CRTS provides a framework for appreciating the complexity of emotions and their role in a complex set of responses that a person may have internally and externally to a stressor. Research on emotional responses to sexual harassment using the CRTS has received less attention than how targets respond to or cope with sexual harassment (Ayres & Leaper, 2013; Charney & Russell, 1994; Cortina & Magley, 2003; Fitzgerald, Swan, & Fischer, 1995; Harned, 2000). Unfortunately, the research on emotions and sexual harassment has also been conducted in a disjointed manner. For example, a common self-report measure used in cross-sectional sexual harassment research, the Coping with Harassment Questionnaire (CHQ, Fitzgerald, 1990), has been used to assess emotional responses, cognitive appraisals, and coping strategies following sexual harassment; yet, researchers have not made distinctions between these separate but related
constructs collected within the same measure. Thus, while it is good that information about emotions was collected, understanding about internal processes following sexual harassment is not enhanced given that separate constructs are mixed together and referred to overall as “coping” (Cortina & Magley, 2009; Cox, Bennett, Tripp, & Aquino, 2012; Magley, 2002; Salin, et al., 2014). When researchers have focused more directly on emotions, vulnerable, enraged, shocked, and intimidated are some emotional responses to sexual harassment that have been identified (Blackstone, Uggen, & McLaughlin, 2009; Bunk & Magley, 2013; Dan, Pinsof, & Riggs, 1995; Gruber & Bjorn, 1982). Unfortunately, these emotions have been identified from research that has relied heavily on qualitative methods which lack agreed upon criteria in which to determine validity, partially due to the wide range of data collection methods that fall into this category (Noble & Smith, 2015). Additionally, some of the emotion constructs were assessed using measures with three or fewer items that had been developed solely for the study (Dan, Pinsof, & Riggs, 1995; Gruber et al., 1982). In other words, the authors did not use measures of emotions with established reliability and validity and used an inadequate number of items to adequately assess the breadth of a complex construct (emotions). Retrospective studies on emotional responses to sexual harassment have identified general psychological distress, feelings of panic, terror, guilt, humiliation, and disgust; but due to these methodological designs that rely on recall, it is unclear if the reported emotional responses resulted from poor outcomes related to the sexual harassment, the harassment itself, physiological responses, cognitive appraisals following the harassment, tried and failed coping strategies, or cognitive appraisals following coping attempts (Cortina, et al., 2002; Demir & Rodwell, 2012; Finnis, Robbins, & Bender, 1993).
In order to improve upon retrospective designs, written vignettes have been utilized to study how people perceive various aspects of sexual harassment. Using written vignettes allows for the opportunity to ascertain immediate cognitive and emotional responses to the portrayal of sexual harassment without having to depend on memory recall. Studies using written vignettes have focused primarily on how person-factors interact with environment-factors to predict appraisals of and emotional reactions to sexual harassment scenarios and have compared responses to control vignettes, ones that did not include sexual harassment (Gutek, Morasch, & Cohen, 1983; Malovich, et al., 1990). Despite this work not being theory driven, the relationships found in these studies between the person-environment interaction and emotional responses to written vignettes portraying sexual harassment were consistent with theorized relationships proposed by the CRTS. One study attempted to develop an exhaustive list of emotional responses and reactions to various sexual harassment scenarios in an attempt to predict coping strategies based on personality variables, or person-factors in CRTS terminology (Terpstra & Baker, 1989). In this study, the written vignettes presented hypothetical scenarios of sexual harassment and participants were asked to report on how they thought the target would respond. A wide range of emotional responses was reported because participants were allowed to answer in an open-ended fashion. Results showed that due to certain person-factors, like the target’s age and gender, participants expected the vignette targets to be more or less fearful and the target to feel more or less helplessness. They attributed these varying emotional responses to the same vignette to the influence of cognitive appraisals, like the threat of retaliation if they coped with the sexual harassment by using formal reporting procedures. According to the CRTS, appraisals and emotional responses are likely to affect a target’s coping strategies; however, participants were reporting what they thought the emotional responses would be for others based
on assumptions concerning the internal processes of other individuals. As such, an improvement in the use of hypothetical written vignettes was made by Dillon, Adair, and Brase (2015) who asked participants to imagine that they, and not some other person, were the targets in the vignette and then report on their emotional responses. Participants who perceived the vignette as a threat rather than a social exchange were more likely to report feeling discomfort. A strength of this study was that participants were asked to label each vignette as a threat or not, allowing for some inferences to be made about the relationship between threat appraisals and emotional responses. While not stated explicitly as testing the CRTS, results from this study provided some support for the proposed relationship between appraisals and emotional responses in the context of sexual harassment. However, a problem with this research and much of the aforementioned research was that reported appraisals and emotional responses could not clearly be associated with the antecedent of potentially sexually harassing behavior because there was no control condition in these studies to clearly isolate the effects of sexually harassing behavior from other features of the vignettes. In order to use vignettes to link cognitive appraisals and emotional responses to the stressor of sexual harassment, while it is occurring (during the event-moment), there needs to be experimental research theoretically guided by the CRTS.

**Experimental Approach to Sexual Harassment**

Experimental research on sexual harassment has been sparse. One of the aspects of an experiment that is imperative to establish internal validity, or make causal inferences is the presence of a control condition. This allows for any changes in the dependent variable (i.e. emotional responses) to be attributable to the manipulation of the independent variables (i.e.
sexual harassment). A number of studies have utilized an experimental design in order to examine how various groups of people will respond to a hypothetical scenario of sexual harassment presented in a written vignette (Malovich et al., 1990; Fitzgerald, 1990; Terpstra, et al., 1989). One study compared participants’ attributions about vignettes portraying sexual harassment to ones portraying workplace aggression and asked them to imagine that they were the target in the written vignettes (Hershcovis & Barling, 2010). Additionally, the salience of gender (gender-dominant vs. gender neutral) in the workplace portrayed was also manipulated, resulting in four conditions. A gender-dominant workplace was conceptualized in this study as one that is primarily male dominated, whereas a gender-neutral workplace was portrayed as having an equal distribution of male and female employees. Participants reported greater feelings of self-blame in the sexual-harassment condition when the environment was manipulated such that a gender-neutral context was created (i.e. apparent equal distribution of gender in the working environment). In other words, when gender was more salient, participants were less likely to feel blame when sexually harassed. Important aspects of the environment were manipulated in this study, providing support for the CRTS’ position that environment-factors affect emotional responses to stressors. However, a limitation of this study was its sole focus on workplace interactions which limits its generalizability to other contexts. In another study, 11 scenarios of potentially sexually harassing behaviors (three of which did not portray sexual harassment) were presented to elementary-aged participants and then their emotional responses to the scenarios were recorded (Murnen & Smolak, 2000). Emotional responses by girls included feeling embarrassed, hurt, mad, and uncomfortable. Notably, those who had previously experienced some of the sexual harassment behaviors described in the vignettes reported stronger emotional responses to those vignettes. While this study was
promising in its use of multiple behaviors and non-sexual harassment vignettes, surprisingly the authors did not take the opportunity to compare emotional responses to the control conditions which limited their ability to draw conclusions about sexual harassment leading to emotional responses. In a study that actually utilized comparisons with a control group, written vignettes were used to gauge emotional responses of men who were instructed to imagine they were the initiator in scenarios of sexual harassment (experiment) with a female peer or that they were in a disagreement (control condition) with a male roommate (Saunders & Senn, 2009). In both conditions, the initiators that the participants were supposed to identify with had done something that would put them in the wrong, interpersonally. Results showed that participants responded to the sexual harassment vignette but not the control condition with feelings of guilt. It is important to note that this experiment examined emotional responses of initiators not targets of sexual harassment. In addition, the two conditions may not have been equivalent as the control condition involved two males, while the experimental condition involved a male harassing a female. Gender of the “other person” may be acting as a third variable that could partially account for the difference in emotional response between the two conditions. While there are some studies that have used written vignettes experimentally, manipulating various person-factors and environment-factors, no other published studies have utilized control vignettes which did not include sexually harassing behavior (Hershcovic et al., 2010; Sheets & Braver, 1999).

Despite some improvement in the designs of sexual harassment studies with some studies utilizing experimental designs and some studies providing instructions to imagine oneself as the target, the written vignette studies have been criticized as not being sufficiently relevant to participants, thus not evoking emotions to the level that one would see in everyday interactions (Barter & Renold, 2000). Despite suggestions to use more “real-life” stimuli in sexual
harassment research 20 years ago (Lenghick-Hall, 1995), very few studies have attempted to do so.

An improvement on the use of written vignettes for examining the internal processes of targets of sexual harassment during the event-moment is the use of in-vivo, experimental designs. Yet, only four studies have exposed participants to sexual harassment in-vivo. Exposing participants to sexually harassing behaviors rather than reading about vignettes of sexually harassing behavior and then assessing their cognitive appraisals and emotional responses immediately has the potential to provide a more realistic understanding of how an individual decides to label and then is affected by the experience. One study measured tolerance of sexual harassment in a speed dating scenario that utilized text messaging (Angelone, Mitchell, & Carola, 2009). After being told they were testing out a new online dating platform, participants began interacting via text message with what they believed to be a man of their choosing (actually a confederate). Participants were directly harassed via text-messages in this lab-based experiment. In the study, ratings of attraction of the men portrayed in the dating files were used as proxies for emotional responses. Participants’ attraction ratings of the men portrayed in the dating profiles reduced significantly after receiving sexually harassing texts. While having an in-vivo sexually harassing encounter demonstrate an effect on a target’s evaluative processes is a useful contribution to the literature, it is questionable that decreased ratings of attraction can be equated to having an emotional response to sexual harassment. Unfortunately, emotional responses that participants could have had such as being upset, angry, or annoyed were not assessed. Additionally, participants were not asked to label if a text message was sexual harassment and no cognitive appraisals were recorded. Internal validity is also questionable as there was no control group who received non-sexually harassing texts. Another in-vivo study,
but with a more direct interaction than the text messaging study, utilized individuals already applying for research assistant positions as participants to test the effects of subtle sexual harassment on cognitive functioning (i.e. repeating words, diluted language) during an interview (Woodzicka, & LaFrance, 2005). The researchers found that participants did worse during interviews where sexist remarks were made by the interviewer than those who were in the control condition. Thus, this study added compelling evidence that there is an immediate negative impact of even subtle sexual harassment. Importantly, participants’ emotional affect was assessed. Negative affect was found related to poor performance thus demonstrating support for the relationship between emotional responses and outcomes as proposed by the CRTS.

However, the sexist remarks participants were exposed to were relatively mild examples of sexual harassment and are likely not representative of the full range of behaviors targets may experience. In another in-vivo study, one with less of a power differential between individuals, confederates made sexist remarks during a decision group task (Swim & Hyers, 1999). The aim of the study was to see under which conditions female participants would respond to sexist remarks. After the group task, participants were asked to list thoughts and feelings, and if they were in one of the two “sexist remark” conditions, identify if their thoughts and feelings were related to the sexist remarks. There were significantly fewer feelings listed in the two control conditions that did not include sexist remarks and participants in the experimental conditions reported a greater number of negative feelings after the task. The strengths of this study lie in its utilization of an in-vivo design and control conditions. On the other hand, making a sexist remark is only one type of sexually harassing behavior, thus limiting the study’s generalizability. Also, the event-moment cognitive appraisals of the participants were not assessed preventing the growth of the knowledge base on what cognitive appraisals lead to which emotional responses.
Finally, one of the most advanced in-vivo studies to date on the event-moment of sexual harassment used both acute physiological and self-report measures of participants who endured gender-based sexual harassment during a group project and compared their data to participants in a control condition, a group project that did not include sexual harassment (Schneider, Tomaka, & Palacios, 2001). The study was theoretically driven by the CRTS and provided support for the relationships between cognitive appraisals and emotional responses to other stressors as well as proposed relationships with coping. Unfortunately, the self-report measures failed to assess appraisals and emotional responses to the harassment itself, and instead assessed their reactions to the tasks specifically. Overall, each in-vivo study discussed had some limitations, as expected. For example, the few in-vivo studies of sexual harassment failed lacked a control group (Angelone et al., 2009). In the few studies that have utilized an experimental design to get at these internal processes of the target during the event-moment, very subtle or mild types of sexually harassing behaviors were used which is also a limitation, but did so for ethical reasons, an issue that cannot be ignored (Schneider, et al., 2001; Swim, et al., 1999; Woodzicka, et al., 2005). The broad range of potentially sexually harassing behavior cannot be examined in vivo in a laboratory setting given the ethical issues with exposing participants to more extreme types of sexual harassment directly). However, using video stimuli may be another approach that might be the best compromise given the subject matter.

Video vignettes or analogues have the potential to overcome prior limitations in researching the event-moment of sexual harassment. Exposing participants to video stimuli allows for the examination of more severe forms of sexual harassment and happens in a format that is more realistic than reading a written vignette, yet, does not put the participant in a position, which can be construed as ethically hazardous. There are a number of studies that have
used video stimuli of sexual harassment to examine observer perceptions of target reactions and coping styles (Henry & Meltzoff, 1998; Lee & Guerrero, 2001; Marks & Nelson, 1993). A set of video stimuli was created for a study that manipulated the gender of the professor (initiator) and behavior (suggestive comments with staring combined with or without inappropriate touching) (Marks, et al., 1993). Unsurprisingly, when the touching behavior was added, ratings of perceived sexual harassment were higher. Participants were more likely to report feeling uncomfortable because of the perceived inappropriateness of the “touching” behavior. The results from this study also show support for the CRTS as appraisals of inappropriateness were related to feeling uncomfortable. This study provided information about what behaviors are perceived to be sexual harassment and can inform future research regarding the operationalization of sexual harassment behaviors. Unfortunately, this study did not utilize a control condition, which limits making conclusions about the supposed sexual harassment behavior. In fact, because there was the assumed power differential in the relationship portrayed between a professor and a student, the same behaviors might not be perceived as sexual harassment if the relationship between the initiator and target was not so delineated. An improvement in generalizability can be found in another study examining the effects of touch, as the actors portrayed were presumably of the same status (Lee et al., 2001). This study specifically examined the effect of touching on appraisals of potential sexual harassment using a within-subject design that included nine different types of touching and a no touch control condition. The script among the actors was the same across all videos. Of the nine types of touch, touching someone’s forearm or someone’s cheek received the highest ratings of perceived sexual harassment, whereas, shaking hands and the no touch control condition had the lowest ratings of perceived sexual harassment and no feelings reported. Some participants reported
feelings of attractive, flirty, bashful, and delighted during the videos of touching someone’s forearm and cheek; but most participants did not report any feelings at all and just rated these two types of touching as sexual harassment. The results from this study inform future experimental research in developing video stimuli that portrays sexual harassment as it identified and isolated very discrete behaviors that were perceived to be indicators of sexual harassment. A limitation of the study is that it focused on only one set of behaviors that could be considered sexual harassment. Several important variables, such as gender and perceived power differential, were controlled for, yet the data collected on these variables were not examined to see if they moderated the relationship between the touching condition and appraisals or emotional responses. Another limitation is that the issue of context was not examined as some behaviors that may be perceived as inappropriate in some settings may not necessarily be deemed inappropriate in other contexts. Finally, the authors used a scale that they developed for the study to assess positive affect and sexual harassment. Surprisingly, they did not use any scale to assess negative affect, which minimized the reporting of any negative feelings. Thus, the authors in this study lacked the capability of capturing the range of emotions that may have been experienced. Another team of researchers used videos portraying a scene of sexual harassment and asked participants to rate their level of stress in addition to any history of sexual harassment (McDermut, et al., 2000). Participants watched three videos, presented in random order: a non-sexual harassment video, a video portraying sexual harassment, and another emotionally evocative video. Participants were asked about their emotional responses using the Positive and Negative affect schedule (PANAS) and had their heart rate monitored during exposure to the videos. While no physiological differences were found between the emotionally evocative and harassment videos, emotional responses were significantly different between those conditions.
Greater negative affect was reported after viewing the harassment video as compared to the emotionally evocative video and those with a history of being sexually harassed reported even greater negative affect. While not explicitly using the CRTS to guide the study, support for the effect of person-factors on emotional responses to event-moment sexual harassment was demonstrated. This study stands out as one that has improved upon previous research using videos by having a control condition in their within-subjects design. Unfortunately, the researchers failed to ask what made the scene sexual harassment, which would have furthered the field’s understanding of judgments/cognitions/appraisals that lead to emotional responses during the event-moment of possible sexual harassment. However, another study presented participants with a video of an interaction between a teaching assistant and a student and did focus on appraisals (Jaschik & Fretz, 1991). Participants were randomly assigned to either the control condition or the sexual harassment condition. The sexual harassment condition involved three potentially sexually harassing behaviors and participants were asked to write several sentences about the teaching assistant first, then label the video as portraying sexual harassment or not. The video stimuli were created in such a way as to have the teaching assistant look at the participant as if they were the student. With both the open-ended responses and the direct answers, experimental condition participants were significantly more likely than control participants to describe the teaching assistant as “rude”, “demeaning”, and “sexist” and to respond “yes” to a direct question about the teaching assistant’s behavior constituting sexual harassment. In reference to personal emotional responses, participants reported that they would feel “unpleasant” and “offended” if they were in the student’s position. However, only two out of 60 participants in the sexual harassment condition used the term “sexual harassment” in the open-ended description while 59 out of the 60 participants labeled the video as sexual harassment
when directly asked. The results of this study show the extreme discrepancy in semantics used by participants when presented with potentially sexually harassing stimuli.

Using videos that portray potential sexual harassment seems to be an acceptable compromise in the field, especially in order to study more severe types of sexual harassment. Experimental designs using control conditions are not common either. Each of the studies discussed had both strengths and weaknesses; yet most of these studies did not provide a clear understanding of what the internal cognitive and emotional processes are during the event-moment of sexual harassment. Many of the studies were also not theory driven, making it difficult to understand why certain constructs were used or ignored. Thus, for the field to progress, using a framework that encompasses all the factors that interact when a target is exposed to potentially sexually harassing behavior is needed (and currently lacking).
Proposed Study

While there has been extensive research on sexual harassment over the years, the study of sexual harassment has remained stagnant in many ways (Ram, Tribe, & Biran, 2016). A large proportion of prior research has focused on power differentials between the target and initiator. The other line of research in the field is about how targets react to and cope with sexual harassment. Yet, the links between the event moment of the occurrence of a potentially sexually harassing behavior and how and when a person ultimately responds to this stressor are still missing. These flaws in the research literature have resulted in the lack of an accepted operationalized definition of sexual harassment and relatedly, the reporting of inconsistent prevalence rates. One of the biggest problems is that much of the research has been atheoretical. Research that is not driven by theory lacks a framework or foundation for explaining how constructs are related to each other. Viewing a problem, such as sexual harassment, through the lens of a theory puts researchers on a path that will allow them to continue to build upon the parts of a theory that lacks support in some areas. Continued theory driven research on a particular problem will be less disjointed. Research on sexual harassment is mostly retrospective in nature. When examining the labeling, reporting, and responses one has to sexual harassment, the internal process of what a target is experiencing cannot be captured after the event-moment has occurred. Most of the research on sexual harassment has been non-experimental as well. Causal inferences cannot be made without such designs. There are no known studies to have examined how the context in which potentially sexually harassing behavior occurs may affect how one cognitively appraises the interaction. That is, will the exact same behavior be appraised
differently depending on the context in which it occurs? Expectations of what is considered acceptable behavior in a given context likely have an influence on how a behavior is appraised (Butt & Choi, 2006). This has not been researched in the field of sexual harassment. Research exploring appraisals of and emotional responses to the same behavior in different contexts might help the field elucidate some of the ambiguity surrounding sexual harassment. Learning the internal processes that occur during the event-moment of sexual harassment can lead to the development and dissemination of guidelines for college students regarding what constitutes sexual harassment within and across contexts. What could be learned from this research can be used to inform training programs for college students, prevention programs, training of teachers so they can guide students regarding behavior that is actually inappropriate for a context. Additional guidelines that may be gleaned from this study include knowledge about where certain behaviors are acceptable and even limits on those behaviors for those settings. Applying the CRTS allows for the consideration of the many person-factors that interact within a given environment which itself encompasses numerous environment-factors. The same person is likely to take their environment/context into consideration when appraising a stressor. As most research on sexual harassment has been based on workplace environments, comparing these constructs across contexts has been all but ignored. It is the interaction of the person-environment that the CRTS proposes will affect one’s appraisal of a stressor. How one appraises an event, according to the CRTS will be directly related to their emotional response. While there is research on emotional responses to sexual harassment; little is known about their antecedents, thus for the most part that line of research is descriptive, rather than explanatory. Additionally, it is likely that there are individual characteristics that may influence cognitive appraisals such as general disposition towards stressors (Adikaram, 2016), history of experience with sexual
harassment (Murnen, et al., 2000), and identification as a feminist (Uggen & Blackstone, 2004). These variables have been found to be related to retrospective accounts of sexual harassment; but have not been studied during the event-moment of sexual harassment as variables that need to be controlled for during analyses (Bergman, et al., 2002; Holland et al., 2013).

**Hypotheses**

The main aim of the proposed study is to examine the cognitive appraisals and emotional responses that occur during the event-moment of potential sexual harassment and to examine how the environment in which the behavior occurs affects these internal processes. Specifically, it is hypothesized:

**General Hypothesis**

1: The type of social interaction (non-sexual harassment; sexual harassment) will interact with the context (classroom; college party) in which the interaction takes place to influence participant responses (threat appraisal; emotional affect; sexual harassment belief) during the event-moment of the social interaction.

**Specific Hypotheses**

2a: Participants in the sexual harassment/classroom condition will report the highest threat appraisals.
2b: Participants in the sexual harassment/classroom condition will report the greatest change in emotional affect, as in participants will have an increase in negative affect.

2c: Participants in the sexual harassment/classroom condition will report the strongest belief that the video they have watched portrayed sexual harassment.
Study 1: Testing the Validity of Experimental Stimuli

In order to examine the hypotheses proposed, two studies were conducted because the stimuli needed to conduct the experiment do not currently exist. Study 1 involved the creation and validation of video stimuli portraying potentially sexual harassing behavior and non-sexual harassment social interactions to be used in a new experimental paradigm. Study 2 used the validated video stimuli in a 2 x 2 design that examined cognitive appraisals and emotional responses during the event-moment of potential sexual harassment. Taking into account the reviewed literature, Study 2 examined cognitive appraisals of and emotional responses following non-sexual harassment and sexual harassment behaviors portrayed in the video vignettes created in Study 1. The effect of context on appraisals and emotional responses was examined by portraying the same behaviors in two different environments (two additional videos were created using the same scripts in a different context), a comparison that has yet to be done in the field of sexual harassment research.

Methods

Participants

Two validation samples were used to validate the content of the video stimuli. Over 75 individual recruitment emails were sent and this resulted in 37 graduate students who identified as women from both the Psychology and the Women and Gender Studies Departments at the
University of South Florida (USF) participating in the study. Graduate students were utilized as an expert validation sample because they are mandated to report sexual harassment according to the Title IX statute and have been through training on USF’s Title IX policies. Only participants who identified as women were included because research suggests that women are more likely to perceive they have been sexually harassed than men and sexual harassment has been found to be perceived by men and women differently in a recent meta-analysis (Mcdonald, 2012). In addition, the video stimuli was intended to be used in Study 2 investigating the internal cognitive and emotional processes of college women, so it seemed appropriate that the sample used to validate the videos consist of women.

More than half the graduate sample reported that they were from the Psychology Department and 21.6% reported their department as Women & Gender Studies. About 19% did not specify in which program they were enrolled. This sample represented students across the spectrum of time in graduate school. A quarter of the sample was in their first year of graduate school, another quarter was in their third year and there was near equal distribution of students in their second, fourth, fifth, and sixth year who participated as well. The mean age of participants was 27.63 years \((SD = 4.73)\) and the majority identified as Caucasian (83.8%) and the remaining participants identified as either African American or Hispanic. While three quarters of the sample identified as heterosexual, only 54% identified as exclusively heterosexual according to the Kinsey Scale of Sexual Orientation.

A second validation sample of 34 self-identified women who were undergraduate students were recruited utilizing SONA, an online recruiting and data collection software used by USF. Students enrolled in psychology courses participated for extra credit. This second validation sample was made up of undergraduate women because it was important to ensure that
the video stimuli created worked with the target population for Study 2. Almost half the sample (44%) reported their major as Psychology, 11.8% reported that they were Biology majors, and 8.8% reported that they were Health Science majors. The rest of the sample included Engineering, Public Health, Bio-Medical Science, Social Work, and Pre-Nursing. The mean age of participants was 20.80 years ($SD = 5.71$). The undergraduate sample was more ethnically and racially diverse than the graduate sample. Approximately one third (32.4%) of the sample identified their ethnicity as Hispanic. The majority of the sample identified their Race as Caucasian (73.5%), 17.6% identified as African American, and the remaining participants identified as American Indian/Alaskan Native or Native Hawaiian/Pacific Islander. A different pattern concerning sexual orientation was apparent in the undergraduate sample; 79.4% identified as heterosexual, and 76.5% identified as exclusively heterosexual on the Kinsey Scale.

Upon completion of data being downloaded from the online survey system, the data was screened for completeness. Participants who completed less than 50% of the measures were dropped from analysis (1-graduate, 11-undergraduates). Participants dropped from analysis did not differ on any variable from participants retained. Combined validation samples resulted in a total of 71 participants.

**Materials**

**Demographics Questionnaire.** Demographic information, such as age, sexual orientation, race/ethnicity, major, and year in school was collected. This questionnaire took approximately five minutes to complete. A copy of the demographics measure can be found in Appendix A.
Sexual Harassment Analogue Questionnaire. The Sexual Harassment Analogue Questionnaire (SHAQ, Hangartner, 2017) is a 20-item measure created by the author. The SHAQ has participants indicate key demographics of the initiator (three multiple-choice items), the environment of the social interaction (one multiple choice item), and whether the video portrayed sexually harassing behavior (one item). The presence or absence of behaviors of the initiator was asked using 14 dichotomous items, nine of which were potentially sexual harassment. The behaviors used partially map onto the widely used Sexual Experiences Questionnaire (SEQ) (Fitzgerald, Gelfand, & Drasgow, 1995) which is used in the majority of sexual harassment research that uses behavioral checklists as opposed to a single item. The SEQ has been found to have content validity when compared to self-report, open-ended experiences of participants (Fitzgerald, et al., 1999). The strongest evidence of convergent validity was demonstrated by Glomb and colleagues (1997) who compared the path coefficients from organizational climate that is specific to tolerance of sexual harassment to individual SEQs and the mean from SEQs completed by participants’ co-workers in the same workplace and found that that they were both positive and statistically significant. This suggests that individual perceptions of sexual harassment are similar to co-worker’s perceptions. Finally, reliability has been demonstrated across a number of studies, even with modified versions of the SEQ. The reliability of the SEQ is summarized in Gutek, Murphy, and Douma (2004). The SEQ is based on work done by Till (1980) who was the first to collect data from college students about their experiences of sexual harassment. Till proposed five categories based on all of the behaviors reported to have been experienced. The SEQ, along with the Sexual Harassment Index (Tang, Yik, Cheung, Choi, & Au, 1996), and other behavior checklists of sexual harassment all overlap considerably with Till’s original comprehensive list of behaviors and were also consulted in
developing the SHAQ (AAUW, 1993; Barling, Rogers, & Kelloway, 2001; Bastian, Lancaster, & Reyst, 1995; USMSPB, 1987). These behavior checklists are also extensions of or based on a number of other proposed theoretical definitions of what constitutes sexual harassment (Betts, & Newman, 1982; Bond, 1988; Fitzgerald, 1993; Reilly, Carpenter, Dul, Bartlett, & Brewer, 1982). The underlying themes across definitions include previous rebukes not being respected by the initiator, invasion of personal space; touching, unwanted sexual attention, using language or displaying materials containing explicit sexual content, and threats that leave targets feeling as if they have no choice but to acquiesce to the initiator’s demands. The last item asked how strongly the participant believed that the interaction that they watched was or was not sexual harassment using a Likert scale ranging from 1 (Very Strongly) to 10 (Not at All). A ten-point scale was used because larger scales have been found to have greater interquartile discriminating power than scales with fewer categories (Preston & Colman, 2000). Additionally, participant responses on ease of use have been found to steadily increase as scale categories are increased up to 10 points (Preston & Coleman, 2000). See Appendix B. The SHAQ took approximately ten minutes to complete and was completed by participants after viewing each video. The measure was used to validate whether specific behaviors were present in the videos and if they were considered to be sexual harassment. For the purpose of comparison between conditions, a sexual harassment subtest score was calculated by summing responses to the following individual items of the SHAQ: 4, 5, 6, 7, 8, 9, 11, 13, and 15 (11 and 15 are reverse scored). A Sexual Harassment Behaviors subscale score was calculated from the individual items of the SHAQ. A high degree of inter-rater reliability was found on the SHAQ. Table 1 presents the frequency with which each behavior was endorsed on the SHAQ by condition and validation sample. The ICC was .81 with a 95% confidence interval from .733 to .869, \((F (66, 858) = 5.201, p<.001)\). Descriptive statistics
were run on the Sexual Harassment Behaviors subtest scores and confidence in labeling the videos as sexual harassment or not. Means, standard deviations, and t-tests are displayed in Table 2.

**Video Stimuli.** Videos were created to be validated in Study 1 so that they could be used as stimuli in Study 2. These videos consisted of a scripted interaction between a male actor (the initiator) and a female actor (the target). In order to ensure the atmosphere of a one-on-one interaction and to increase the participant’s sense that the initiator is interacting with the participant, a three-quarter view of the initiator’s face and upper-body was used in the videos (Benton, Sivan, Hamsher, 1994). Participants also only saw the hand and arm of the target in the video and not the face. This was intended to help the participant immerse themselves in the interaction, creating as realistic an interaction as possible as participants were instructed to imagine that they were the targets when watching the videos. Both videos involved a male student (initiator) interacting with a female student (target). See Appendix C. Each video established that the initiator and target had interacted before. A non-sexual harassment script and a script containing a number of behaviors that could be construed as sexual harassment such as touching the target’s forearm suggestively and inquiring into the target’s past sexual experiences (Fitzgerald, et al., 1995) were followed by trained actors. To increase internal validity and not introduce any confounding variables, each scripted video contained an equal number of words (254), questions (4), and hand gestures by the initiator (4) and target (2) and lasted for the same length of time. In the non-sexual harassment condition, the content of the conversation was focused on academics with no mention of dating or sexual content.
Procedure

Students interested in participating were directed to an anonymous online survey that explained that the purpose of the study was to analyze subtle behavioral cues in videos that would be used in a larger project about interpersonal interactions. Participants who followed the link were sent to a survey on Qualtrics which began with an informed consent page that explained the requirements of participation, any possible risks and benefits, participant rights, and policies regarding confidentiality and its limits. Participants were then provided another online prompt asking for their informed consent prior to completing the online self-report measures or viewing the videos. Undergraduate participants were required to type “I understand that I can withdraw at any time without penalty” after reading the consent form in order to access the study. Before beginning the validation study, participants were asked to ensure they were able to hear and see an embedded video on the computer at which they were participating in the study. Directions explaining the need to hear audio to participate in the study were provided along with suggestions for headphones or earbuds. A reminder to ensure the volume on the computer the participant was using was not muted was also included. The audio/visual task consisted of playing a video that asked participants to enter the answer to a simple math problem presented verbally (i.e. “What is two plus three?”) and answer a question about what was displayed in a second short video (i.e. “What animal was in the video you just viewed?”). See Appendix D. No participants failed the audio/visual task. Once these technical checks were completed, participants viewed both video stimuli as part of a within-subjects design. These videos were shown randomly to each participant to avoid order effects. After each video, participants were asked to complete the SHAQ and then the demographics measure. Participants also had the opportunity to provide feedback qualitatively about the videos. A debriefing page
was presented at the end explaining the purpose of the study and providing the contact information of the principal investigator. Because the study exposed depictions of scenes which could be considered sexual harassment, information about both community-based and on campus resources were provided in the event that participants were interested in seeking services for themselves or others. See Appendix E. In addition, the USF policy regarding sexual harassment was provided. Finally, participants were thanked for their participation and asked not to disclose information about the study to others so as not to potentially influence other graduate student participants in Study 1 or undergraduate participants in Study 2. All data was assigned an anonymous, random code that cannot be connected to any identifying information, and stored on a secure password protected server.

Results

To test both hypotheses a Mixed Repeated Measures ANOVA was conducted. It was first hypothesized that the videos portrayed distinctly different behaviors. There was a significant difference in endorsement of sexual harassment behaviors across the two video stimuli, \(F(1, 64) = 1,759.91, p < .001, \eta^2_p = .97\). More participants endorsed sexually harassing behaviors in the video containing the potentially sexually harassing behaviors \((M=8.02, SD=1.61)\) than in the video with the non-sexual harassment interaction \((M=1.19, SD=.95; t(65) = 28.84, p < .001)\). Some key behaviors in which large differences were endorsed included whether the initiator touched the target and whether the initiator leaned into the target’s personal space. Refer to Table 1 for item endorsements. Participants were more likely to report that the initiator in the potentially sexually harassing video touched the target \((N=70, 90.9\%)\) than in the non-sexual harassment video \((N=1, 1.3\%)\). Sixty-three participants \((81.8\%)\) indicated that the initiator leaned
into the target’s personal space in the potential sexual harassment video while only one (1.3%) endorsed this behavior in the non-sexual harassment video. Some of the largest differences in judgements about the initiator found between the videos were how respectful the initiator seemed. As expected, most participants (N= 67, 87%) indicated that the initiator was not respectful in the potential sexual harassment video while only four (5.2%) reported that the initiator was not respectful in the non-sexual harassment video.

Sixty-seven (87%) participants reported that the initiator engaged in friendly conversation in the non-sexual harassment video while only 17 (22.1%) participants reported that the initiator engaged in this behavior in the potential sexual harassment video. Thirty-two (41.6%) participants reported that the initiator accepted that their previous advances had been denied in the non-sexual harassment video as expected and only 14 participants (18.2%) reported this behavior in the potential sexual harassment video. Additionally, as expected, endorsement of other sexual harassment behaviors such as suggesting the use of alcohol to increase the likelihood of sexual activity (N=65, 95.6%) and the offer of a favor in exchange for sex (N=57, 84%) in the potential sexual harassment video was higher than in the non-sexual harassment video 4% (N= 3; suggesting the use of alcohol to increase the likelihood of sexual activity) and 16% (N= 11; the offer of a favor in exchange for sex).

The second hypothesis was supported as analyses yielded an F ratio of $F(1, 64) = 582.47$, $p < .001$, $\eta^2_p = .91$, indicating that confidence in labeling behaviors as sexual harassment or not was greater after viewing the “potential sexual harassment” video ($M=8.91$, $SD=3.25$) than after viewing the non-sexual harassment video ($M=-8.26$, $SD=2.15$; $t (65) = -38.14$, $p < .001$).
Supplemental Analyses. Besides the main effect of condition, a main effect was also found by sample type. An effect for validation sample type yielded an F ratio of $F(1, 64) = 105.58, p < .001, \eta^2_p = .62$, indicating that there was a significant difference between undergraduate and graduate students’ endorsement of sexual harassment behaviors after viewing either condition. Across both conditions, the undergraduate sample reported observing a mean of 5.32 ($SD = .10$) sexually harassing behaviors and the graduate sample had a mean of 3.89 ($SD = .10$). Table 1 details item endorsement by sample.

There was also a significant interaction effect between video type and validation sample, $F(1, 64) = 73.56, p < .001, \eta^2_p = .54$, whereas undergraduate students were more likely to endorse a greater number of sexual harassment behaviors than graduate students specifically in the potential sexual harassment video but not in the non-sexual harassment interaction video. Undergraduate students endorsed more sexual harassment behaviors ($M=9.45, SD=.85$) than the graduate students ($M=6.58, SD=.72$) after viewing the potential sexual harassment video ($t(64) = -16.99, p < .001$).

While there was a main effect for video type, there was no significant difference between validation samples for confidence in labeling videos as sexual harassment or not ($F(1, 64) = .003, ns, \eta^2_p = 0$). Confidence did not vary between graduate sample ($M=9.00, SD=2.73$) and the undergraduate sample ($M=8.65, SD=2.14; t(64) = .61, ns$). There was, however, a significant interaction between video type and validation sample when it came to level of confidence in labeling the behaviors in the video as sexual harassment or not, $F(1, 64) = 16.43, p < .001, \eta^2_p = .22$. Graduate students ($M=9.45, SD=.85$) were more confident in their labeling behaviors as sexual harassment or not than undergraduate students ($M=6.58, SD=.72$) in the potential sexual harassment condition only [$t(64) = -.14.99, p > .001$].
Discussion

The purpose of this study was to develop video stimuli to be used in experimental research into how targets respond to sexual harassment during the event-moment, or while it is occurring using a video paradigm. This is a new way to study responses to sexual harassment that is not retrospective and therefore a potential improvement to the most common methodology used in this area. The main hypothesis that video stimuli developed by the researcher would differentiate between sexual harassment and non-sexual harassment behavior was supported. Not only did participants endorse more sexually harassing behaviors as occurring in the “potential sexual harassment” video, they also were more confident in their labeling the video as sexual harassment or not in the sexual harassment condition.

Responses from the participants in this study validated that each video clearly portrayed the behaviors that were intended; sexually harassing behaviors were confidently identified in the sexual harassment video but not in the non-sexual harassment interaction. This finding is consistent with previous research that has found that video stimuli can differentiate non-sexual harassment versus intended interaction conditions (Fehr, Achtziger, Roth, & Strüber, 2014). This finding is also consistent with other research that has used video stimuli to differentiate non-sexual harassment from other realistic interactions (Trautmann-Lengsfeld, Domínguez-Borràs, Escera, Herrmann, & Fehr, 2013).

Statistical analyses supported the intended distinction between the video stimuli suggesting this video paradigm would be appropriate for experimental research on a larger sample. The inclusion of “unwanted touching” in the sexual harassment video likely contributed
to the video’s use in differentiating between sexual harassment and non-sexual harassment behavior. Previous research has found that adding this behavior to video stimuli was related to a higher likelihood of participants labeling an interaction as sexual harassment (Lee et al., 2001). By using contextual conversation cues such as establishing that there was a previous interaction between the target and the initiator likely also added to the validity of the stimuli for sexual harassment research as “persistent, unwanted sexual attention” is standard language for many institutional definitions of sexual harassment (Fitzgerald, 2017; OSU, 2018). By establishing that the initiator had made a previous advance likely added to the validation of the videos as isolated incidents of sexual harassment can often be dismissed. This is consistent with previous research that has found differences in labeling an interaction as sexual harassment based on the frequency with which it occurs (Settles et al., 2011). A number of findings from retrospective studies of sexual harassment were incorporated into the development of the video stimuli, demonstrating some consistencies regarding what is considered sexual harassment across study methodology.

**Limitations**

Despite the study being able to successfully differentiate behaviors between sexual harassment versus non-sexual harassment interactions, there were several limitations to the study. Participants were exposed to only one context (a classroom setting) in this validation study. The decision to use only one context for the validation study was to keep the design as parsimonious as possible. While it is believed that behaviors can be perceived differently depending on context, by only using one context, this enabled participants to focus only on the
behaviors themselves in each video. That said, study 2, acknowledging the importance of context, will utilize more than one context. In fact, it is hypothesized in Study 2 that the context in which a sexually harassing interaction takes place will affect how it is appraised. Additionally, the actor and actress in the videos appeared to be of European descent (white) and heterosexual. While this portrayal of college students may reduce this study’s generalizability if some participants of differing cultural backgrounds do not identify with the video participants, these characteristics should overlap considerably with the demographic characteristics of the intended experimental sample. The majority of undergraduates at the university where this study will take place identify as Caucasian (60%), 11% identify as Black/African American and about one quarter identify as Hispanic. Further videos using this methodology can potentially be developed that utilize more diverse representation. Another limitation is that this study was conducted online, which allows for a less controlled environment. It is not entirely possible to know if students gave their undivided attention, read the resources provided or sought help from others.

**Strengths and Implications**

While a number of limitations exist, there are several noteworthy strengths. Most in-vivo studies on sexual harassment have only included stimuli that portrayed verbal sexual harassment whereas this study was able to include nonverbal forms of sexual harassment because of the use of video stimuli (Swim et al., 1999). Another strength of this study is the randomization of videos in order to limit order effects. As a result of the success of this validation study, video stimuli now exist and can be used in experimental research on event-moment responses to sexual harassment. While the videos created in study 1 were specifically intended to be used in study 2 and hence test hypotheses posed in study 2, many other research questions can be explored using
the same video stimuli. Finally, and most importantly, the video stimuli developed for this study can be used as a template or guideline for the development of additional video stimuli that manipulate other theoretically important variables when studying sexual harassment.
Study 2: Experimental Test of Cognitive Appraisals and Emotional Responses

Methods

Participants

A total of 185 undergraduate college women were recruited from the University of South Florida (USF) psychology research pool via SONA. Power analysis suggested that in order for a moderate effect to be detected (80% chance) as significant at the Alpha = .05 level, a sample of 33 participants would be required in each of the four conditions (Faul & Erdfelder, 1992). Given past research that has demonstrated that approximately 25% of the participants will either not complete the study or have technical issues, a sample size of at least 176 was intended to be collected instead of the recommended 132 (Chen et al., 2015). A total of 49 participants who signed up for the study were not included in analyses for the following reasons: 29 participants failed the A/V tasks, 12 participants completed less than 50% of the measures, seven indicated that the manipulation had little to no effect, and one participant provided the same response for every item suggesting they were not attending to the study and their data was invalid. There was no age cutoff placed on the sample used for this study since data collected from a previous study showed no statistical differences on sexual harassment experiences or coping strategies by age at the same university (Brown Hangartner, 2015). Criteria for inclusion were any undergraduate student who identified as a woman, was enrolled in a psychology course, age 18 and over, had no profound hearing loss, and was fluent in reading English. There were no other exclusionary
criteria other than having participated in Study 1. Participants received extra credit in psychology courses as a result of their time participating in this study.

The most commonly reported major was Psychology (41.2%) and the mean age was 20.30 years ($SD = 2.91$). Figure 1 shows the additional majors identified by the sample. The majority of this sample identified their Race as Caucasian (73.5%), followed then by Asian (10.3%), African American (7.4%) and the remaining participants identified as American Indian/Alaskan Native or Native Hawaiian/Pacific Islander. Approximately one quarter of the sample identified their ethnicity as Hispanic/Latina (25%) and 8.1% identified as Arab/Middle Eastern. Most of the sample identified as heterosexual (90.4%) with 78.7% of the sample identifying as exclusively heterosexual on the Kinsey Scale of Sexual Orientation. Greater details about the sample demographics can be found in Table 3.

**Materials**

**Video Stimuli.** Prior research (Study 1) established that one video contained behaviors that have been determined to be sexual harassment while the other video contained behaviors that have been established to not be sexual harassment. The same scripts were used to record the two different interactions in an additional context, a college party. To examine the effects of a more ambiguous context that would be relevant to college students, a “college party setting” was used to test hypotheses about sexual harassment and context interactions. Thus, a total of four videos were used as stimuli, 1) sexual harassment in a classroom, (2) sexual harassment at a college party, (3) non-sexual harassment interaction in a classroom, and (4) non-sexual harassment interaction at a college party, creating four experimental conditions.
Measures

**Demographics Questionnaire.** Demographic information, such as age, sexual orientation, race/ethnicity, major, and year in school, see Appendix G, was asked. This questionnaire took approximately five minutes to complete. This demographic information was selected because previous research has suggested an association between these factors and appraisals of sexual harassment (Blackstone, et al., 2014; Sbraga, et al., 2000; Woods, Buchanan, & Settles, 2009; Huerta, et al., 2006; Brooks, et al., 1991).

**Cognitive Appraisal.** The *Stress Appraisal Measure for Adolescents* (SAMA, Rowley, Roesch, Jurica, & Vaughn, 2005) is a 14-item measure that assesses challenge (4 items), resource (3 items), and threat appraisals (7 items). The SAMA was adapted from the Stress Appraisal Measure (SAM) (Peacock, et al., 1990) and was found to have a three factor loading in college samples (Na, Dancy, & Park, 2015; Rowley, et al., 2005). The measure’s threat subscale (the only scale that was used in this study) took approximately five minutes to complete. Participants responded to the video they viewed by rating how much they were currently experiencing each cognition using a 5-point scale ranging from 0="not at all" to 4="extremely". An average of each item in the subscale is calculated to create a “threat” score rather than totaling the items. Thus, a threat score can range from 0-4. Higher scores indicated greater cognitive appraisal of threat. The SAMA has demonstrated high internal consistency (α =.81-.87) in multiple populations (Na, et al., 2015; Rowley, et al., 2005). Evidence of divergent validity has been demonstrated as threat appraisals were negatively correlated with hope (Rowley, et al., 2005). Convergent validity was demonstrated by the positive correlation with threat appraisals and predictive validity was
demonstrated by the strong association to denial, venting of emotions, and behavioral disengagement (Rowley, et al, 2005).

**Emotional Responses.** The *Positive and Negative Affect Schedule-Expanded Form* (PANAS-X, Watson, & Clark, 1999) is a 60-item measure that assesses 11 different affect states: joviality (8 items), surprise (3 items), attentiveness (4 items), serenity (3 items), self-assurance (6 items), fear (6 items), guilt (6 items), sadness (5 items), hostility (6 items), shyness (4 items), and fatigue (4 items). These scales were analyzed as two higher order scales of positive and negative affect, whereas higher scores suggest a person’s current affect, either positive or negative. Examples of items on the Fear Scale include “scared”, “frightened”, and “nervous” and examples of the items on the Guilt Scale are “ashamed”, “blameworthy”, and “guilty”. The PANAS-X took approximately 15 minutes to complete. The change score for Negative Affect was used to test hypotheses. Participants responded to the video they viewed by rating how much they are currently experiencing each emotion using a 5-point scale ranging from 1="very slightly or not at all" to 5="extremely". The PANAS-X has demonstrated high internal consistency (α =.83-91) in multiple populations, including university students (Watson, Clark, & Carey, 1988). Evidence of predictive validity has been demonstrated as higher negative affect was found positively correlated with psychopathology and higher positive affect was found positively correlated with marital satisfaction (Watson, D., & Walker, L. M. (1996). Convergent validity has been demonstrated as scores on the positive affect scale of the PANAS-X have been negatively associated with scores on the Beck Depression Inventory and the negative affect scale was found negatively associated with optimism as measured by the Revised Life Orientation Test (LOT-R, Scheier, Carver, & Bridges, 1994) (Rottinghaus, Day, & Borgen, 2005).
**General Disposition.** The *Life Orientation Test Revised* (LOT-R, Scheier & Carver, 1985) is an eight item scale that measures dispositional optimism and pessimism, or in other words whether one has a positive or negative outlook on life. Participants responded to items using a 5-point scale ranging from 0="strongly disagree" to 4="strongly agree". Factor analysis has identified two distinct factors, as opposed to a unidimensional scale (Herzberg, Glaesmer, & Hoyer, 2006). Higher scores on the LOT-R indicate greater optimistic outcome expectancies whereas low scores indicate greater pessimist outcome expectancies. The measure took about five minutes to complete. Internal consistency for the scale was found to be α = .76, which is considered to be acceptable. Divergent validity was demonstrated by a negative relationship between scores on the LOT-R and a hopefulness measure (Scheier, et al., 1985). Additionally, the LOT-R was found to have predictive validity in that dispositional optimism predicts greater adjustment through increased use of adaptive coping strategies (Chang, 1998).

**Sexual Harassment.** *The Sexual Experiences Questionnaire* (SEQ; Fitzgerald, et al., 1995) is a 19-item self-report scale designed to assess the occurrence of behaviors considered to be sexual harassment and was used to measure perceived previous exposure to sexual harassment. The scale took approximately 5 minutes to complete. Items are behaviorally based (e.g. made crude sexual remarks, subtly bribed). Only the final item on the scale asks the participant if they believe that they have been sexually harassed. Response choices are on a 5-point scale and range from “never” to “6 or more times” (Fitzgerald, Swan, & Magley, 1997). The SEQ was scored based on the method proposed by Fitzgerald et al (1995) where severity is weighted by frequency reported. The resulting score from the SEQ is a composite of type of sexual harassment and frequency. The SEQ has been found to have high internal consistency in a college population (α = .95) (Hangartner, 2015). Convergent validity has been demonstrated by
showing a high association between individual scores on the SEQ and organizational measures of sexual harassment (Glomb, Richman, Hulin, & Drasgow, 1997). Additional convergent validity has been demonstrated by significant correlations between scores on the SEQ and general distress in the workplace ( Fitzgerald, et al., 1997; Magley, Hulin, Fitzgerald, & DeNardo 1999).

**Ideological Beliefs.** The Feminist Identity Development Scale (FIDS, Bargad & Hyde, 1991) is a 39-item scale that measures the degree to which one identifies as a feminist. The FIDS is made up of five subscales representing distinct feminist identity stages: passive acceptance, revelations, embeddedness, synthesis, and active commitment. Examples of items on the FIDS include "I want to work to improve women's status" and "I care very deeply about men and women having equal opportunities in all respects." Participants responded to statements using a 5-point Likert scale (1 = "Strongly Disagree" to 5 = "Strongly Agree"). The FIDS took approximately 10 minutes to complete. The FIDS subscales have acceptable to good internal consistency (α = .65-.85). In addition, the FIDS had no relationship with the Social Desirability Scale (Crowne & Marlowe, 1964) and a negative relationship with a measure of traditional feminine values demonstrating divergent validity (Burows, 1997). Convergent validity has been demonstrated as greater identity as a feminist is significantly related to greater involvement in women’s organizations (Fischer, Tokar, Mergl, Good, Hill, & Blum, 2000). Discriminative validity was demonstrated in a study comparing a convenience (introductory psychology students) to a purposeful sample (gender studies majors) (Murnen et al., 2000). Greater identification as a feminist was found in the sample of gender studies majors.

**Social Skills.** The Brief Social Skills Inventory (BSSI, Riggio, 1989; Riggio & Carney, 2003) is a 30-item self-report measure of social and emotional communication skills that is a
modified version of the Social Skills Inventory (SSI) which consists of 90 items. The BSSI consists of six domains and provides a global score which is purported to be indicative of overall social competence. The six domains are emotional expressivity, emotional sensitivity, emotional control, social expressivity, social sensitivity, and social control. These six domains can be taken together to represent three basic communication skills: control (regulatory), expressive (encoding), and sensitivity (decoding) (Mayer, Caruso, & Salovey, 1999). The BSSI was found to be highly correlated with the SSI, making the BSSI a suitable replacement measure of social skills that is less onerous for participants \( r = .91, p < .001 \) (Riggio, et al, 2003). The BSSI has good reliability \( (\alpha = .77) \). Predictive validity has been demonstrated as better social skills were found to predict emotional stability and social intelligence (Rubin, Carney, & Riggio, 2000). Convergent validity has been established by the BSSI’s strong association with leadership in teamwork tasks (Groves, 2003). All items are on a 5-point scale: 1-“Not at all like me” to 5-“Exactly like me”. The BSSI was used as a filler measure to support the deception that this is a study about interpersonal interactions. This measure took approximately 7 minutes to complete.

**Confidence in Labeling Video.** After being asked whether the video they watched portrayed sexual harassment (“Yes” or “No”), participants were asked how much they believed what they observed in the video was sexual harassment or not using a one-item Likert scale ranging from 1 (Very Strongly) to 10 (Not at All). See Appendix H. Ten-point scales have been found to have greater interquartile discriminating power than scales with fewer categories (Preston & Colman, 2000). Additionally, participant responses on ease of use steadily increased as scale categories were increased up to 10 points (Preston et al., 2000). These findings suggest that a 10-point scale is ideal for measuring beliefs and feelings. A single item measure of a construct is usually discouraged due to the potential loss of information, power, and an inability
to estimate its reliability. However, if the construct is not multifaceted, single item measures may be appropriate, especially if the item is continuous (Wanous & Hudy, 2001). In fact, previous research asking participants about their having experienced sexual harassment has only used a single dichotomous item (Yoon et al, 2007). In this study, the single item measure of sexual harassment differentiated between Caucasian and African American females, whereas more African American women reported sexual harassment than Caucasian women. A continuous variable about the perception or judgment of behavior that could be construed as sexual harassment is an improvement in the field as it should be better able to detect some of the ambiguity surrounding an overly simplified “yes” or “no” judgment on sexual harassment.

Additional Conceptualization of Variable. Because the Confidence in Label variable was a composite that took into consideration whether participants had labeled the video stimuli in the expected way depending on the condition, all participants who labeled their video “No”, as in no, sexual harassment was not present had their confidence score converted to a negative integer. Similarly, all participants who labeled their video “Yes”, as in yes, there was sexual harassment in that video had a positive integer for their confidence score. This was done because not every participant labeled the video they were exposed to in the expected way.

Manipulation Check. A single item asked participants how successful they were in following the instructions of imagining they were being spoken to directly by the person in the video. This was asked on a 10-point scale (1= Not successful at all, 10 = Completely successful). Participants who responded with a “1” or “2” were excluded from analyses as their responses to the measures following the manipulation were likely not valid. Please see Appendix J. Please refer to Table 5 for means and standard deviations of each variable by condition.
**Procedure**

Students interested in participating were directed to an anonymous online survey that explained that the purpose of the study was to analyze how college students responded to different types of interpersonal interactions. After accessing the online survey, informed consent was provided via an online prompt that explained the requirements of participation, any possible risks and benefits, participant rights, and policies regarding confidentiality and its limits. Participants were then provided another online prompt asking for their informed consent prior to completing the online self-report measures or viewing the videos. Directions explaining the need to hear audio to participate in the study (i.e. unmute your computer) were provided along with suggestions for headphones or earbuds. To ensure participants were able to hear and see the embedded video, participants were asked to enter the answer to a simple math problem presented verbally (i.e. “What is two plus three?”) and answer a question about what was displayed in a second short video (i.e. “What animal was in the video you just viewed?”). See Appendix D. If a participant did not get both answers correct, then they were taken to a page stating they could not participate in the study due to technical difficulties. Participants who successfully completed this technology check then completed a questionnaire on demographics, optimism (LOT-R), and social skills (BSSI) which was used as a filler measure to reduce the possibility that participants would guess the true purpose of the study before the manipulation. The last measure participants completed was the PANAS-X in order to have a baseline for assessing if affect changed after viewing the experimental video. Next, participants were instructed that they were about to watch a video. They were instructed that while watching the video that they should try to imagine that the person speaking is interacting directly with them. If the participant understood that they were going to be watching a video and that they were supposed to be imagining they are the person
being spoken to, then they were asked to click an ‘Okay’ button which activated the randomization system in Qualtrics. Participants were randomly assigned to one of four conditions (videos), (1) sexual harassment in a classroom, (2) sexual harassment at a college party, (3) non-sexual harassment interaction in a classroom, or (4) non-sexual harassment interaction at a college party. Instructions to press “Play” were listed next to the window containing the video. After watching the video, participants were instructed to consider the thoughts and feelings that they were having while imagining themselves interacting with the person in the video. Instructions were provided to participants to refer to the thoughts and feelings that they just experienced, while completing the next set of measures which consisted of the SAMA and the PANAS-X. The FIDS and the SEQ were then administered after the participant answered an item asking them if they would label the video as sexual harassment or not. Finally, participants were then asked how strongly they believe that the video portrayed sexual harassment or not. A manipulation check using one item, asking how well the participant felt they were able to imagine they were the person being spoken to while watching the video was asked.

A debriefing page was presented at the end explaining the purpose of the study and provided the contact information of the principal investigator. See Appendix I. Because the study exposed depictions of scenes which could be considered sexual harassment and asked for a history of sexual harassment experiences, information about both community-based and on-campus resources was provided in the event that participants were interested in seeking services for themselves or others. The university’s definition and policy regarding sexual harassment was provided. See Appendix E. Additionally, at the end of the study, participants were provided the opportunity to withdraw their data from any analyses. This option was provided because once
the data is downloaded, participants would not be able to withdraw from the study as there would be no way to identify which set of responses belong to them. No participants indicated that they wanted their data withdrawn. All data was assigned an anonymous, random code that was not connected to any identifying information, and stored on a secure password protected server. The study took between 60-90 minutes, depending on the participants’ reading speed. Figure 2 is a visual representation of the study’s procedures.

Figure 2. Study 2 Procedures

Analyses

Upon completion of data being downloaded from the online survey system, subtest scores were calculated from the individual items of the measures. Data was screened for normality assumptions (e.g. kurtosis, skewness), internal consistency, and missing data. Descriptive
statistics were run on all measures and sub-scale scores to obtain means (continuous variables) or frequencies (categorical variables), standard deviations, and ranges (Table 4). Scores were considered to be normally distributed if skewness was between +1 and -1 (Bulmer, 1979) and kurtosis was between +3 and -3 (Balanda & MacGillivray, 1988). A series of one-way Analysis of Variances (ANOVA) were conducted on sexual harassment experience, feminist identity, general disposition, age, and the Kinsey scale of sexual orientation to ensure success of randomization. Chi square analyses were conducted on year in school, identification as Transgender, ethnicity, Race, major, and sexual orientation to ensure success of randomization. Mean imputation was used for missing data on each of the dependent variables.

Fixed-effects models were used to test the hypotheses. A two-way Multivariate Analysis of Variance (MANOVA) was used to test Hypothesis 1 and then 3 two-way ANOVA’s were conducted to test Hypotheses 2a-c. SPSS Statistics for Windows, Version 24 was used to analyze the data (IBM, 2016). Bonferroni corrections were done to reduce the likelihood of Type 1 errors. First, the following multivariate assumptions were tested for violation: independence and randomization of observations, dependent variable normality within each combination of the independent variables, equality of covariance matrices, and multicollinearity. The design of the study ensured independence of observations and participants were randomly assigned to their conditions. Next, the following factorial Analysis of Variance (ANOVA) assumptions were tested for violation: independence of observations, and normality.
Results

Descriptive Statistics

Stress Appraisal Measure for Adolescents. The cognition items that make up the Threat Appraisal subscale were calculated and are presented in Table 4. The SAMA Threat Appraisal subscale showed excellent internal consistency, with a Cronbach’s alpha of .90. Skewness and kurtosis for the Threat Appraisal subscale were within limits for normality criteria and there was no evidence of range restriction. There was also no missing data on this variable. Data collected in this study were significantly different than in a study on cyberbullying by Na, Dancy, and Park (2015). Compared to the Na and colleagues (2015) study, the current study’s sample’s scores on the Threat Appraisal subscale were significantly higher, $M_{c1} = 2.28; t(255) = 3.41, p<.001$.

Positive and Negative Affect Schedule-Expanded Form. Participant’s items that make up the Negative Affect subscale of the PANAS-X at baseline were calculated and are presented in Table 4. The Negative Affect subscale showed excellent internal consistency, with a Cronbach’s alpha of .91. The data was somewhat positively skewed (1.21) while kurtosis for the Negative Affect subscale was within normal limits for normality criteria and there was no evidence of range restriction. No transformations were done given planned analyses are robust to minor violations of normality. Three participants had composite scores missing at baseline and one participant had a composite score missing at post. The Negative Affect subscale is made up of 10 items and if any of those items had missing data, the subscale was not computed for that particular participant. At baseline, one participant had one item missing from the subscale, a
second participant had two items missing, and the third participant was missing four items. Mean imputation by condition was used for the missing items. At post, one participant was missing data for one item on the subscale for which mean imputation by condition was used. After item-level mean imputation was completed, no missing composite scores remained. Data collected in this study was not significantly different than a control group of women in a study on PTSD, $M_{c1} = 1.50; t(149) = .27, ns$, (Brown, Wojtalik, Dewey, Bruce, Yang, & Sheline, 2016).

**Life Orientation Test Revised.** The items that make up the subscale of Dispositional Optimism were calculated and are presented in Table 4. The subscale for Dispositional Optimism showed acceptable internal consistency, with a Cronbach’s alpha of .75. A number of studies have suggested that an alpha of .70 or above is acceptable for internal consistency (Tavakol & Dennick, 2011). Skewness and kurtosis for this subscale were within normal limits of normality criteria and there was no evidence of range restriction. Data collected in this study was statistically different than data collected from a sample of women between the ages of 18 and 30 in a study that sought to update norms for the LOT-R (Schou-Bredal, Heir, Skogstad, Bonsaksen, Lerdal, Grimholt, & Ekeberg, 2017). Compared to the Schou-Bredal and colleagues (2017) study, the current study’s sample’s scores on the Dispositional Optimism subscale was significantly higher, $M_{c1} = 2.45; t(271) = 5.09, p < .001$.

**Sexual Experiences Questionnaire.** The endorsement of the occurrence of sexually harassing behaviors as reported on the Sexual Experiences Questionnaire (SEQ) is presented in Table 4. The SEQ showed excellent internal consistency, with a Cronbach’s alpha of .96. Scores on the SEQ were positively skewed (1.44); but univariate tests tend to be robust to this violation of normality (Hopkins & Weeks, 1990). Scores on the SEQ were within normal limits for
normality criteria. Finally, there was no evidence of range restriction. The prevalence rate for the current study (88%), as operationalized as the endorsement of at least one experience of sexual harassment behavior on the SEQ, was statistically significantly higher than the rate reported in Moylan and Wood (2016), 56%, \(X^2 (2, n=144) = 8.24, p< .01.

**Feminist Identity Development Scale.** The endorsement of items that represent which stage of development participants’ feminist identity was currently at is presented in Table 4. The FIDS total score showed acceptable internal consistency, with a Cronbach’s alpha of .78. Skewness and kurtosis were within normal limits for the FIDS. Finally, there was no evidence of range restriction. Data collected in this study was not significantly different than a sample of heterosexual, female college students, \(Mc^I = 3.75; t(304) = .49, ns, (Citarella & Mueller, 2015).

**Confidence in Label.** Participants who were in the sexual harassment conditions reported stronger beliefs on their labeling of the behavior in the video they viewed as sexual harassment \((M=8.01, SD=2.28)\) than participants in the non-sexual harassment conditions \((M=-7.57, SD=2.22)\). Endorsements of how strongly participants believed in their labeling of the video they viewed as sexual harassment or not are presented in Table 4. Six participants had missing data on this variable. For each of the participants with missing data, they had answered the dichotomous item asking them to label the interaction as sexual harassment or not; however, they did not answer the follow-up item asking how confident they were in their label. Consequently, their data for this item was computed using mean imputation according to what condition they were in. For participants in the sexual harassment conditions, responses were negatively skewed (-1.81) while the kurtosis was within normal limits of normality criteria and there was no evidence of range restriction. Skewness and kurtosis were within normal limits for normality criteria for participants in the non-sexual harassment conditions. Data collected in this
study was statistically different than data collected in the study validating the video stimuli used in this experiment (Study 1) when comparing data from participants in the sexual harassment conditions. Participants in the validation study reported stronger beliefs in their labeling of sexual harassment, \( M^c_1 = 8.91, t(138) = 2.40, p < .05 \). However, data collected in this study was not statistically different than data collected in the study validating the video stimuli used in this experiment (Study 1) when comparing data from participants in the non-sexual harassment conditions. Participants in the validation study reported similar levels of beliefs in their labeling videos as not sexual harassment, \( M^c_1 = -8.26, t(136) = 1.45, ns. \)

**Additional Calculation of Confidence in Label.** Additional analyses were done with both variables used to make the composite variable “Confidence in Label”. Each participant had a “Confidence Score” that was continuous, regardless of whether they labeled their condition in the expected way and each participant had an expected/not expected score that was dichotomous. The means and standard deviations can be found in Table 5. The means and standard deviations were calculated using the entire sample and excluding the participants who labeled their video in the unexpected way (see Table 5).

**Manipulation check.** Participant responses suggest the manipulation was effective \( (M = 7.25, SD = 2.20) \). Participant reports on how successful they felt they were in following the instructions to imagine that the person in the video was speaking directly to them are reported in Table 4. Skewness and kurtosis for this scale were within normal limits of normality criteria and there was no evidence of range restriction. Incorporating a manipulation check in experimental research has been noted as a recommended practice for providing support for the presence of internal validity (Finkel, Eastwick, & Reis, 2017). A series of one-way Analysis of Variances (ANOVA) were conducted on sexual harassment experience, feminist identity, general
disposition, age, and the Kinsey scale of sexual orientation to ensure success of randomization. Chi square analyses were conducted on year in school, identification as Transgender, ethnicity, Race, major, and sexual orientation to ensure success of randomization. No differences were found on any of these variables by condition.

Hypothesis Testing

To test the hypothesis that the type of social interaction (sexual harassment or non-sexual harassment) would interact with the context (classroom or college party) in which the interaction took place to influence participant responses (dependent variables) during the event-moment of the social interaction, a two-way between-groups multivariate analysis of variance (MANOVA) was performed to investigate group differences on three dependent variables: threat appraisal, change in negative emotional affect, and strength of belief when labeling behavior (belief). The independent variables were behavior portrayed in the video (sexual harassment or non-sexual harassment interaction) and context (classroom or college party) in which the interaction took place in the video.

Multivariate assumptions. MANOVA can be quite robust to violations of some assumptions when each cell has an $n>30$, is close in size, and the overall sample is large (Tabachnick & Fidell, 1983). The present study has each of these characteristics, specifically, cell size ranged from 31-36 participants. Threat appraisal, belief in labeling the behavior portrayed in the video and change in negative affect were moderately to strongly correlated, meeting the assumption of correlations between dependent variables that are moderately related but do not exceed .80 (French, Macedo, Poulsen, Waterson, & Yu, 2008); Grice & Iwasaki,
Correlations among dependent variables can be found in Table 6. No multivariate outliers were identified using Mahalonobis’ distance which provided initial support for a normal multivariate distribution. Levene’s test of homogeneity of variance was conducted on each dependent variable resulting in this assumption being met for threat appraisal (Levene’s statistic = 1.26, \( p = .29 \)) and strength of belief in labeling videos (Levene’s statistic = 2.37, \( p = .07 \)). The assumption of homogeneity of variance was not met for change in negative affect as Levene’s test was found to be significant (Levene’s statistic = 4.63, \( p < .01 \)). The multitude of tests for homogeneity of variance and how robust parametric statistics are to violations of this assumption has been vigorously contested for over 70 years (Huber, 1972; Huber, 2011). The multivariate assumption of equality of covariance matrices was not met, Box’s \( M = 36.52, (9, 203,765.75) = 3.95, p < .0001 \), thus providing evidence of a non-normal multivariate distribution. Given that the assumption of normality was violated according to some tests, a more conservative multivariate test was used, Pillai’s Trace, for testing hypothesis 1 instead of Wilk’s Lambda or the use of data transformations (Finch, 2005).

**Univariate assumptions.** Visual inspection of histograms and normal Q-Q plots of residuals showed that for each of the four cells (conditions) threat appraisal, change in negative affect and strength of belief in labeling behaviors as sexual harassment were normally distributed. The Shapiro-Wilk test of normality also suggested that threat appraisal, change in negative affect and strength of belief in labeling behaviors as sexual harassment were normally distributed as reported significance levels did not reach \( p < .001 \) (Schmider, Ziegler, Danay, Beyer, & Bühner, 2010). The between-subject design of the study and random assignment to conditions satisfied the assumption of independence of observations and the assumption of homoscedasticity was also met.
Testing for multivariate effects of behavior. The multivariate effect for behavior type was significant, Pillai’s Trace = .78, $F = 154.98$, $df = (3, 129)$, $p < .001$, $\eta^2_p = .78$, indicating that a large effect was found according to Cohen (1988, pp. 280-287) who suggested .01 to be small, .06 to be medium, and .14 to be large. There was a significant main effect for behavior, such that participants who viewed the sexual harassment stimuli had greater negative internal responses to the social interaction than individuals who viewed the non-harassment stimuli. Results are displayed in Table 6.

Testing for univariate effects of behavior. Using a Bonferroni adjusted alpha level of .017 to minimize risk of Type I error, the univariate F tests showed there was a significant difference between behavior conditions for each dependent variable. A large effect was found for behavior type on threat appraisals, $F = 86.70$, $df = (1, 131)$, $p < .001$, $\eta^2_p = .40$, whereas significantly higher scores were reported in the sexual harassment (SH) condition ($M= 3.40$, $SD= .92$) than in the non-sexual harassment interaction (NSH) condition ($M= 2.03$, $SD= .79$) as can be seen in Table 8. Behavior type also had a large effect on change in negative affect, $F = 56.05$, $df = (1, 131)$, $p < .001$, $\eta^2_p = .30$, whereas significantly higher scores were reported in the SH condition ($M= .89$, $SD= .85$) than in the NSH condition ($M= -.05$, $SD= .56$) as can be seen in Table 9. Finally, behavior type had a large effect on belief in labeling video as sexual harassment or not, $F = 444.22$, $df = (1, 131)$, $p < .001$, $\eta^2_p = .77$, whereas significantly higher scores were reported in the SH condition ($M= 7.54$, $SD= 3.77$) than in the NSH condition ($M= -6.71$, $SD= 4.11$) as can be seen in Table 10. Behavior type, specifically the sexual harassment condition had a large effect for each of the dependent variables.

Supplemental Analyses. ANOVAs were conducted to examine if the same relationships would be found with these two variables separated. While an interaction between context and
behavior type was not found using the composite variable, previous research suggests that context is a mitigating factor in identifying an interaction as sexual harassment (Harris, McDonald, & Sparks, 2018; Saunders et al., 2007). In addition, there may have been instrumentation issues with the composite variable used to measure confidence in labeling an interaction as sexual harassment which could have led to null findings. The variable “confidence in label” lacked previous psychometric testing. In addition, it was calculated by recoding the Likert scale item “How confident are you in your label of the interaction in the video?” from (1 to 10) to (-1 to -10) if their response was “No”. This was done because not every participant in the “sexual harassment” condition labeled the interaction as sexual harassment and not every participant in the non-sexual harassment condition labeled the interaction as not sexual harassment. For these reasons, it was suspected that there could still be a context effect. It was hypothesized that the type of social interaction (non-sexual harassment; sexual harassment) will interact with the context (classroom; college party) in which the interaction takes place to influence whether participants labeled the interaction as sexual harassment or not. To test this supposition, factorial logistic regression (LR) was used to test the effects of context and behavior type on the dichotomous variable of labeling a video as sexual harassment or not. Logistic regression does not have the same assumptions of homoscedasticity, multicollinearity, or normal distributions. The few assumptions of binary logistic regression, including that the dependent variable be binary, that the study not be a repeated measures design, and that the sample be large enough given the number of independent variables, were all met. Participants were more likely to label the behavior in the video as sexual harassment if they were in the sexual harassment condition than the non-sexual harassment condition; LR $X^2 (1, n = 136) = 128.13, p < .001$, Nagelkerke $R^2 = .81, d = 3.09$. There was not a main effect of context on labeling a video as
sexual harassment or not; LR $X^2 (1, n = 136) = .26$, $p = .61$, Nagelkerke R$^2 = .003$, $d = .09$. There was a significant interaction between context and behavior on labeling the video however, LR $X^2 (2, n = 136) = 37.17$, $p < .001$, Nagelkerke R$^2 = .32$, $d = 1.63$. Nagelkerke R$^2$ is a pseudo R$^2$ and thus is interpreted differently. Pseudo R$^2$ can only be compared across models with the same predicted outcome. The larger the pseudo R$^2$, the better a particular model fits (Freese & Long, 2006). First, data was analyzed using the entire sample. Behavior was the greatest predictor of labeling a video as sexual harassment and the interaction between context and behavior is the next best predictor. Participants in the sexual harassment/classroom condition were the most likely to label the video as sexual harassment as can be seen in Figure 3. When separated, Confidence did not correlate with appraisals or change in negative affect. Additionally, when compared, participants who labeled the SH condition in the expected way were not statistically different than those who labeled the NSH condition in the expected way on confidence. Finally, participants who labeled the video stimuli in the unexpected way had statistically lower levels of confidence than those who labeled their video in the expected way.

**Testing for multivariate effects of context/interaction effects.** There was not a significant multivariate effect for context, Pillai’s Trace = .02, $F = .72$, $df = (3, 129)$, $p = .54$, $\eta_p^2 = .02$ on any of the dependent variables as can be seen in Table 7. Had this effect been significant, the effect of context on participant responses would have been considered small. Finally, there was not a significant multivariate effect for an interaction between context and behavior, Pillai’s Trace = .04, $F = 1.61$, $df = (3, 129)$, $p = .19$, $\eta_p^2 = .04$ on any of the dependent variables as can been seen in Table 7. Had this effect been significant, the effect of the interaction of behavior type and context on participant responses would have been small. Univariate follow-up tests
were not conducted on context or the interaction of behavior and context because no multivariate
effects were found.

Discussion

The goal of Study 2 was to examine the cognitive appraisals and emotional responses that
occur during the event-moment of sexual harassment and to examine how the context in which
the behavior occurs affects these internal processes. Most research on sexual harassment has
been cross-sectional, a design that relies heavily on memory recall and is subject to biases
resulting from the passage of time (Arvey, et al., 1995; Blackstone, et al., 2014). Unsurprisingly,
research on the occurrence of sexual harassment has resulted in varying rates of prevalence; but
the exact reasons why are unknown. One possible explanation is that the immediate effects of
sexual harassment have not been studied extensively. A premise of this study was that a closer
examination of how targets respond to sexual harassment during the event-moment would
provide a greater understanding as to what factors affect labeling and eventual reporting of
sexual harassment. Thus, Study 2 sought to examine this moment using an experimental video
paradigm that was validated in Study 1.

It was hypothesized that the type of social interaction (sexual harassment; non-sexual
harassment) would interact with the context (college party, classroom) in which the interaction
took place to influence participant responses (Hypothesis 1). Specifically, it was hypothesized
that participants in the sexual harassment/classroom condition would report the highest threat
appraisals (Hypothesis 2a), the greatest increase in negative affect (Hypothesis 2b), and the
greatest confidence in their labeling of the interaction as sexual harassment or not (Hypothesis 2c). While there was not an interaction effect of context and social interaction on the outcome variables, some hypotheses were partially supported. As expected, participants in the sexual harassment conditions did report higher threat appraisals, greater increases in negative affect, and more confidence in their labeling of the interaction.

A main effect for behavior was found for threat appraisals in this study. Similarly, previous research has found threat appraisals to be reported by target women who have retrospectively reported sexual harassment (Berdahl & Aquino, 2009; Ferguson, Lawrence, & Matthews, 2000). Further study is warranted to be able to conclude if it was the sexual harassment portrayed in the video or simply the uncomfortable feelings associated with being repeatedly asked out when one is not interested that lead to threat appraisals; however, if it was the sexual harassment behaviors in the video that lead to threat appraisals, then results from this study provide further support for the supposition that experiencing sexual harassment is sufficient to cause cognitions that one’s safety is in jeopardy (Langhout et al., 2005). These results are noteworthy because at no point were the participants’ physical safety directly threatened. The video stimuli do not depict attempted rape and the initiator’s touching of the target’s arm is purposely ambivalent so as not to objectively be viewed as sexual assault. Interestingly, the Cognitive Relational Theory of Stress (CRTS) states that a stressor is thought to become threatening when harm is anticipated and one feels they have little control (Lazarus & Folkman, 1987). This theory may explain why the participant felt threatened when there was no true overt threat because prior research has shown that women appraise sexual harassment to be threatening and in fact there is a strong association held by women between sexual harassment and the potential for rape (Ferraro, 1996). The sexual harassment scenario may have triggered
The Evolutionary Model of Threat provides a plausible explanation for why an analogue scenario could still trigger a threat reaction without a live face to face interaction. This theory suggests that there is an evolutionary response in which it is adaptive to learn to be wary or cautious of potential threatening stressors that could lead to danger or require effort that may exceed one’s resources. This evolutionary response would be triggered by the stressors in the scenario resembling real life situations that one would adapt to (Boyer & Bergstrom, 2011). Thus, it is also plausible that their reactions could reflect how they would respond in a real-life scenario. Boyer, et al. (2011) theorizes that the modern day sensitivity to threat is specifically related to threat from other human beings. Ferraro’s (1996) research in particular shows that women are even more sensitive to potential threat from other humans than men because they consistently reported a fear of a specific type of violence from men (rape). Thus, the women in this study could have had this same rape association triggered by the sexual harassment scenario. Further research is needed to draw conclusions about what lead to threat appraisals as it could be exposure to sexual harassment, triggered associations to rape, or another aspect that has yet to be identified and measured.

The Shadow Thesis, which proposes that many women perceive a threat of rape at all times, during any interactions with men, provides further theoretical and empirical evidence to support why the research participants may have associated the sexual harassment scenario with potential threat such as rape (Ferraro, 1996). Women in this study may have had an associated fear of risk for rape triggered when appraising their “interaction” with the male actor in the video stimuli. This fear could have been based on deeply held beliefs that many women have (Pina & Gannon, 2012) about men’s condoned proclivity for sexual violence, based on their own past experiences, or on stories about other women’s experiences. In fact, research has shown that
women have beliefs about what they believe men think about how men and women interact. These are beliefs such as men are incapable of controlling their sexual impulses, women are solely responsible for the sexual attention they receive based on how they dress, and women will lie about rape to get revenge (Lonsway & Fitzgerald, 1994). The more strongly women hold these beliefs, the more likely they are to see sexual harassment as a risk for sexual assault (Seabrook, McMahon, & O’Connor, 2018). Interestingly, women’s beliefs about men, especially ones who engage in sexually harassing behaviors may be justified given that a number of studies have found that perpetrators of sexual harassment are more likely to have a proclivity for sexual assault (Silbaugh, 2015; Thomae & Pina, 2015). It is likely that participants in this study appraised sexually harassing behavior to be threatening because of greater awareness of the presence of strongly held beliefs that women are not likely to be believed if they are the target of sexual violence or that others deem unwanted sexual attention as insufficient to warrant concerns about one’s safety (McMahon & Farmer, 2011). Some studies have gone further to find that any potential face-to-face interaction with a man can spark a fear of rape (Fisher & Sloan, 2003). This is a possible explanation for why threat appraisals reported by women in the non-sexual harassment condition were still present despite the absence of any indicators of romantic interest on the part of the initiator.

If participants appraised specifically the sexual harassment as threatening, these findings could also be understood through the lens of the Sociocultural Theory of Sexual Harassment (STSH) which states that gender inequality underlies the phenomenon of sexual harassment (Malovich et al., 1990; Thomas et al., 1997). Gender inequality can be seen in environments where men have more power than women, even if that power results from simple male majority (Gneezy et al., 2009). Research has found that environments that are male dominated (males
with power) do tend to have a higher tolerance for sexual harassment (Schwartz, et al., 2011; Wasti et al., 2000). A number of aspects of the college environment may drive women’s perception that college environments are male dominated such as the power structure, availability of resources, and who holds leadership roles in both social and academic contexts (Bond & Wasco, 2017). Given that college environments are typically male dominated, it is likely that given prior research, these environments are also more tolerant of sexual harassment.

In fact, Cortina and Berdahl (2008) have cited decades of research showing that college environments tend to be tolerant of sexual harassment. So, according to the STSH, if women perceive an environment to be tolerant of sexual harassment behavior, then they are also likely to feel there is inadequate protection from others in which case their sense of threat would be increased.

Postulating that the women in this study associate sexual harassment with gender inequality would be in concordance with how much impact sexual harassment alone can have. In fact, research has demonstrated that sexual harassment is enough to reinforce gender inequality or sexism (Parish, Das, & Laumann, 2006). Environments that perpetuate gender stereotypes and encourage masculine traits not only have a higher tolerance for sexually harassing behavior, they tend to have a greater number of reported and unreported incidents of sexual harassment (Castro, Kintzle, Schuyler, Lucas, & Warner, 2015), lending validation to the relationship between gender inequality and sexual harassment. This association might be a result of having personally experienced sexism or witnessed sexism in their college environment. In fact, 88% of participants in the present study endorsed experiencing some type of sexual harassment while in college. As such, participants in this study may have drawn on their own perception that “college” is permissive of gender inequality and thus perceived the initiator to be more powerful
than them in the video analogues. The one-on-one interaction, as depicted in the video stimuli may have reinforced the idea that men dominate interactions with women in college (Fiske, 2018), further feeding into this unequal power dynamic. Perceived unequal power dynamics have been found to be associated in up to 88% of peer sexual harassment experiences in prior research (Mitchell, Jones, Turner, Shattuck, & Wolak, 2016). Given that sexual harassment has been linked to gender inequality, it is not surprising that the women in this study appraised the interaction as threatening as gender inequality is a contributor to many adverse experiences women uniquely face (Fox & Tang, 2017).

There are numerous adverse effects associated with sexual harassment, thus it should be unsurprising that women would find the experience to be threatening, if that was the aspect of the stimuli participants were attending to. Prior research has found that when presented with a hypothetical situation involving sexual harassment, many women report that they would leave an environment even if it meant significant financial stress, like quitting a job (Blackstone, Uggen, McLaughlin, 2009). Another study found that women believed they would be met with apathetic responses to their concerns about being sexually harassed so they regularly engaged in proactive behaviors to prevent being a target (Dhillon & Bakaya, 2014). When presented with hypothetical scenarios of being sexually harassed, some response behaviors that college women have identified included avoiding the harasser at all costs and changing how they dress and interact with the harasser (Malovich, et al., 1990). Furthermore, women in the same study reported that they would feel angry, helpless, uncomfortable, and embarrassed. Finally, a study on college women by Whitley and Page (2015), found that one source of fear about sexual harassment originated from a fear that they would become the target of the harassment they are witnessing and thus experience what that target was experiencing like being ostracized, interruptions in
coursework and class attendance. Prior research has also cited women’s beliefs that if they were sexually harassed, their experience would be minimized, leading to an overall sense of invalidation (Bergman et al., 2002). Based on this prior research, women seem to believe that being sexually harassed leads to other negative consequences like the interruption of school or work. In fact, research has found that women, either from personal experience or observing others, will change their behavior first when encountered with sexual harassment which could lead to not attending classes or missing work to protect themselves (Bergman et al., 2002). Targets may also fear being ostracized and thus lonely as a result of avoiding their harasser (Holland & Cortina, 2016). Given the prevalence of sexual harassment, it is quite possible that besides carrying beliefs similar to what women have reported in the aforementioned studies, women in this study may have observed other targets lose out on opportunities to socialize resulting from their avoidant behavior, a common response found in other research on sexual harassment (Ullman, Lorenz, & O’Callaghan, 2018). When considering the abundance of what women know about potential negative consequences associated with being sexually harassed, it is understandable that the women in this study, despite only being exposed to a video analogue might report appraisals of threat specific to the sexual harassment, as the cost to one’s psychological health and educational attainment is at stake.

Similar to the main effect of behavior found for threat appraisals, participants exposed to the sexual harassment condition reported a greater increase in negative affect than those in the non-sexual harassment condition. This finding makes sense since those who feel threatened are likely to also experience negative affect (Grupe & Nitschke, 2013). This finding is congruent with previous research on the relationship between negative affect and threat appraisals in a variety of situations (Scherer & Moors, 2018). This finding also adds additional support for the
negative impact of sexual harassment on one’s affect and emotions (Chiodo, Wolfe, Crooks, Hughes, & Jaffe, 2009; Schneider, Swan, & Fitzgerald, 1997). More research is needed to understand how long the impact of sexual harassment on emotions can last and how that duration may be affected by other factors like severity and persistence. Additionally, there is only sporadic empirical evidence for specific negative emotions resulting from sexual harassment, thus a broad measure of negative affect was used in this study (Quick & McFadyen, 2017). Future research should explore more specific emotions that are triggered by feeling threatened, especially in the context of sexual harassment.

As hypothesized, participants reported greater confidence in their labeling in the sexual harassment condition than in the non-sexual harassment condition. This study found that most of the participants in the sexual harassment condition (objectively labeled as the sexual harassment condition) did subjectively label the interaction as sexual harassment, which is not congruent with previous research on labeling sexual harassment. Discrepancies in what participants consider sexual harassment (i.e., subjective) and what researchers consider sexual harassment (i.e., objective) are rampant in the literature (Ilies et al, 2003; Brown Hangartner, 2015). Subjective measures of sexual harassment ask participants if they have been sexually harassed, thus requiring them to subjectively label an experience whereas objective measures of sexual harassment ask participants to indicate whether they have experienced certain sets of behavior or not, without asking participants to label their experiences as sexual harassment. The researchers then determine sexual harassment prevalence rates based on whether or not certain behaviors, predetermined by the researcher as being indicators of sexual harassment, were endorsed as having been experienced. Objective measures are often used by researchers to circumvent the tremendous variability (over and under reporting) in whether or not someone subjectively self-
labels as having had a sexual harassment experience. Methodological design and choice of measurement tools in the prior research literature likely explain this recurring discrepancy between subjective and objective measures of sexual harassment. When participants are asked if they have experienced a particular behavior, such as unwanted touching, many studies have found that a greater number of participants will endorse the behavior than will subjectively label that behavior as sexual harassment (Neilsen et al., 2010; Saunders, et al., 2007). In the current study, the sexual harassment condition, as defined by the researcher, was labeled by almost every participant as sexual harassment, suggesting agreement between the participant (subjective) and the researcher (objective) on what behaviors constitute sexual harassment. While the intent of the study was not to establish agreement between subjective and objective perceptions of sexual harassment, it was a necessary premise in order to test the experimental manipulation. Many other studies have focused on isolated behaviors giving rise to the inclusion of countless additional variables that may impact the labeling of a behavior as sexual harassment by participants. What might have led to this agreement of subjective and objective perceptions of sexual harassment in the current study, may have been that the stimuli used in the study was a realistic interaction, a conversation, with multiple related variables, context, and defined roles of involved individuals.

A related methodological issue is the use of dichotomous answer choices in most prior research on labeling and reporting of sexual harassment (Magley et al., 1999; Street, Gradus, Stafford, & Kelly, 2007; Wood, Sulley, Kammer-Kerwick, Follingstad, & Busch-Armendariz, 2017). Prior research using dichotomous answer choices has found that sexually harassing behaviors, that are perceived to be more severe, are more likely to be labeled as sexual harassment (Nielsen et al 2010). The use of isolated behavioral indicators combined with
dichotomous answer choice may lead to more subtle types of sexual harassment that may be covert, ambiguous, and heavily based on context, not being subjectively identified and thus reported to researchers as sexual harassment. This study sought to address the under labeling of the more ambiguous types of sexual harassment by using a continuous variable, belief in label, instead of only a forced choice dichotomous “yes/no” on whether or not sexual harassment occurred. When not constrained by a “yes/no” choice; but able to consider a continuum of experiences, participants in this study were able to integrate more ambiguous behaviors when rating their confidence in labeling. This was precisely what the objective of the research design intended to capture.

Implications of the findings of different patterns when separating the Confidence in Label variable suggests that participants were equally confident across context conditions and that confidence in label does interact with how participants labeled the videos. Participants were more confident when they labeled the video in the expected way as compared to those who did not. When the participants who labeled the videos in the unexpected way were excluded from analyses, the correlations between the other dependent variables were no longer significant. This taken together with the significant effects found when using the entire sample and composite variable suggests that Confidence in Label did tap into different content than the two variables did when considered separately. For the purpose of this study, the content that Confidence in Label was measuring was in fact in line with the overall research question which wanted to explore the ambiguity around labeling sexual harassment. These two items could be used to validate conditions or serve as a manipulation check; but that was not the intended purpose of the study.
However, the meaning of the confidence in labeling variable is still uncertain; thus interpretation of this variable requires further discussion in the context of other design issues and variables. Asking participants to attend to their cognitions and emotions before asking them to label an interaction may have contributed to the high confidence ratings overall. Yet, confidence in labeling was only moderately correlated with threat appraisals and change in negative affect, suggesting other variables might impact ratings of confidence in labeling. These other variables could be important individual differences between participants such as prior direct experience, knowledge of what has happened to others who have made sexual harassment accusations, and even knowledge of sexual harassment laws (Abbott, Elkins, Phillips, & Madera, 2014; Kilimnik & Meston, 2019). This conceptualization would partially explain why a group of people could have identical experiences, but end up with different appraisals and affect. Alternatively, whether targets label an interaction as sexual harassment or not may have little to do with how they have been impacted and may have more to do with anticipated costs, like feeling helpless or experiencing retribution (Bell, Street, & Stafford, 2014; Nielsen et al., 2010; Sojo, Wood, & Genat, 2016). Another explanation could be that despite efforts to develop and use a paradigm that purportedly manipulates the participant to imagine they are actually interacting with the male actor in the video; the salience may have been limited. In other words, participants may have felt more comfortable labeling an interaction, confidently, because there were no real repercussions that could potentially result from such an act. Research on prevalence rates of sexual harassment has documented the costs to targets in labeling an interaction as sexual harassment and especially reporting it (Bell et al., 2014; Nielsen et al., 2010; Sojo et al., 2016). Those costs may not have been factored in by participants in this study because it was a simulated interaction. While this methodology is an improvement in a controlled experimental
design, the real test of its utility would be in epidemiological studies where prevalence rates are being studied.

An interaction of behavior (non-sexual harassment; sexual harassment) and context (classroom; college party) on threat appraisal, change in negative affect, and confidence in labeling was hypothesized but not supported by the data. While a main effect of behavior was found, what was most surprising was the lack of an effect of context on any of the three dependent variables. Some studies have found contextual variables such as location, and perceived tolerance of sexual harassment to play a role in whether an interaction is labeled as sexual harassment or not (Butt et al., 2006; Madan & Nalla, 2016). For example, prior research has found that sexually harassing behaviors by coworkers that occurred outside of the workplace are perceived to be more acceptable than if the same behaviors had occurred during work (Ritter, 2014). This context effect has been found in both correlational research and qualitative studies examining lay person definitions of what constitutes sexual harassment (Dillon et al., 2015; Saunders et al., 2007). Given the previous research which has mostly focused on workplace sexual harassment (McCord, Joseph, Dhanani, & Beus, 2018; Nielsen, Glasø, & Einarsen, 2017) and found potentially sexually harassing behaviors to be more acceptable in social contexts outside of work, it was presumed, that college classrooms would offer a parallel to workplace settings and thus, similar to the work place literature, that social expectations of flirting would have a greater presence in the college party setting than in the classroom thus making the occurrence of sexual harassment less acceptable in the classroom setting and potentially more acceptable in the college party setting (Graham, Bernards, Abbey, Dumas, & Wells, 2017; Mellgren, Andersson, & Ivert, 2017). However, this pattern was not found in this college sample comparing a classroom and a college party. The same behavior was considered to be sexual
harassment in both contexts by this sample. This is a departure from literature on workplace sexual harassment in that this finding suggests that expectations of what is not acceptable behavior in a classroom is the same as what is not acceptable behavior at a college party. It should be noted that this was the first study to experimentally examine the effect of context of sexual harassment in a college sample. Potential explanations for the lack of a main effect of context on threat appraisals, change in negative affect, or confidence in labeling likely rest in the underlying assumptions that a classroom and a college party for college students would be analogous to a workplace and “outside of work” setting for a worker. This begs the question of why these behaviors are considered by college students to be not acceptable not just in a classroom but also at a college party. It might be that college students are more attuned to what behaviors are considered sexual harassment or that the rules of acceptable behavior are more established for college parties than the social contexts examined in the work place literature. However, this is not a likely explanation as college students have consistently been found to perceive sexual harassment by peers as less threatening than sexual harassment by someone with power over them (Bursik & Gefter, 2011). Another possibility is that this study may not have had a context that was truly parallel to a work place. It could be that seeing a co-worker in a non-work setting is a different experience entirely than seeing another student in a classroom and at a party. One may be more likely to know the co-worker and have an established set of expectations about what is considered appropriate behavior which are context specific. Perhaps seeing a fellow student at a party is more like seeing a stranger and the same expectations are present regardless of context. However, this finding is probably more likely due to the strong main effect for behavior which could have washed out any potential effect of context. In the future, a comparison of contexts relevant to a college population could be done using a more ambiguous
sexual harassment condition. Additionally, using the same clearly sexually harassing behaviors as was portrayed in the video stimuli in the current study in another study comparing work place and social settings might result in similar findings (no context effect of social setting versus work setting). This possibility makes sense given the severity of the behaviors portrayed in the video stimuli. More covert or less egregious types of sexual harassment may be perceived quite differently, thus allowing for more nuanced effects of context.

**Limitations**

Despite this study’s novel experimental design and additive value to the literature, there were still some limitations to consider when drawing conclusions from the results. Generalizability of the study’s findings is limited as a random sampling technique was not used. While the sample was taken from the population of interest, there may be inherent differences in students who participate exclusively in online studies versus in-person studies suggesting the possibility of selection effects. Students who exclusively participate in online studies might be less extroverted, may have higher rates of social anxiety, or may be less invested in extra academic tasks (i.e. extra credit). However, there is research to suggest that the same results can be obtained using online or paper and pencil methods across a number of different types of constructs, such as alcohol use and personality characteristics (Riva, Teruzzi, & Agnolli, 2003). While generalizability could potentially be questioned because this sample consisted of female college students at one university, it is worth pointing out that the purpose of this study was to examine female college student perceptions during the event-moment of sexual harassment, so this was more than a convenience sample; it was the population of interest. In addition, students in this sample reported a wide variety of majors; they did not consist of psychology majors only. Nonetheless, the conclusions drawn cannot be generalized to students not enrolled in psychology
classes, students who chose not to participate in research for extra credit, or students from other universities. It is possible that the climate on this school’s campus surrounding sexual harassment may have been impacted by news reports and what has been shared on social media (i.e. the #MeToo movement). Relatedly, generalizability was also limited due to the homogeneity of the sample (i.e. mostly heterosexual, mostly Caucasian women). However, this pattern of demographics is common in the sexual harassment literature examining college samples that are not specifically designed to look at Race/Ethnic differences. While this study’s sample was 75% Caucasian, a study on sexual violence using a nationally representative sample from colleges across the U.S. reported a sample comprised of 85% Caucasian women (Fisher, Daigle, Cullen, & Turner, 2003). The low participation of individuals identifying as non-white is common in clinical trials as well suggesting a larger, systemic issue at play (Fisher & Kalbaugh, 2011). This could be indicative of historically lower participation in research by people of color across disciplines, however, it also shows that the current sample was more diverse than other studies using college samples. Generalizability may also be limited due to the stimuli that was used, as it portrayed a heterosexual, Caucasian male as the initiator. While much of the reported sexual harassment is from Caucasian males interacting with females, this may not generalize to dyadic sexual harassment interactions between two persons of different races, ethnicities, genders, or sexual orientations. Lastly, the use of video stimuli to elicit responses to sexual harassment may not generalize to sexual harassment from a live actor or an actual person perpetrating sexual harassment in everyday life. Nevertheless, the use of a video and instructions of engaging with the initiator in the first person was designed in such a way as to most closely mimic a live interaction. This paradigm allowed for the portrayal of a more complex and severe type of sexual harassment than has been done in previous studies.
Another limitation to consider that could have threatened the study’s internal validity is that participation in the study may have occurred anywhere as the study was administered online. While the use of ear buds was recommended and A/V tasks were incorporated to ensure proper functioning of computers, some participants may have proceeded in a noisy or distracting environment anyway. A total of 29 participants were not permitted to participate due to failing the A/V tasks. Outside influences may have affected participant responses that would otherwise have been controlled if this study were conducted in a laboratory setting. It was integral to the manipulation that participants understood and followed the directions to imagine they were interacting directly with the actor in the video. Thus, a salience item was included at the end of the experiment as a manipulation check to identify any participants whose data might be invalid because they either could not or would not follow the instructions. Participants who indicated a “1” or “2” on the 10-point salience scale were dropped from analyses ($N=7$). It was presumed these participants may not have attended to the study as a whole. Participants who were dropped from the study due to their responses to this item did not differ on any demographics or measures administered prior to viewing the video stimuli. Finally, data on all constructs were obtained through self-report questionnaires which are vulnerable to recollection problems and social desirability bias. However, the constructs measured included primarily internal and/or covert phenomena and thus are best measured through self-report by their very nature of not being readily observable by others. Similar to other internalizing phenomena like anxiety, self-reported internalizing symptoms (e.g. intrusive thoughts, negative self-talk) are more predictive of internalizing diagnoses than internalizing symptoms reported by other informants (Manassis, Tannock, & Monga, 2009). Social desirability was likely curtailed by administering this study online, providing a semblance of anonymity. Shared method variance among constructs is
another limitation to consider due to the utilization of a single informant. It would be ideal to compile information from multiple informants; however, the inclusion of additional observers would have been beyond the scope of the study (i.e. bystanders). Even if sexual harassment is observed by a third party, by definition, sexual harassment includes “unwanted” sexual advances and personal violations, these are subjective experiences and may not be observable by “bystanders”, therefore self-report on the experience of sexual harassment is likely to be the most informative.

Implications

Despite the limitations noted, the current study contributes to the literature on how targets respond to sexual harassment in several ways. First, a new experimental paradigm that portrayed a more realistic sexual harassment interaction was created and validated in this study. This paradigm was novel in that it portrayed many potentially sexually harassing behaviors in the context of a conversation thus mimicking what targets actually experience in real life. Most of the previous experimental research on sexual harassment has relied on single, isolated behaviors that can be explained away for a number of reasons such as targets’ perception that this was a “one-time” thing or that they misunderstood the initiator. Findings from this study support the introduction of a new and better paradigm for future study of sexual harassment.

The Cognitive Relational Theory of Stress (CRTS) has been used for decades in the study of sexual harassment and results from this study suggest its utility in this area could be improved by including additional variables. Implications of the null finding of effect of context could mean that important aspects of the context were not measured. The role of context on how targets
respond to sexual harassment could be defined and thus measured in different ways. In order to bridge findings from this study to other areas of research on sexual harassment, future research should measure tolerance for sexual harassment. While the CRTS emphasizes the interaction of person-factors and environmental-factors, it is still unclear what role perceived tolerance of sexual harassment in a given environment or context plays. Future research expanding on the CRTS could include measures of perceived tolerance of sexual harassment and analyses could test whether it is a person, environment, or combined factor in predicting targets’ responses or confidence in labeling an interaction as sexual harassment.

A final implication of the finding that all of the women in this study appraised the interaction with the man as threatening suggests that there is a need to better educate coeds about interpersonal interactions as potentially half the college population may perceive many of their exchanges to be threatening. If some college women are experiencing a constant level of threat, they may become desensitized to the point of unknowingly putting themselves in dangerous situations. Not only is this finding further support for the Shadow Thesis which theorizes that women perceive a threat of rape during any interaction with men (Ferraro, 1996), it highlights a point of intervention. Trainings geared at preventing sexual harassment may be more effective if the target of the training were the people most likely to be the ones engaging in sexual harassment, college men. This additional component not only allows for the opportunity to teach replacement behaviors; but also not put the onus on the most likely targets of sexual harassment, college women. Findings from this study can be interpreted in such a way as to re-design sexual harassment prevention trainings. Trainings could perhaps include segregated portions and combined audience portions so that myths that men and women hold about each other can be dispelled and the training could be a restorative experience, rather than a punitive one. Insight
into the experiences of some college women has the potential to inform the development and dissemination of guidelines for college students regarding what constitutes sexual harassment within and across contexts. While sexual harassment awareness and prevention programs are in place at many universities, perhaps greater emphasis should be placed on teaching transitioning youth to be mindful of behavioral cues and not immediately dismissing them. The content being taught may need to be evaluated and revised to encompass the full experience of sexual harassment. Presently, many universities and workplaces use the legal definition of sexual harassment or some version of it and findings from this study demonstrate the limitations of depending on a single definition. When students are provided with a complex interaction that includes subtle behaviors that only when considered together might be labeled as sexual harassment, the inherent ambiguity surrounding sexual harassment is better captured and could lead to greater accuracy in prevalence rates. Using a definition that references vague generalities to drive the measurement of sexual harassment ignores the ambiguity rampant in the field and that is a reflection of how rampant it is in society. Research on sexual harassment that ignores rather than embraces the ambiguity does targets and initiators a disservice.
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Appendix A.

Demographics (Study 1)

1. What is your age? ______

2. Do you identify as a member of the Transgender community?
   □ Yes
   □ No

3. How would you classify your sexual orientation?
   □ Attracted to a different sex
   □ Attracted to the same sex
   □ Attracted to both sexes

4. Please select the item from the scale below that best describes your sexual orientation.

<table>
<thead>
<tr>
<th>Exclusively heterosexual with no homosexual (Straight)</th>
<th>Predominantly heterosexual, only incidentally homosexual</th>
<th>Predominantly heterosexual, but more than incidentally homosexual</th>
<th>Equally heterosexual and homosexual</th>
<th>Predominantly homosexual, but more than incidentally heterosexual</th>
<th>Predominantly homosexual, only incidentally heterosexual</th>
<th>Exclusively homosexual (Lesbian)</th>
</tr>
</thead>
</table>

□ Not Applicable

5. Which ethnic group best describes you?
   □ Hispanic or Latino/a
   □ Not Hispanic or Latino/a

6. Which racial group best describes you? Please check all that apply.

   □ American Indian or Alaskan Native
   □ Asian
   □ Black or African-American
   □ Native Hawaiian or Pacific Islander
   □ White or Caucasian
   □ Other - Specify: __________________________

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☐ More than one race - Specify: ___________________

7. Which graduate program are you in?
   ☐ Women and Gender Studies
   ☐ Psychology

8. In what year are you in your graduate program?
   ☐ First
   ☐ Second
   ☐ Third
   ☐ Fourth
   ☐ Fifth
   ☐ Sixth or more

9. Have you participated in any training that is relevant to sexual harassment?
   ☐ No
   ☐ Yes
   If Yes, please
   list:_____________________________________________________________
Appendix B.

SHAQ

1. How would you describe the gender of the person speaking in the video?
   - Male
   - Female
   - Cannot distinguish

2. How would you describe the race/ethnicity of the person speaking in the video?
   - African American/Black
   - White/Caucasian
   - Hispanic/Latino
   - Cannot distinguish

3. Approximately how old does the person speaking in the video appear to be?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45 or older

4. Did the person in the video suggest using alcohol to make it easier to engage in sexual activity?
   - Yes
   - No

5. Did the person in the video show interest in having a sexual relationship with the other person?
   - Yes
   - No

6. Did the person speaking in the video touch the other person?
   - Yes
   - No

7. Did the person in the video lean in to the other person’s personal space?
   - Yes
   - No

8. Did the person in the video ask questions about sexual details of someone else’s life?
   - Yes
   - No

9. Did the person in the video offer a special favor in exchange for sex?
   - Yes
   - No
10. Did the person in the video engage in friendly conversation?
   o Yes
   o No

11. Did the person in the video accept that their advances had been denied previously?
   o Yes
   o No

12. Did the person in the video introduce their self?
   o Yes
   o No

13. Did the person in the video touch the other person after given behavioral cues that they did not want to be touched?
   o Yes
   o No

14. Did the person in the video offer a compliment?
   o Yes
   o No

15. Did the person in the video seem respectful of the person they were talking to?
   o Yes
   o No

16. Did the person speaking in the video ask questions of the other person?
   o Yes
   o No

17. Did the person in the video bring up the topic of drinking alcohol?
   o Yes
   o No

18. How would you best describe the context of the video? ?
   o Outside; but at a college party
   o A bar or restaurant
   o In a classroom
   o A public place on a college campus
   o A public place off a college campus

19. Did the person in the video engage in sexual harassment?
   o Yes
   o No
20. How confident are you that the person in the video did or did not engage in sexual harassment?

1 = Not at all confident
10 = Very confident
Appendix C.

Scripts

Sexual Harassment Script

“When you first met me last semester? Well I’ve tried to hook up with you a couple times this semester and you’ve been blowing me off. How about we start over?”

“I’m Bryce, we took English Comp together. I asked you out and you said you had a boyfriend back home.”

“I think you’re really pretty and I think you need to give me a chance.”

“Still have that ‘boyfriend’, huh.

“So babe, that ‘boyfriend’ of yours, how serious is it?”

“It can’t be that serious if he didn’t follow you to college, maybe he couldn’t get in here”

[Leans in closer]

“You’d be surprised how many girls here are still virgins and I totally respect that. You know we can still do some other stuff without you worrying about your virginity and all that. Honey, hear me out, basically we can still hang out and you can keep your virginity.”

“Have you ever gone down on a guy or let him go down on you?”

[Touches arm suggestively]

“I bet I could make you feel things you’ve never felt before.”

“How far have you gone with a guy? Come on, you can tell me.”

[Grabs hand]

[ hand is pulled away]

“You really need to loosen up. I bet we could have a lot of fun; but you probably need a few drinks in you. I could make you totally forget about your boyfriend and he’d never find out.”

[Touches arm suggestively]

[Target tries to leave]

“You can’t leave”

[ Grabs arm]

“My friend is a bartender and I could get you whatever you need, whenever you want, maybe we could work something out.”
Non-sexual harassment Script

“Do you know where the closest Starbucks is?”
“I know its lame; but I’m already tired. I was up studying so late last night.”

“You must think I’m an idiot to not know where all the Starbucks are around here considering I work at one. Do you remember me from last semester? I’m Bryce, we took English Comp together.”
[puts hand on his own chest]

So, that huge project that’s due in a couple of weeks, I haven’t started yet, it’s cool that we can work in groups though.”

“If you’re not already working with people, we could work together, I have a group I meet with every week.”
[points thumb behind him]

“We meet on Thursday nights in the library; I bet you know half the people already in the study group.”
“A lot of them are from our English Comp class last semester. Study groups are the best, we quiz each other and I’ve found I can learn from anyone. It’s like we each understand one key part of a topic and put it together like a puzzle, just talking about it with each other works.”

“Um, do you drink? It’s cool if you don’t, I’m asking because sometimes after a tough exam we all let loose and celebrate at one of our apartments. The host usually provides the refreshments.”
[Shrugs]
[Target tries to leave]

“You probably have somewhere to be”
[Target spreads hands, like a shrug]

“Oh, and did I mention, everyone in the Thursday night study group gets free coffee during my shift at Starbucks, the one near the library. At least when my boss isn’t there”
“What do you think?”
Appendix D.

Audio and Visual Check

This validation study requires the use of video and audio on whatever device you are currently on, in fact ear-buds or ear-phones are preferred to using your computer’s speakers. Please take the time now to ensure you are in a quiet place and/or have adequate audio on your device. You will first watch 2 short videos and then answer 2 simple questions that will ensure the video and audio are working properly. Please make sure your computer is not muted.

Press play to start the video.
Please select the correct answer to the math problem you just heard.

- 18
- 5
- 12
- 6

Press play to start the video.

What animal was shown in the video?

- Zebra
- Lion
- Dog
- Ferret
You may stop at any time and be taken to the Debriefing Page:

☐ Continue on
☐ End Study
Appendix E.

Resources:

If you suspect that you or someone you know has been sexually harassed, please utilize the following resources.

Title IX (sexual violence, sexual harassment, or gender discrimination)  
http://www.usf.edu/diversity/title-ix/

Inclusion and Equal Opportunity (DIEO) http://www.usf.edu/diversity/about-dieo/  
Office of Student Rights and Responsibilities (OSRR) http://www.sa.usf.edu/srr/page.asp?id=73  
USF Counseling Center 813-974-2831 http://www.usf.edu/student-affairs/counseling-center/  
USF Psychological Services Center 813-974-2496 http://psc.usf.edu/  
National Suicide Prevention Lifeline 1-800-273-8255 http://www.suicidepreventionlifeline.org/  
EthicsPoint 1-866-974-8411 https://secure.ethicspoint.com/domain/media/en/gui/14773/

The USF policy regarding sexual harassment is:

STATEMENT OF POLICY
A. The following actions are prohibited:
1. Sexual harassment, including sexual violence, by or between any faculty member, staff, or student, including individuals of the same sex, in all academic, educational, extracurricular, athletic, and other programs of the University, whether those programs take place in University facilities, at a class or training program sponsored by the University at another location, or elsewhere.

2. Sexual harassment, including sexual violence, by any faculty member, staff or student while assigned to duties or academic programs within the USF System (regardless of their work location) against any individual who is not a faculty member, staff or student, including USF
3. Sexual harassment, including sexual violence, by any vendor or individual external to the USF System against any faculty member, staff, student, or USF System program invitee during the transaction of business with the USF System, during any program or activity coordinated through the USF System, and/or while on USF System premises.

4. Retaliation by any faculty member, staff or student against any individual who, in good faith, has made any allegation of sexual harassment (including sexual violence) or who has testified, assisted, or participated in any way in any investigation, proceeding, or hearing conducted under this Policy or any federal or state law. For a more detailed discussion of the University’s anti-retaliation provisions, please refer to Policy # 0-020, Retaliation, Retribution, Or Reprisals Prohibited.

5. Knowingly making false accusations or allegations of sexual harassment (including sexual violence), or knowingly making false statements regarding alleged sexual harassment (including sexual violence) in any investigation, proceeding, or hearing conducted under this Policy or any federal or state law.

6. Gender-based harassment, which may include acts of verbal, non-verbal, or physical aggression, intimidation, or hostility based on sex or sex-stereotyping, even if those acts do not involve conduct of a sexual nature.

B. Examples of prohibited conduct include, but are not limited to:
1. Requesting or coercing sexual intercourse or sexual favors, or attempting to or actually engaging in a sexual assault or sexual battery.

2. Inappropriate and unwelcome sexual attention or touching, including—but not limited to—leering, patting, fondling, pinching, and attempted or actual kissing.

3. Making actual or implied threats to impede or interfere with employment or educational opportunities or benefits for failing to agree to or engage in sexual activity.

4. Making actual or implied promises of an employment or educational opportunity or benefit in exchange for sexual activity.

5. Inferring or displaying favoritism that benefits or adversely affects another based on sexual involvement or a sexual relationship.
6. Making sexually explicit or suggestive gestures or sounds.

C. Examples of potential participants in a Sexual Harassment situation (including sexual violence) include, but are not limited to:

Faculty – Faculty
Administrator – Faculty Member
Faculty – Student
Administrator – Staff Member
Faculty – Staff
Staff Member/Administrator – Student
Teaching Assistant – Student
Staff Member – Staff Member
Supervisor – Employee
USF System Program Invitee – Employee
Student – Student
USF System Program Invitee – Student
Appendix F.

Debriefing Page: Study 1

TITLE TBD

Pro000XXXXX

PURPOSE OF THE STUDY

The study in which you just participated was designed to validate videos developed as stimuli for an experimental study on sexual harassment behaviors. Sexual harassment can be very upsetting for some people and how they react to it can vary a lot. What we do not know is the process in which someone decides that they have been sexually harassed, or what aspects of the interaction are most important. That is the next step in this line of research.

CONTACT INFORMATION

If you are interested in learning more about the research being conducted, or the results of the research of which you were a part, please do not hesitate to contact Renee Hangartner, either by phone at (813) 974-6594 or email at rrbrown5@usf.edu. If you would like to speak to Renee’s faculty advisor, you may reach Marc Karver by phone at (813) 974-6594 or by email at mkarver@usf.edu.

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the Division of Research Integrity and Compliance of the University of South Florida at (813) 974-5638.

Please note that these numbers and emails are only monitored during business hours, so if you feel your problem is an emergency, please proceed to the nearest emergency room, dial 9-1-1, or contact one of the crisis resources listed above.
Thank you for your help and participation in this study!!!

Please do not disclose information about the study to others so as not to potentially influence other graduate student participants in Study 1 or undergraduate participants in Study 2.
Appendix G.
Demographics (Study 2)

1. What is your age? _____

2. What is your year in school?
   ☐ Freshman
   ☐ Sophomore
   ☐ Junior
   ☐ Senior
   ☐ Senior-plus (More than four years)

3. Do you identify as a member of the Transgender community?
   ☐ Yes
   ☐ No

4. How would you classify your sexual orientation?
   ☐ Attracted to a different sex
   ☐ Attracted to the same sex
   ☐ Attracted to both sexes

5. Please select the item from the scale below that best describes your sexual orientation.

<table>
<thead>
<tr>
<th>Exclusively heterosexual with no homosexual (Straight)</th>
<th>Predominantly heterosexual, only incidentally homosexual</th>
<th>Predominantly homosexual, but more than incidentally heterosexual</th>
<th>Equally heterosexual and homosexual</th>
<th>Predominantly homosexual, but more than incidentally heterosexual</th>
<th>Predominantly homosexual, only incidentally heterosexual</th>
<th>Exclusively homosexual (Lesbian)</th>
</tr>
</thead>
</table>
| ☐ Not Applicable

6. Which ethnic group best describes you?
   ☐ Hispanic or Latino/a
   ☐ Not Hispanic or Latino/a
7. Which racial group best describes you? Please check all that apply.

☐ American Indian or Alaskan Native
☐ Arab/Middle Eastern
☐ Asian
☐ Black or African-American
☐ Native Hawaiian or Pacific Islander
☐ White or Caucasian
☐ Other - Specify: ___________________
☐ More than one race - Specify: ___________________

8. Please enter your major in the space provided.

_______________________________________
Appendix H.

Confidence in Label item

How confident are you that the person in the video did or did not engage in sexual harassment?

1 = Very Confident  10 = Not Confident at All
Appendix I.

Debriefing Page: Study 2

TITLE TBD

Pro000XXXXX

PURPOSE OF THE STUDY

The study in which you just participated was designed to explore the thoughts and emotions women experience during the precise moment when they are potentially being sexually harassed. This was an experimental study and you may or may not have been in the condition that portrayed sexually harassing behaviors. Sexual harassment can be very upsetting for some people and how they react to it can vary a lot. What we do not know is the process in which someone decides that they have been sexually harassed, or what aspects of the interaction are most important.

This study hopes to explore whether certain moderating factors, such as one’s history of sexual harassment, general disposition to stressful events, and degree to which someone identifies as a feminist will affect how they respond to sexual harassment in the moment. Findings from this research are important because very little is known about the experience of being sexually harassed as most research asks about past experiences. Prevalence rates of sexual harassment vary considerably across studies and one reason might be that people’s memories are not less dependable the older an event becomes.
CONTACT INFORMATION

If you are interested in learning more about the research being conducted, or the results of the research of which you were a part, please do not hesitate to contact Renee Hangartner, either by phone at (813) 974-6594 or email at rrbrown5@usf.edu. If you would like to speak to Renee’s faculty advisor, you may reach Marc Karver by phone at (813) 974-6594 or by email at mkarver@usf.edu.

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the Division of Research Integrity and Compliance of the University of South Florida at (813) 974-5638.

Please note that these numbers and emails are only monitored during business hours, so if you feel your problem is an emergency, please proceed to the nearest emergency room, dial 9-1-1, or contact one of the crisis resources listed above.

Thank you for your help and participation in this study!!!

Please do not disclose information about the study to others so as not to potentially influence other undergraduate participants.
Appendix J.

Manipulation Check

1. How successful were you in imagining that you were being spoken to by the person in the video?

1-(Not successful at all)

10-(Completely successful, it felt like the person in the video was talking to me)
<table>
<thead>
<tr>
<th>SHAQ Behavior Items</th>
<th>Potential Sexual Harassment Condition</th>
<th>Non-sexual harassment Interaction Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>G</td>
</tr>
<tr>
<td>1. Did the person in the video suggest using alcohol to make it easier to engage in sexual activity?</td>
<td>91.5% ***</td>
<td>89.2%</td>
</tr>
<tr>
<td></td>
<td>(65)</td>
<td>(33)</td>
</tr>
<tr>
<td>2. Did the person in the video show interest in having a sexual relationship with the other person?</td>
<td>100%***</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(71)</td>
<td>(37)</td>
</tr>
<tr>
<td>3. Did the person speaking in the video touch the other person?</td>
<td>98.6%***</td>
<td>97.3%</td>
</tr>
<tr>
<td></td>
<td>(70)</td>
<td>(36)</td>
</tr>
<tr>
<td>4. Did the person in the video lean into the other person’s personal space?</td>
<td>88.7%***</td>
<td>86.5%</td>
</tr>
<tr>
<td></td>
<td>(63)</td>
<td>(32)</td>
</tr>
<tr>
<td>5. Did the person in the video ask questions about sexual details of someone else’s life?</td>
<td>95.8%***</td>
<td>97.3%</td>
</tr>
<tr>
<td></td>
<td>(68)</td>
<td>(36)</td>
</tr>
<tr>
<td>6. Did the person in the video offer a special favor in exchange for sex?</td>
<td>80.3%***</td>
<td>81.1%</td>
</tr>
<tr>
<td></td>
<td>(57)</td>
<td>(30)</td>
</tr>
<tr>
<td>7. Did the person in the video engage in friendly conversation?</td>
<td>23.9%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>(17)</td>
<td>(10)</td>
</tr>
<tr>
<td>8. Did the person in the video accept that their advances had been denied previously?*</td>
<td>19.7%</td>
<td>16.2%</td>
</tr>
<tr>
<td></td>
<td>(14)</td>
<td>(6)</td>
</tr>
<tr>
<td>9. Did the person in the video introduce their self?</td>
<td>85.9%</td>
<td>86.5%</td>
</tr>
<tr>
<td></td>
<td>(61)</td>
<td>(32)</td>
</tr>
<tr>
<td>10. Did the person in the video touch the other person after being given behavioral cues that they did not want to be touched?</td>
<td>93%***</td>
<td>89.2%</td>
</tr>
<tr>
<td></td>
<td>(66)</td>
<td>(33)</td>
</tr>
<tr>
<td>11. Did the person in the video offer a compliment?</td>
<td>81.7%</td>
<td>83.8%</td>
</tr>
<tr>
<td></td>
<td>(58)</td>
<td>(31)</td>
</tr>
<tr>
<td>12. Did the person in the video seem respectful of the person they were talking to?</td>
<td>5.6%</td>
<td>8.1%</td>
</tr>
<tr>
<td></td>
<td>(4)</td>
<td>(3)</td>
</tr>
<tr>
<td>13. Did the person speaking in the video ask questions of the other person?</td>
<td>91.5%</td>
<td>91.9%</td>
</tr>
<tr>
<td></td>
<td>(65)</td>
<td>(34)</td>
</tr>
<tr>
<td>14. Did the person in the video bring up the topic of drinking alcohol?</td>
<td>97.2%</td>
<td>97.3%</td>
</tr>
<tr>
<td></td>
<td>(69)</td>
<td>(36)</td>
</tr>
<tr>
<td>15. Did the person in the video engage in sexual harassment?</td>
<td>95.8%***</td>
<td>94.6%</td>
</tr>
<tr>
<td></td>
<td>(68)</td>
<td>(35)</td>
</tr>
</tbody>
</table>

Note: *Reverse scored for subscale, *p < .05. **p < .01. ***p < .001 indicate level of significance of paired t-tests, G-Graduate sample, UG-Undergraduate sample
Table 2. **Study 1: Video Stimuli Differences: Means, Standard Deviations, and Paired t-tests for each Outcome**

<table>
<thead>
<tr>
<th>Video Stimuli</th>
<th>SHAQ Sexual Harassment Subscale</th>
<th>Outcome Confidence in Labeling Behavior as Sexual Harassment in Video</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total M (SD) UG M (SD) G M (SD)</td>
<td>Total M (SD) UG M (SD) G M (SD)</td>
</tr>
<tr>
<td>Potential Sexual Harassment</td>
<td>8.01*** (.61) 9.45*** (.85) 6.58*** (.72)</td>
<td>8.91*** (2.15) 8.65*** (2.14) 9.00*** (2.73)</td>
</tr>
<tr>
<td>Non-sexual harassment Interaction</td>
<td>1.19 (.95) 1.22 (1.28) 1.13 (.50)</td>
<td>-8.26 (3.25) -8.29 (2.48) -8.68 (2.55)</td>
</tr>
</tbody>
</table>

Note: UG= Undergraduate Student Sample, G= Graduate Student Sample

*p < .05. **p < .01. ***p < .001, indicate level of significance of paired t-tests.
Table 3. Study 2 Demographics: Age, Race/Ethnicity, Sexual Orientation, Program of Study, and Year in the Program

<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>N (%)</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age**</td>
<td>18-39</td>
<td>135 (98.5%)</td>
<td>20.30</td>
<td>2.89</td>
<td>3.20</td>
<td>14.34</td>
</tr>
<tr>
<td>Year</td>
<td>Freshman</td>
<td>38 (27.9%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>40 (29.4%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>33 (23.5%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>26 (19.1%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity*</td>
<td>Arab/Middle Eastern</td>
<td>11 (8.1%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>14 (10.3%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black/African-American</td>
<td>10 (7.4%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Caucasian</td>
<td>100 (73.5%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hispanic/Latina</td>
<td>34 (25%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>American Indian/Alaska Native</td>
<td>1 (.7%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Native Hawaiian/Pacific Islander</td>
<td>2 (1.5%)</td>
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<tr>
<td>Sexual Orientation</td>
<td>Bi-sexual</td>
<td>7 (5.1%)</td>
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<tr>
<td></td>
<td>Heterosexual</td>
<td>123 (90.4%)</td>
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<tr>
<td></td>
<td>Homosexual</td>
<td>7 (5.1%)</td>
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<tr>
<td>Kinsey Scale of Sexual Orientation</td>
<td>Exclusively Heterosexual</td>
<td>107 (78.7%)</td>
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<td></td>
<td>Predominately Heterosexual, only Incidentally Homosexual</td>
<td>14 (10.3%)</td>
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<td>Predominately Heterosexual, but more than Incidentally Homosexual</td>
<td>5 (3.7%)</td>
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<tr>
<td></td>
<td>Equally Heterosexual and Homosexual</td>
<td>2 (1.5%)</td>
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<tr>
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<td>Predominately Homosexual, but more than Incidentally Homosexual</td>
<td>2 (1.5%)</td>
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<tr>
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<td>Predominately Homosexual, only Incidentally Homosexual</td>
<td>2 (1.5%)</td>
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<tr>
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<td>Exclusively Homosexual</td>
<td>4 (2.9%)</td>
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<tr>
<td>Identification as a Member of the Trans Community</td>
<td>Yes</td>
<td>1 (.7%)</td>
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<td>Major</td>
<td>Psychology</td>
<td>57 (40.4%)</td>
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<tr>
<td></td>
<td>Other</td>
<td>82 (58.2%)</td>
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*This variable does not add up to 100% due to multiple responses
**This variable does not add up to 100% due to missing responses
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<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Cronbach’s Alpha</th>
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<tbody>
<tr>
<td>Sexual Harassment Experience</td>
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<td>.86</td>
<td>1</td>
<td>5</td>
<td>1.44</td>
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<td>.66</td>
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<td>.04</td>
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<td>Revelations</td>
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<td>.73</td>
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<td>3</td>
<td>10</td>
<td>-.49</td>
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<tr>
<td>Confidence in Labeling Behavior in Video</td>
<td>136</td>
<td>.34</td>
<td>8.13</td>
<td>-10</td>
<td>10</td>
<td>-.03</td>
<td>-1.81</td>
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<td>Variable</td>
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<td>College Party Condition</td>
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<td>Sexual Harassment</td>
<td>Sexual Harassment</td>
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<td>Condition (N=X)</td>
<td>Condition (N=X)</td>
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<td>M (SD)</td>
<td>M (SD)</td>
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<td>Threat Appraisal (SAMA)</td>
<td>3.42 (.96)</td>
<td>3.37 (.89)</td>
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<tr>
<td>Negative Affect Change (PANAS-X)</td>
<td>9.03 (9.34)</td>
<td>8.58 (7.98)</td>
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<tr>
<td>Confidence in Labeling Composite (All)</td>
<td>7.94 (2.21)</td>
<td>6.89 (5.02)</td>
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<tr>
<td>Confidence in Labeling (Exp.)</td>
<td>7.94 (2.21)</td>
<td>8.45 (2.17)</td>
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<tr>
<td>Sexual Harassment Experience (SEQ)</td>
<td>2.10 (.94)</td>
<td>1.78 (.87)</td>
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<tr>
<td>Optimism (LOTR)</td>
<td>2.48 (.26)</td>
<td>2.60 (.30)</td>
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<tr>
<td>Social Skills (BSSI)</td>
<td>3.08 (.51)</td>
<td>3.10 (.50)</td>
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<tr>
<td>Feminist Identification (FIDS)</td>
<td>3.07 (.41)</td>
<td>3.04 (.28)</td>
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<tr>
<td>Manipulation Check (Salience)</td>
<td>7.39 (2.18)</td>
<td>6.97 (2.29)</td>
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</table>

Note: a - N=136, b - N=128 (excluding participants who did not label condition in expected direction). SAMA- Stress Appraisal Measure for Adolescents, PANAS-X- Positive and Negative Affect Schedule-Expanded Form, SEQ- Sexual Experiences Questionnaire, LOTR- Life Orientation Test Revised, BSSI- Brief Social Skills Inventory, FIDS- Feminist Identity Development Scale
Table 6. Bivariate Correlations among Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tr>
<td>1. Change in Negative Affect</td>
<td>-</td>
<td>.60***</td>
<td>.53***</td>
</tr>
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<td>2. Threat Appraisal</td>
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<td>.65***</td>
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<td>3. Confidence in Labeling Behavior in Video</td>
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Note: * $p < .05$, ** $p < .01$, *** $p < .001$
Table 7. Two-Way MANOVA – Behavior type and context on threat appraisal; emotional affect; and strength of belief when labeling behavior

<table>
<thead>
<tr>
<th>Factor</th>
<th>Pillai’s Trace</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
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<tbody>
<tr>
<td>Behavior Type</td>
<td>.783</td>
<td>154.98</td>
<td>.00</td>
<td>.783</td>
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<td>Context</td>
<td>.016</td>
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<td>.016</td>
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<td>Behavior * Context</td>
<td>.036</td>
<td>1.61</td>
<td>.19</td>
<td>.036</td>
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</table>

Note: df = 3, 129
### Table 8. Two-Way ANOVA – Behavior type and context on threat appraisal

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
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<tbody>
<tr>
<td>Behavior Type</td>
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<td>62.58</td>
<td>62.58</td>
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<td>.16</td>
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<td>Behavior X Context</td>
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<td>1.99</td>
<td>2.76</td>
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<tr>
<td>Error</td>
<td>131</td>
<td>94.56</td>
<td>.72</td>
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<tr>
<td>Total</td>
<td>135</td>
<td>1,153.59</td>
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Table 9. Two-Way ANOVA – Behavior type and context on change in negative affect

<table>
<thead>
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<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
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<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
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<tbody>
<tr>
<td>Behavior Type</td>
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<td>29.27</td>
<td>29.27</td>
<td>56.05</td>
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<td>.26</td>
<td>.50</td>
<td>.48</td>
<td>.004</td>
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<td>Behavior X Context</td>
<td>1</td>
<td>.49</td>
<td>.49</td>
<td>.94</td>
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<td>Total</td>
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<td>121.91</td>
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Table 10. Two-Way ANOVA – Behavior type and context on confidence in label

<table>
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<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
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Figure 3. Labeling Video Stimuli using a Dichotomous Variable