An Examination of Specific Situation and Person Factors in Online Video Game Sexual Harassment

DISSERTATION

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Abstract

Online video game sexual harassment has become a serious issue pervading the video game community. Women players have faced many instances of online sexual harassment due to their perceived intrusion into a male-dominated cultural environment. The current study examined the causal relationships between social identity threats and sexual harassment. The social identity threats were randomly represented either as a feminist, traditional, or anonymous female partner the male participants interacted with online. They played with the female partner in a video game where she outperformed them. The male participants were randomly assigned to send jokes either to their female partner or to an innocent female bystander. Some jokes were sexist, giving the opportunity to sexually harass their female target. Results revealed that male participants sent more sexist jokes to their female partner than to the innocent female bystander. Several personality traits predicted the number of sexist jokes sent. Implications for online sexual harassment are discussed.
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# Table of Contents

Abstract ............................................................................................................................... ii

Acknowledgments .............................................................................................................. iii

Vita ..................................................................................................................................... iv

List of Tables ..................................................................................................................... vi

Chapter 1: Literature Review .............................................................................................. 1

Chapter 2: Current Study .................................................................................................. 22

Chapter 3: Method ............................................................................................................ 28

Chapter 4: Results ............................................................................................................. 37

Chapter 5: Discussion ....................................................................................................... 41

References ......................................................................................................................... 51

Appendix A: Tables .......................................................................................................... 76

Appendix B: Survey Measurement Items ......................................................................... 86

Appendix C: Experiment material .................................................................................. 103
List of Tables

Table 1. Number of participants discarded from each condition................................. 77
Table 2. Analysis of variance predicting on the belief that the partner was a woman. .... 78
Table 3. Analysis of variance predicting on partner’s abilities..................................... 79
Table 4. Analysis of variance predicting partners’ reactions to jokes........................... 80
Table 5. Correlations between variables of interest.................................................... 81
Table 6. Analysis of variance predicting the number of sexist jokes sent....................... 82
Table 7. Analysis of variance predicting the number of sexist jokes among participants
who at least slightly agree that their partner is a woman.......................................... 83
Table 8. Analysis of variance predicting the number of sexist jokes sent....................... 84
Table 9. Analysis of variance predicting for the partner competence rating................... 85
Chapter 1: Literature Review

“The sexual harassment is part of culture. And if you remove that from the fighting game community, it’s not the fighting game community.”

- Aris Bakhtanians (2012)

The above quote was used to justify and normalize Aris’s actions to his fellow female team member during a competitive video gaming event that was being broadcast live. During a live streaming event, he made uncomfortable remarks about her body and made several advances to her. He continued until she left in the middle of a gaming session. This event among many others sparked conversations about sexual harassment among gamers.

**Violent Video Games: A Male Dominated World**

The world of violent video games is a male-dominated environment (Bertozzi, 2008). Although 44% of video game player are female (ESA, 2015), violent games (e.g., first-person shooters) are markedly male-dominated (Eden, Maloney & Bowman, 2010; Homer, Hayward, Frye & Plass, 2012; Lucas & Sherry, 2004). The male-dominated environment is manifested in a variety of ways. Within video games, there are proportionally more male video game characters than female video game characters (85% vs. 15%) , and male characters are also more likely to be protagonists than female characters (90% vs. 10%; Williams, Martins, Consalvo & Ivory, 2009). Female video
game characters are often depicted as sex objects, such with large breasts, thin bodies, and revealing clothes (Downs & Smith, 2010; Martins, Williams, Harrison & Ratan, 2009). Sexualized depictions of women have been shown to prime men to sexually objectify women and to be more tolerant to instances of sexual harassment (Dill, Brown, & Collins, 2008; Yao, Mahood, & Linz, 2010). The disproportionate gender representation of female characters and their sexualized depiction, suggests that they were designed specifically for a male-dominant audience.

The sexualized depiction of female video game characters also extends to video game advertisements. Content analyses of advertisements in video game magazines found that women were underrepresented, and when they are depicted it is often in a subordinate or submissive role to the male protagonist (Behm-Morawitz, 2014; Summers & Miller, 2014). A similar pattern was found in video game cover art (Near, 2013). The centrality of male characters in advertisements indicates that marketers presume that sales are dependent on embedding hypermasculinity as a strategy to increase sales (Near, 2013). Such marketing strategies reinforce traditional gender roles and the perception that violent video games are a male-dominant medium (Dill & Thill, 2007).

The perception of male dominance is further reinforced on video game websites and its treatment of video game characters because most video game journalists are men (Ivory, 2006; Fisher, 2015). In content analyses, journalists mention physical and sexual appearance more often for female characters than for male characters (Fisher, 2015). In addition, journalists often review video games by playing the game from the male character's point of view, with no or little mention of whether a game can be played as a
female character, thus subordinating the importance of gender for the female audience (Fisher, 2015).

In contrast to violent video games, characters from simple and inexpensive nonviolent video games that can be played on a web browser or mobile device, called casual video games, have a more equitable gender representation, with 42% of video game protagonists being female (Wohn, 2011). However, people who identify themselves as gamers, sometimes as “hardcore,” perceive distinctions between themselves and players of casual video games (Loporcaro, Ortega, & Egnoto, 2014; Scharkow, Festl, Vogelgesang & Quandt, 2015). The distinctions were based on social and cultural distinctions, with hardcore gamers playing challenging and competitive video games for long periods of time. Casual gamers, who are mostly women, are not perceived as gamers proper because they typically play games that are not perceived as competitive or challenging, even if they spent a significant amount of time playing these games (Loporcaro et al., 2014).

Participation at video game venues (e.g., professional competitions, video game conventions, informal meetings) reflect the difficulties women encounter within a male dominated environment. LAN meetings where individuals meet at a physical location to play video games together are often an activity between men (Jansz & Martens, 2005). At professional events, the gender disparity is also apparent as the majority of competitors are male, and the few female competitors often receive unwanted attention from their male counterparts and audience members (Taylor, Jenson, & de Castell, 2009). Furthermore, when women are present at video game venues, they often are in gendered
roles, such as being cheerleaders to the male competitors or "booth babes" for video game products. The absence of female competitors and the highly sexualized presence of women reflect a highly masculine environment.

The online discourse on video games highlights how the majority of male gamers respond to gender issues by enforcing a masculine status quo. Consider three case studies. In one case study, *World of Warcraft* players were unhappy when the game removed sexist dialogue from a non-player character (Braithwaite, 2014). Many forum postings blamed feminists for the character's dialogue changes (Braithwaite, 2014). In another case study, women were ostracized online for voicing their concern about a rape joke in a video game comic strip (Salter & Blodgett, 2012). In a third case study, a male journalist accused a female video game celebrity of being "nothing more than a glorified booth babe" on Twitter, attacking and downplaying the female celebrity's contribution to video game culture (Tomkinson & Harper, 2015).

In sum, the male dominance of video games can be seen through the sexualized depiction of female video game characters. Male dominance is also apparent in how video game marketers and journalists treat women. The separation of casual video games from the "core" cultural identity of gaming also maintains the gender segregation of video games. Finally, female gamers' participation in video games are marked with sexually objectifying roles that males impose upon them, downplaying their importance in contributing to video games. Thus, these conditions within the media and its audience are likely to create a social environment conducive to sexual harassment of female players.

**Sexual Harassment**
Sexual harassment is defined primarily from a legal and psychological perspective (Willness, Steel, & Lee, 2007). The legal definition of sexual harassment originates from the U.S. Equal Employment Opportunity Commission (1980), which defines it as "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature... when such conduct is made either explicitly or implicitly a term or condition of an individual's employment, basis for employment decisions, and of unreasonably interfering with an individual's work performance, or creating an intimidating, hostile or offensive work environment." The psychological definition is more subjective: "unwanted sex-related behavior at work that is appraised by the recipient as offensive, exceeding her resources, or threatening her well-being" (Fitzgerald, Swan & Magley, 1997). The multiple definitions of sexual harassment led to disagreements between researchers in distinguishing sexually harassing behaviors and non-threatening sexual behaviors, such as flirting or sexual banter (Gutek, 1985).

The prevalence of sexual harassment is widespread and affects more individuals than other physical and sexual aggressive behaviors, such as rape (Pina, Gannon, & Saunders, 2009; Spitzberg, 1999). Reflective of its gendered nature, sexual harassment is mostly perpetrated by men against women, although sexual harassment can also be perpetrated by women against men or by individuals of the same sex against each other (Holland, Rabelo, Gustafson, Seabrook & Cortina, 2015; Pina et al., 2009; Waldo, Berdahl, & Fitzgerald, 1998; Willness et al., 2007). Prevalence rates vary due to methodological differences. Estimates of sexual harassment for American women is between 40 - 75% and for men between 13 - 31% (Aggarwal & Gupta, 2000); another
estimate for Canadian women is 77% (Crocker & Kalemba, 1999) and for European women is between 17- 81% (Timmerman & Bajerma, 1999). Similarly, the prevalence rate on the Internet is alarming, estimates for women are between 10 - 69% and for men is between 8 - 31% (Barak, 2005; Finn, 2004; Jones, Mitchell, & Finkelhor, 2012; Lindsay, Booth, Messing, & Thaller, 2015; Lindsay & Krysik, 2012; Mitchell, Ybarra, & Korchmaros, 2014; Pew Research Center, 2014). Estimates specific to video games are few. Unspecified harassment for men online is 21% and for women is 11% (Pew Research Center, 2014). A survey of massively multiplayer online game players revealed that perpetrators were mostly men, 52% of women and 49% of men were victimized, of which 6% of women and 2% of men were repeatedly victimized several times a week (Ballard & Welch, 2015). The most common behaviors included name-calling, ostracism, threats, and lying; female players reported being sexually harassed more frequently than male players (Ballard & Welch, 2015).

There are several sexual harassment typologies developed by researchers. The Sexual Experiences Questionnaire (Fitzgerald, Gelfand, & Drasgow, 1995), one of the most popular measures, assesses three types of sexual harassment behaviors: (1) gender harassment (e.g., sexual slurs and gestures), (2) unwanted sexual attention (i.e., behaviors that are offensive, unwanted, and unreciprocated by the victim) and (3) sexual coercion (i.e., the intent of gaining sexual cooperation for job-related favors). The Inventory of Sexual Harassment (Gruber, Smith, & Kauppinen-Toropainen, 1996) also assesses three types of sexual harassment behaviors: (1) verbal comments (e.g., comments on physical appearance), (2) verbal requests (e.g., repeated requests for dates) and (3) nonverbal
displays (e.g., staring, catcalling). These typologies were developed within the context of physical workplaces, including corporate, academic, and military settings and extended to public settings, such as streets and malls (Lenton, Smith, Fox, & Morra, 1999; MacMillan, Nierobisz, & Welsh, 2000). The computer-mediated settings create differences in the expression of certain sexual harassment behaviors, such as the nonverbal gestures of staring or leering (Barak, 2005). Nevertheless, studies of Internet harassment and video game harassment revealed many of the behaviors found offline are also present online (Biber, Doverspike, Baznik, Cober, & Ritter, 2002; Fox & Tang, 2013; Ybarra, Espelage, & Mitchell, 2007).

Among sexual harassment behaviors, sexist jokes are the most frequently reported behaviors (Timmerman & Bajema, 1998). Sexist jokes, like other sexist behaviors (e.g., sexual innuendos, staring, whistling) are ambiguous in terms of hostile intent (Thomae & Pina, 2015). Such ambiguity increases the likelihood of repeating sexist humor and more serious sexually harassing behaviors (Thomas & Esses, 2004; Thomae & Viki, 2013). Experiments have demonstrated that individuals exposed to sexist humor were more likely to be hostile towards women (e.g., by supporting rape myths), are more likely to tolerate sexist behaviors, and are less likely to support feminist causes (Ford, 2000; Ford, Boxer, Armstrong, & Edel, 2007; Ford & Ferguson, 2004; Ford, Wentzel, & Lorion, 2001; Thomae & Viki, 2013).

The harmful consequences of sexual harassment appear on two broad outcomes: workplace and psychological (Chan, Chow, Lam, & Cheung, 2008; Pina & Gannon, 2012). Workplace outcomes relate to the targets' affective, cognitive, and behavioral
relationship with the workplace. As targets are increasingly sexually harassed, they become dissatisfied with their jobs and their co-workers, less committed to their organization, and disillusioned as they blame their organization in neglecting their safety (Lapierre, Spector, & Leck, 2005). As a result of such dissatisfaction, their work productivity worsened which is manifested in withdrawal behaviors, such as avoiding tasks, neglectfulness, avoiding the workplace whenever possible and, ultimately, quitting their jobs (Fitzgerald et al., 1997; Willness et al., 2007). The targets' experiences with sexual harassment are psychologically distressing, which can manifest in heightened negative affect, such as anxiety, fear, and anger, depression, decreased subjective well-being and life satisfaction (Fitzgerald et al., 1997; Nielsen & Einarsen, 2012). In addition, physical symptoms may appear in the form of sleeping problems, fatigue, and physical pain, such as headaches (Magley, Hulin, Fitzgerald, & DeNardo, 1999). Some individuals may even manifest symptoms of post-traumatic stress disorder (Avina & O'Donohue, 2002). Thus, sexual harassment's harmful effects on the individual are quite severe and possibly long lasting. In the next section I focus on theories of sexual harassment.

**Theories of Sexual Harassment**

There are different theoretical perspectives on sexual harassment. Some theories focus on the organizational issues leading to sexual harassment, such as power relations between co-workers, abuse of power by superiors to their subordinates, social norms, and policy enforcements (McDonald, 2012; Pina et al., 2009; Tangri & Hayes, 1997).

Sociocultural theories posit that gender inequality in society leads to the expression of sexual harassment in the workplace (Pina et al., 2009). The Person X
Situation model of sexual harassment presents a theoretical perspective most relevant to the present study (Pryor, Giedd, & Williams, 1995). According to this model, sexual harassment is a function of the person's internal factors interacting with the situational factors permitting or eliciting sexual harassing behaviors.

Social identity threat is a recent theoretical development in sexual harassment research (Maass, Cadinu, Guarnieri, & Grasselli, 2003; Thomae & Pina, 2015). Based on social identity theory and self-categorization theory, sexual harassment is a response to a threat, perceived or otherwise, to one's social and gender identity. This threat may stem from an individual losing their standing with their in-group, such as a man who perceives a loss in manhood after performing as well as the average woman, but not as well as the average man (Maass et al., 2003). These identity threats elicit anxiety and the need to disparage the other group in order to protect or enhance the status of one's own group (Hunt & Gonsalkorale, 2014; Page, Shute, & McLachlan, 2015; Vandello, Bosson, Cohen, Burnaford & Weaver, 2008). Thus, sexual harassment is motivated based on differences between social groups.

**Antecedent Predictors of Sexual Harassment**

Theories of sexual harassment guide the focus on antecedent factors of sexually harassing behaviors. Studies informed by organizational theories have identified antecedent factors tied to an organizational climate permissive of sexual harassment, such as lack of policies and effective enforcement against sexual harassment (Holland et al., 2015). The second factor is the job gender context wherein the gender ratio of a workplace is highly skewed leaving women as a token minority, such as sports and the
military, traditionally-male occupations (Fasting, Chroni, & Knorre, 2014; Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Koeszegi, Zedlacher, & Hudribusch, 2014; Willness et al., 2007). Another factor guided by sociocultural theories is power relations where supervisors abuse their managerial status to harass their subordinates (Pina & Gannon, 2012). These factors fall under situational antecedents and although quite useful in identifying the likelihood of sexual harassment, there are personality characteristics that are as predictive.

There are several personality traits predictive of sexual harassment. One of the frequently used measures on the proclivity to sexually harass is the Likelihood to Sexually Harass Scale (LSH; Pryor, 1987). The measure has participants imagining themselves in hypothetical scenarios in which they are in a position of power (e.g., interviewer, supervisor, professor) relative to a female subordinate, and they are asked how likely they are perform sexually exploitative behaviors without any repercussions to themselves. However, the hypothetical scenarios assume a permissive organizational climate to sexual harassment and they do not vary in terms of formal power relations between the perpetrator and target. Given the anonymous climate of online video games in which strangers interact with each other, the LSH may be difficult in predicting online sexual harassment proclivities. Nevertheless, the LSH is related to several relevant personality traits (Pina & Gannon, 2012). Personality traits related to a preference for social hierarchy were identified as predictors, such as right-wing authoritarianism and social dominance orientation (Begany & Milburn, 2002; Russell & Trigg, 2004). Gender-typed personality traits were also found to be predictors: hostile attitudes and beliefs
towards women (Hitlan, Pryor, Hesson-McInnis, & Olson, 2009; Pina et al., 2009), conformity to masculinity, masculine gender identity (Hunt & Gonsalkorale, 2014; Maass et al., 2003), hypermasculinity (Parrott & Zeichner, 2003; Reidy, Shirk, Sloan, & Zeichner, 2009) and ambivalent sexism (Begany & Milburn, 2002; Glick & Fiske, 1996). Thus, there are numerous predictor personality traits of sexual harassment.

**Ambivalent Sexism**

The motives underlying sexual harassing typologies, such as coerced sexual exchange vs. gender harassment (Fitzgerald et al., 1995), can be reflected through ambivalent sexism (Fiske & Glick, 1995). Ambivalent sexism is conceptualized as the simultaneously held positive and negative prejudices towards women (Glick & Fiske, 1996). These prejudices for traditional gender roles are argued to be rooted by motives for social hierarchy based on right-wing authoritarianism and social dominance orientation (Sibley, Wilson, & Duckitt, 2007). The subjectively positive aspect is called *benevolent sexism*, which reflects views of women being as the "weaker" sex in need of help, protection, and in exchange for providing romantic and sexual intimacy. Hence, benevolent sexism reflected the underlying motives of unwanted sexual attention (e.g. repeated unwanted romantic advances) and paternalistic behaviors and attitudes towards women (e.g., pulling a chair for the woman, seeing women as warm and nurturing individuals; Delacollette, Dumont, Sarlet, & Dardenne, 2013; Hammond & Overall, 2015).

The subjectively negative aspect is called *hostile sexism*, which reflects views of women as being the "unfit" sex lacking competence relative to men and should be
subservient to men, including as sexual objects. Hence, hostile sexism reflected the underlying motives of gender harassment (e.g., degrading sexist jokes) and sexually aggressive tendencies (e.g., rape myth acceptance; Chapleau, Oswald, & Russell, 2007; Masser & Abrams, 2004; Masser, Viki, & Power, 2006). A survey of college students have found that hostile sexism mediated the relationship between right wing authoritarianism and the Likelihood to Sexually Harass Scale, but benevolent sexism did not (Begany & Milburn, 2002). It should be noted that the LSH consists of coercive harassing scenarios which fit appropriately with hostile sexist motives, but not benevolent sexist motives, which relate more to paternalistic chivalry (Viki, Abrams, & Hutchinson, 2003). An experiment found that high hostile sexist male participants sent more sexist jokes to a female confederate than low hostile sexist male participants (Siebler, Sabelus, & Bohner, 2008). Thus, the duality of sexism underlies the differentiation between sexually harassing behaviors.

Precarious Manhood Theory

The link between masculinity and aggression is apparent because most perpetrators of physical aggression, sexual violence and violent crimes are men (Kellerman & Mercy, 1992). The link between masculinity and sexual harassment is also apparent (Mellon, 2013; Pryor, 1987; Reidy et al., 2009). What defines masculinity changes across time and culture and is at least the opposite of femininity, but the needs to attain masculinity remains constant (Vandello & Bosson, 2013). This constant need to attain masculinity has led researchers to conceptualize manhood as a precarious social status, an identity that is difficult to attain, is easily threatened and requires swift
responses to such threats (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). As these threats are, in essence, social identity threats, men often seek out behaviors that would prove their manhood, such as aggressive acts (e.g., retaliation), risky behaviors (e.g., gambling; Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009), avoiding feminine objects and activities (Cheryan, Cameron, Katagiri, & Monin, 2015), and sexualizing women's appearance (Dahl, Vescio, & Weaver, 2015). Although there are many masculinity-proving behaviors, the receptivity of masculinity threats and responses to them may vary across individual men.

The presence of a masculinity threat should elicit strong responses from hypermasculine men. Hypermasculinity is a personality trait conceptualized as an extreme adherence towards a masculine gender role emphasizing violence, power, dominance, and calloused sexual attitudes towards women (Mosher & Sirkin, 1984). High levels of hypermasculinity are associated with sexual aggression women (Mosher & Anderson, 1986; Murnen, Wright, & Kaluzny, 2002). However, hypermasculine men do not aggress against all women. Experiments have found that they are likely to aggress against women who violate traditional gender roles, such as women seeking careers or who are not interested in romantic relationships (Parrott & Zeichner, 2003; Reidy et al., 2009). Hypermasculine men's aggression against non-conforming women is argued to be a masculinity threat retaliation because the women were not subservient to them or were in superior position of power rendering their self-views as not masculine enough. Hypermasculinity is an extreme adherence to the masculine gender role, although it does not define men's identification as a social group.
Another relevant trait to masculinity threats is gender identification. According to social identity theory, there are personal and social identities that comprise the individual's identity, with the latter deriving from social groups (Tajfel, 1982). As certain identities are more important and salient than others, people tend to maintain a positive self-image relative to other groups. Social identity threats should elicit behaviors either to enhance their in-group or derogate out-groups, which in the case of sexual harassment, highly identified men are more likely to derogate women who threaten their masculine social identity. There are several sources of social identity threats. First, certain professions were exclusive to men and in turn, these professions define their identity. Some men would perceive the presence of women in their profession as a threat and would retaliate to maintain their exclusivity (Maass et al., 2003; Miner-Rubino & Cortina, 2004). Several studies on the workplace have found that women in management positions were more likely to be sexually harassed by their male subordinates (Berdahl, 2007; Leskinen, Rabelo, & Cortina, 2015; Netchaeva, Kouchaki & Sheppard, 2015). Interestingly, women in management positions who displayed ambitious qualities relevant to the masculine identity were more likely to be threatened than those who did not display them (Netchaeva et al., 2015). Second, the power relations between men and women are relevant, as the former traditionally have power over women in society. Several experiments have found that men were more likely to sexually harass women who challenges such power relations, such as feminists or women with masculine qualities (Dall'Ara & Maass, 1999; Maass et al., 2003; Siebler et al., 2008). Third, men were more likely to sexually harass women in the company of other men, in particular
when these other men also sexually harass women (Angelone, Hirschman, Suniga, Armey, & Armelie, 2005; Dall'Ara & Maass, 1999; Hitlan et al, 2009; Hunt & Gonsalkorale, 2014). Sexually harassing women in the company of other men enhances their standing with their social group (Thomae & Pina, 2015). Fourth, masculine-relevant tasks are another source of masculinity threat. Experiments where male participants were outperformed by a female confederate on a masculine task were found to be more likely to sexually harass their female confederate (Maass et al., 2003).

Thus far, much of the research on sexual harassment focused on physical spaces. The studies that examined online sexual harassment have focused on the known antecedents and outcomes (Barak, 2005). However, there has been little attention to the psychological processes of computer-mediated communication differentiating online and offline sexual harassment.

**Social Identity Model of Deinindividuation Effects (SIDE)**

One of the affordances of computer-mediated communication (CMC) is anonymity, defined as being unnamed or unidentified. People can join a video game anonymously or pseudonymously with a name of the user's choosing, which affords people to assume roles unrestricted by their identities in physical spaces. Another affordance is the lack of or perceived lack of accountability as their actions cannot be attributed to their physical space identity, anonymously no one can blame harm to a specific person. Consequently, anonymity affords people to ignore social norms. Early studies found that when people become anonymous they lose their sense of individuality, a state called *deindividuation* (Kiesler, Siegel, & McGuire, 1984). Deindividuation theory
was one of the early theories used to explain computer-mediated communication based on anonymity, self-awareness, and group immersion (Postmes & Spears, 1998). Under such a deindividuated state, people were less inhibited and in turn were more likely to engage in antisocial behaviors (Kiesler et al., 1984; Lea, O'Shea, Fung, & Spears, 1992). Similarly, another theory called the online disinhibition effect posited two types of online behaviors: benign disinhibition, associated with kind and prosocial behaviors, and toxic disinhibition, associated with hostile and aggressive behaviors such as flaming, threats and rude language (Suler, 2004). However, a meta-analysis of deindividuation effects found that people do not behave in an uninhibited fashion, but rather their behaviors were regulated by the social situation they were immersed in (Postmes & Spears, 1998). Thus, an alternative theory was provided to explain behaviors in anonymous contexts.

The social identity model of deindividuation effects (SIDE; Lea & Spears, 1992) provides a theoretical framework for understanding computer-mediated behaviors regulated by social influences. Such framework extends to our understanding for online sexual harassment. Based on social identity theory and self-categorization theory, SIDE theory posits that when people become anonymous, their behaviors conform to situational norms rather than being in an uninhibited state (Spears, Lea, & Postmes, 2007). The behavioral conformity depends on the social identities salient to the individual within the social situation. Thus, anonymity has two SIDE effects on people's behaviors: the anonymity of others to oneself, the cognitive dimension, and the anonymity of oneself to others, the strategic dimension (Reicher, Spears, & Postmes, 1995).
The cognitive dimension of SIDE. The cognitive aspect of SIDE concerns the visibility of identities within the present social context. A particular characteristic of computer-mediated communication is the lack of social cues between the individual and others. In other words, little is known about the personal information of the people within the social context. Consequently, people infer other people's identities from the few social cues they perceive. These social cues (e.g., names, topics discussed, linguistic style) provide the context to infer their own social identity as a matter of interacting with others. Hence, people were not deindividuated as theorized earlier, but rather were depersonalized — they see themselves in terms of being part of a social group than as a unique individual in crowds (Postmes, Spears, & Lea, 2002). Given the scarcity of individuating cues in computer-mediated communication, people infer others' behaviors and identities based on stereotypes and they also behave according to their in-group stereotypes. Identity stereotyping leads to the polarization of attitudes and behaviors among group members, and to the stereotyping of out-group members (Lee, 2007a; Postmes et al., 2002). The depersonalization phenomenon has been established through computer-mediated experiments where participants were identified in terms of their group memberships. Some experiments used nationality, status in education, or gender to depersonalize the participants (Lee, 2004; Postmes et al., 2002; Postmes & Spears, 2002). Furthermore, the phenomenon occurred through environmental cues, participants identified themselves with a social group associated to a theme, such as efficiency or male-oriented topics (Lee, 2007; Postmes, Spears, Sakhel, & De Groot, 2001). An experiment revealed that anonymous participants who communicated sexist messages
reported greater hostile sexism towards women (Fox, Cruz, & Lee, 2015). The anonymity of computer-mediated communication influences individuals' behaviors to conform with salient social identities, in particular those that are readily accessible, such as gender identities for men and women. How they can express these identities are dependent on whether other groups may encourage or discourage them within the social context.

**The strategic dimension of SIDE.** The strategic dimension concerns the expression of salient identities within the present social context. Originally it was thought that computer-mediated communication would remove status cues, such as gender, ethnicity, and class (Durbrovsky, Kiesler & Sethna, 1991). Removing these status cues should equalize all participants at the outset. Status would be based upon their contribution within the social context, rather than associating it with socio-demographic cues. However, several experiments revealed that power relations between groups in physical spaces do extend into the computer-mediated world: that is, people belonging to an identified group in computer-mediated contexts were likely to alter their behaviors in the presence of other groups, in particular to groups who are superior to them. For example, students alter their behaviors in the presence of instructors or women altering theirs when in the company of men (Spears et al., 2007). One of the early experiments had students expressing their views on behaviors undesirable to instructors, such as cheating or skipping classes (Reicher & Levine, 1994). The student members identifiable to the instructors expressed less support for these undesirable behaviors. When the students were made anonymous, they expressed greater support for undesirable behaviors. In another experiment, students who were identifiable to each other showed
greater support for undesirable behaviors as the presence of other group members afforded them to gauge the level of support and a means to resist the instructors (Spears, Lea, Corneliussen, Postmes, & Haar, 2002).

The strategic dimension of SIDE is particularly relevant to computer-mediated communication between men and women, and by extension to online sexual harassment. The power relations between men and women are unequal in the real world and in the computer mediated world. One experiment found that men tend to dominate the online conversation when the topic is male-oriented, such as sports, and vice versa when the topic is female-oriented, such as family (Postmes & Spears, 2002). In another experiment, female participants were more likely to interact with others anonymously and felt they had contributed to a discussion more significantly when anonymous (Flanagin, Tiyaamornwong, O'Connor, & Seibold, 2002). Conversely, the male participants were less likely to interact anonymously and were more likely to reveal personal information, especially their gender (Flanagin et al., 2002). Thus, gendered interactions that were present in physical spaces are extended into computer-mediated contexts.

The SIDE perspective in video games. Given the gendered context of video games, the plurality of male players relative to female players and the gender stereotype attributed to the gamer identity, indicate that online interactions between men and women would be stereotypically gendered (Bertozzi, 2008; Eden et al., 2010). Several studies support this notion. Female gamers hide their true gender identity or pretended to be a man when playing video games (Cote, 2015). Female gamers managed their online identities and behaviors, balancing their need to conform with the masculinity of video
game play and their own need in expressing their femininity (Eklund, 2011; Rosier & Pearce, 2011; Walkerdine, 2006). In an experiment, when female participants played with a male confederate, they evaluated their own video game abilities as lower than their male partners and rated the latter as higher, suggesting that women were self-stereotyping in the presence of male players (Vermeulen, Castellar, & Van Looy, 2014). An online survey of female players of an online video game also support the gendered evaluation (Ratan, Taylor, Hogan, Kennedy, & Williams, 2015). A field experiment revealed that male players were more likely accept a friend request from a female player who did not interact with them and conversely were more likely to accept a friend request from a male player who uttered negative comments (Holz Ivory, Fox, Waddell, & Ivory, 2014). Thus, computer-mediated communication in video games is predominantly masculine, this suggest that female players must carefully behave when their gender identity is revealed.

According to social identity theory and precarious manhood theory, the predominance male players and the male-oriented perceptions of video games are sufficient conditions to elicit potential masculinity threats when female players are visible. The retaliations towards female players have been documented (Gray, 2012, 2013). Field experiments in online video games revealed that a female player received negative comments three times more than a male player (Kuzenkoff & Rose, 2013); the rate of negative comments was influenced by video game performance when the female player outperformed their perpetrators (Kasumovic & Kuznekoff, 2015). Online surveys of video game players revealed that female players were more likely to be victimized and that most perpetrators were male players (Ballard & Welch, 2015). More female than
male players reported to have experienced sexism while playing, and women were more likely to believe that sexism in video games was a problem (Brehm, 2013). On the other hand, people respond to social identity threats in ways to either derogate the undesirable source or reaffirm desirable source that enhance their identity (Morton, Haslam, Postmes, & Ryan, 2006). Among strongly self-identified gamers, they derogate scientific findings linking violent video games to aggression than studies that did not (Nauroth, Gollwitzer, Bender, & Rothmund, 2014; Nauroth, Gollwitzer, Bender, & Rothmund, 2015). These negative evaluations of undesirable findings were elicited by feelings of anger and stigmatization, which undermine their gamer social status.
As mentioned in the literature review, sexual harassment is conceptualized as a behavioral response to masculinity threats from women. Some men swiftly respond to the perceived masculinity threats, and this study included several personality measures (i.e., ambivalent sexism, hypermasculinity, gender self-esteem, online disinhibition, trait aggression, trait displaced aggression, and narcissism) to assess what types of men tend to do this. Sexually harassing behaviors reinforce the unequal power relations between men and women. The present video game environment is predominantly masculine, and as a result many women feel unwelcomed within video game environments, especially when they experience sexual harassment. However, much of the sexual harassment literature is correlational, and there are few experimental studies that demonstrate causal relations. The present experimental study examined conditions that may lead men to sexually harass a woman following a video game session.

The computer harassment paradigm. Given the psychological harm of sexual harassment, there are ethical concerns about exposing confederates to sexually harassing behaviors in experiments. Repeated exposure to potentially sexually harassing content, even if the content is known in advance, may harm female participants. The computer harassment paradigm was designed to simulate sexual harassment interactions with a virtual female confederate. This paradigm involves participants communicating through
computers. Typically interactions involve the male participant sending images or jokes to a female confederate, who provides a scripted response (Dall'Ara & Maass, 1999; Maass et al, 2003; Siebler et al., 2008). Thus, male participants are free to send sexually harassing material to the female confederate. Importantly, the paradigm does not involve the researchers (i.e. authority figures) directly, thus recreating a typical sexually harassing event and allowing researchers to test cause and effects predictions.

The type of sexually harassing behaviors vary in this paradigm, although severe sexual coercive behaviors are relatively rare compared to the more frequent and ambiguous sexist jokes. The first computer harassment paradigm used pornographic images as their sexual harassment variable, but it was found that not many participants sent pornographic images because they were blatantly offensive (Dall'Ara & Maass, 1999). In comparison, telling sexist jokes is closer to real world acts of sexual harassment because it is the most prevalent sexually harassing behavior (Timmerman & Bajema, 1998). In the present study, the number of sexist jokes sent was be the outcome variable for sexual harassment.

Although the researchers using the computer harassment paradigm paid little to attention to the computer-mediated communicative process, the paradigm fits well with the SIDE model because researchers can manipulate specific experimental parameters relevant to SIDE, such as the number of socially individuating cues, characteristics of the confederate, and the power relations between participants (e.g. between peers or between superiors and subordinates). Relevant to the present study is the type of female
confederate the male participant interacted with, which was their sexual harassment target.

**The social identity approach to sexual harassment.** The social identity approach is a theoretical framework incorporating social identity theory and self-categorization theory (Hornsey, 2008). The social identity model of deindividuation effects and the sexual harassment under social identity threat paradigm are based on this framework (Maass et al., 2003; Spears et al., 2007; Thomae & Pina, 2015). Therefore, they are complementary to each other in understanding and predicting online sexual harassment. According to the cognitive dimension of SIDE, the paucity of social cues should accentuate specific identities, and accentuating gender identity is necessary for the sexual harassment identity threat paradigm. The CMC environment should entail depersonalization effects leading to gender self-stereotyping among men and of women and shifting from individual to intergroup interactions. Given the unequal power relations between genders in physical spaces, the strategic dimension of SIDE posit that men would have a positive distinctiveness, a feeling of superiority, over women (Postmes & Spears, 2002). When women threaten the gender identity of men, men should retaliate by derogating women in order to restore their positive distinctiveness. Sexist humor serves such restorative function because the jokes degrade women. Given the depersonalized nature of anonymous CMC interactions, men should act upon their gender self-stereotyping and to women’s stereotyping as well. Furthermore, the retaliations should be one-sided given the strategic inequality within the social context between men and women, even more so when the social context is male-oriented, such as video games.
Social identity threats from women. The masculinity threats posed by women are not generalized. According to social identity theory, there is a taxonomy of social identity threats to consider (Branscombe, Ellemers, Spears, & Doosje, 1999). Previous experiments have found that women who posed a legitimacy threat to the male participants were more likely to be sexually harassed by them (Dall'Ara & Maass, 1999; Maass et al., 2003). The legitimacy threat is manifested in women advocating gender egalitarian qualities, such as feminism or taking on roles usually assigned to men. Experiments found that men sexually harassed feminist women more often than traditional women (Dall'Ara & Maass, 1999; Maass et al., 2003; Siebler et al., 2008). Given the anonymity afforded in online video games, the presence of an anonymous woman posed an interesting comparison to the more visible feminist and traditional-oriented women. Thus, I posed this hypothesis:

H1: Men should send more sexist jokes to feminist female players than to traditional or anonymous female players.

Experimental studies have used different stimuli to induce masculinity threat, such as gender knowledge tests, and observed the outcome to a female confederate who had no role in those activities (Hunt & Gonsalkorale, 2014; Maass et al., 2003). Although the focus on targeting has been given little attention, these findings suggest that the female confederate was a target of displaced sexual harassment. Given that social identity theory posits that sexual harassment should be an intergroup interaction, following a masculinity threat men should sexually harass any women they encountered, regardless whether they posed a legitimacy threat or not. However, research suggests that women
who pose a direct masculinity threat are more likely to be sexually harassed than women who pose no threat (Dall'Ara & Maass, 1999; Maass et al., 2003; Siebler et al., 2008). In order to disentangle these effects, the male participants in this experiment should show more sexual harassment to the female confederate who beat them on the video than to an innocent bystander. Thus, I posed this hypotheses:

H2: Men should send more sexist jokes to the female they played against than to an innocent female bystander.

**Person factors: Individual differences**

The person X situation model fills the gap in the social identity approach by considering the role of individual differences on men's sexually harassing behaviors. As discussed in the literature review, the following personality factors were considered to predict or moderate the hypothesized effects: hostile and benevolent sexism, hypermasculinity, gender identification, and online benign and toxic disinhibition. Thus, I posed these hypotheses.

H3a: Men with high hostile sexism should send more sexist jokes to women.

H3b: Men with high hypermasculinity should send more sexist jokes to women.

H3c: Men with higher gender identification should send more sexist jokes to women.

H3d: Men with higher toxic disinhibition should send more sexist jokes to women.

Other personality factors to consider are trait aggression, trait displaced aggression, and narcissism. Given the association of aggression with masculinity (Bosson
et al., 2009), it is likely that men with higher trait aggression and trait displaced aggression should sexually harass more often than their lower counterparts. Narcissism has been linked to sexual aggression (Konrath, Bushman, & Campbell, 2006), and given that the men's identity has been threatened, it is likely that narcissism is related to sexual harassment (Bushman & Baumeister, 1998; Bushman, Bonacci, van Dijk, & Baumeister, 2003). Thus, I pose these hypotheses:

H3e: Men with high trait aggression should send more sexist jokes to women.

H3f: Men with high trait displaced aggression should send more sexist jokes to an innocent female bystander than men with low trait displaced aggression.

H3g: Men with high narcissism would send more sexist jokes to women.
Chapter 3: Method

Participants and Design

Participants were 221 male undergraduate students who voluntarily participated to fill a course requirement in their communication or psychology class ($M_{age} = 19.73, SD = 2.95$; 74% Caucasian, 13% Asian (i.e. Chinese, Korean, Indian, Filipino Malaysian, Cambodian), 12% African-American, 1% Middle Eastern). Eighteen participants were excluded due to failure to follow experimenter instructions, missing data, or suspiciousness. One participant was excluded due to outperforming the female confederate in the video game task. Thus, the final sample consisted of 202 male participants. As can be seen in Table 1, attrition rates were randomly distributed across conditions., $\chi^2 = 0.14, p > .92$.

The design was a 3 (feminist, traditional, vs. anonymous female player) X 2 (direct vs. displaced aggression) between-subjects factorial design. The number of participants randomly assigned to the experimental conditions were as follows: Feminist / direct aggression ($n = 33$), traditional / direct aggression ($n = 35$), anonymous / direct aggression ($n = 33$), feminist / displaced aggression ($n = 31$), traditional / displaced aggression ($n = 35$), and anonymous / displaced aggression ($n = 35$).

Procedure
Online survey. Prior to the laboratory session, participants were sent an online survey to complete (see Appendix B). The survey contained measures of trait aggressiveness, displaced aggression, narcissism, sexism, hypermasculinity, gender identity, online disinhibition beliefs, and demographics. With the exception of the demographics portion, which always appeared last, the order of the measures was randomized.

Trait aggressiveness was measured using the short version of the Aggression Questionnaire (Buss & Perry, 1992), which contains 12 items (e.g., “Given enough provocation, I may hit another person” and “I can't help getting into arguments when people disagree with me”) that are scored using a 5-point scale (1 = Extremely uncharacteristic of me to 5 = Extremely characteristic of me; $M = 2.13$, $SD = .65$; Cronbach $\alpha = .85$).

Displaced aggression was measured using the Displaced Aggression Questionnaire (Denson, Pedersen & Miller, 2006), which contains 31-items (e.g., "when feeling bad, I take it out on others" and "I never help those who do me wrong") that are scored using a 7-point scale (1=Extremely uncharacteristic of me to 7=Extremely characteristic of me; $M = 2.82$, $SD = 1.07$ Cronbach $\alpha = .96$).

Narcissism was measured using the Single item Narcissism Scale (Konrath, Meier & Bushman, 2014), which contains the item: ‘To what extent do you agree with this statement: ‘I am a narcissist.’ ‘ Note: The word ‘narcissist’ means egotistical, self-focused, vain, etc.) that is scored using a 7-point scale (1=not very true of me to 7=very true of me; $M = 2.48$, $SD = 1.42$).
Sexism was measured using the Ambivalent Sexism Inventory (Glick & Fiske, 1996), which contains 22 items (e.g., "Women are too easily offended" and "Women should be cherished and protected by men") that are scored using a 6-point scale (1=Strongly disagree to 6=strongly agree; \(M = 3.48, SD = 0.68; \) Cronbach \(\alpha = .84\)). The questionnaire consisted of two subscales: Hostile sexism (\(M = 3.39, SD = 0.82; \) Cronbach \(\alpha = .83\)) and benevolent sexism (\(M = 3.36, SD = 0.80; \) Cronbach \(\alpha = .82\)).

Hypermasculinity was measured using the Hypermasculinity Inventory (Mosher & Sirkin, 1984), which contains 21 items that are scored using a 7-point scale (e.g., "I win by not fighting" vs. I fight to win" and "Fair if fair in love and war" vs. "All is fair in love and war"; \(M = 3.52, SD = 0.86; \) Cronbach \(\alpha = .86\)).

Gender identity was measured using the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992), which contains 16 items (e.g., "I often regret that I am a man" and "To be a man is an important reflection of who I am") that are scored using a 5-point scale (1 = Strongly disagree to 5 = Strongly agree; \(M = 4.06, SD = 0.58; \) Cronbach \(\alpha = .81\)). This scale has been successfully used in previous research to measure gender identity (Siebler et al., 2008).

Online disinhibition beliefs were measured using the Online Disinhibition Scale (Udris, 2014), which contains 11 items (e.g., "Writing insulting things online is not bullying" and "The internet is anonymous so it is easier for me to express my true feelings or thoughts") that are scored using a 7-point scale (1=Strongly disagree to 7=Strongly agree; \(M = 3.47, SD = .97; \) Cronbach \(\alpha = .82\)). The questionnaire consisted of
two subscales: benign disinhibition ($M = 4.08, SD = 1.15; \text{Cronbach } \alpha = .81$) and toxic disinhibition ($M = 2.41, SD = 1.11; \text{Cronbach } \alpha = .69$).

Participants also reported their gender, age, race/ethnicity, and the number of hours spent playing video games on an average day.

**Laboratory experiment.** At the laboratory session, participants were tested individually in separate rooms. They did not interact with any other participant. Only male researchers were employed in the current study because female researchers might potentially affect the behavior of participants (e.g., influence them less likely to send sexually harassing jokes). Participants were told that the researchers were studying entertainment, including playing video games and reading jokes. Participants were told that for purposes of efficiency, participants would be tested in small groups. Participants were told that the other members of their group were female college students.

Through a rigged lottery, the participant was assigned as the anonymous sender of jokes, and the partner was assigned as the receiver. Participants were told that since they were in the anonymous condition, they would play the video game only with the user name as a "male player."

By random assignment, participants were introduced to one of three possible female confederates: (1) anonymous, (2) feminist, or (3) traditional. In the anonymous condition, the female partner was only identified as "female player."

No personal information was provided to the participant, and there was no interactions between the participant and the anonymous confederate prior to gameplay. For the other two female partners, participants were told they would get information about their partner via the
chat function of the Steam video game social networking software, where the female partner revealed her name, which was “Jennifer” in both the feminist and traditional conditions, as well as her age, major, hobby, favorite TV program, and favorite website (see Appendix C). The female partner was described as either a feminist or as a traditional woman (Lee, 2007). In the feminist condition, the female partner described herself as a Women's Studies major, who wants to work for a women's rights organization when she graduates. She explained that she chose her major because she believes in defending women’s rights and equal employment opportunity. Her favorite TV show was "Orange is the New Black," and her favorite website was Jezebel, both progressively feminist. In the traditional condition, the female partner described herself as an Education major, who wants to work as an elementary school teacher when she graduates. She explained that she chose her major because she believes it gives her time for her family and children. Her favorite show was "Keeping up with the Kardashians" and her favorite website was Cosmopolitan, both associated with traditional femininity.

Next, the participant played the video game Castle Crashers with the ostensible female partner. This game was rated the ESRB (Entertainment Software Ratings Board) as "T" for "Teens" (ages 13+) due to the violent content and blood. Castle Crashers is a beat them up fighting game in which players control a cartoonish knight set in medieval fantasy era. The setting is enclosed arenas with human crowds in the background. This video game was selected for the current study because it was easy to play for both men and women, thus it is more believable that the female partner could win against the male participants. The players controlled a single knight identical to each other, differentiated
only by the shape of the helmet, weapons they wielded, animal companions, and banners on their backs (see Appendix C). The players were tasked to fight each other in combat using their swords. The players could perform three kinds of attacks, a weak and quick attack, a strong and slow attack or a ranged attack using a bow and arrow. They could defend themselves using their shield. The ability to use magical attacks was omitted from the participants in order to maximize the number of wins for the female confederate. If the participant started using magical attacks, then the female confederate would use magical attacks as well. A player won the round once they killed the opponent. Once a round is complete, they started another round.

Next, the experimenter showed all participants how to play the game. Once the training is completed, the participant and the partner were instructed to compete with each other for 15 minutes, but to not communicate during gameplay because “if participants talked to each other, they might say different things, and the procedures would not be standardized.” The knight ostensibly played by the female confederate was in fact controlled by an experienced gamer who won most of the rounds ($M = 79\%, SD = 12\%$). The percent of wins did not significantly influence the results and therefore will not be discussed further.

After playing the video game, participants were told they would start the humor task and communicate with their partner through chat function on the Steam video game social networking software. The participant was randomly assigned to complete the humor task either with the same female confederate who beat them on the violent video game (direct sexual harassment condition), or with a different female confederate who
did not compete with them in the game, who is identified as "female participant" and had no prior interactions with the participant (displaced sexual harassment condition).

The participant was given an online 16-page booklet, hosted by Qualtrics with each page containing a pair of jokes (see Appendix C). For each second pair of jokes, one was sexist and one was not. An example of a sexist joke is: "What do you call a woman that has lost 95% of her intelligence? Divorced." An example of a non-sexist joke is: "How much does a hipster weigh? An Instagram." Before the current study, an online pilot study involving 46 participants (32 men, 14 women) was conducted to determine how funny and sexist the jokes were, using 7-point scales (0 = not at all funny to 7 = very funny). The sexist ($M = 3.11, SD = 1.25$) and neutral ($M = 3.19, SD = 1.17$) jokes did not differ in terms of how funny they were judged to be, $t(45) = 0.40, p = .69, d = -0.12$. However, the sexist jokes were judged to be much more sexist ($M = 5.03, SD = 1.50$) than were the neutral jokes ($M = 1.04, SD = 0.14$), $t(45) = 16.81, p < 0.001, d = 5.01$. The effect was extremely large. According to Cohen (1988) a “small” effect is $d = 0.20$, a “medium” effect is $d = 0.50$, and a “large” effect is $d = 0.80$.

The participant chose one of the two jokes to send to the female confederate. The number of sexist jokes the participant sent to the partner (0 to 8) was used to measure sexual harassment (Mitchell, Hirschman, Angelone, & Lilly, 2004; Siebler et al., 2008). The female confederate provided a scripted response for each joke. If the joke was sexist, the female confederate made disapproving comments, such as "That's not funny at all." As participants sent more sexist jokes, the female confederate's disapproving comments became more serious, from "I don't like this joke at all" to "Seriously? I don't find these
jokes funny at all, they're offensive!" (see Appendix C). If the joke was non-sexist, the female confederate made approving comments, such as “That’s funny.” The average number of sexist jokes sent was 1.72 ($SD = 1.93$); 35.6% sent no sexist jokes, 21.3% sent one sexist joke, 14.9% sent two sexist jokes, 26.3% sent at least three sexist jokes, and 2% sent all eight sexist jokes.

Once the joke task is completed, participants completed a post-game questionnaire on their experiences with the game, partner, and humor task (see Appendix C). First, they rated the video game they played on several dimensions (i.e. pace of action, violence, frustration, difficulty, enjoyable, realism, liking, exciting, competitive, wanting to play again), using 11-point rating scales (e.g., $0 = not at all violent$ to $10 = extremely violent$; adapted from Anderson & Dill, 2000). To measure their partner’s video game abilities, participants rated how competent, experienced, skillful, and aggressive “she” was as a video game player (1 = not to 10 = very; $M_{\text{combined}} = 7.79$, $SD_{\text{combined}} = 1.18$; Cronbach $\alpha = .72$; $M_{\text{competent}} = 7.90$, $SD_{\text{competent}} = 1.59$, $M_{\text{experience}} = 7.70$, $SD_{\text{experience}} = 1.77$, $M_{\text{skill}} = 8.14$, $SD_{\text{skill}} = 1.31$, $M_{\text{aggressive}} = 7.44$, $SD_{\text{aggressive}} = 1.69$; adapted from Eden et al., 2010).

Participants rated the entire set of jokes they sent to their partner. Participants rated how funny and how much they liked the jokes as well as their partner’s reactions to the jokes using a 10-point rating scale (1 = not funny at all to 10 = Very funny; $M_{\text{participant}} = 5.36$, $SD_{\text{participant}} = 1.98$; Cronbach $\alpha = .89$; $M_{\text{confederate}} = 4.99$, $SD_{\text{confederate}} = 1.78$, Cronbach $\alpha = .89$).
Participants also completed a measure of perceived anonymity (Hite et al., 2014), which contained 8 items (e.g., “I am confident that others do not know who I am” and “I feel I am anonymous in this environment”) scored using a 7-point scale (1 = *Strongly disagree* to 7 = *Strongly agree*; $M = 5.12$, $SD = 1.05$; Cronbach $\alpha = .88$). Participants were instructed to consider the items for both their interactions in the game and their interactions with their partner during the jokes task. Participants responded to the items on their own perceived anonymity as well as their partner’s anonymity. As a manipulation check, participants also reported whether their partner was a woman, or a man using a 7-point scale (1 = *Strongly disagree* to 7 = *Strongly agree*; $M_{\text{woman}} = 4.67$, $SD_{\text{woman}} = 1.85$; $M_{\text{man}} = 3.35$, $SD_{\text{man}} = 1.87$).

A debriefing followed. In the debriefing participants were told that sexual harassment is illegal in the workplace and is not funny in any place.
Chapter 4: Results

Preliminary Results

Confederate manipulation checks. Most participants 52% (105 participants) at least slightly agreed that their participant was a woman, 23.6% neither agreed nor disagreed, and 23.7% (48 participants) at least slightly disagreed. A 3 (feminist vs. traditional vs. anonymous female partner) X 2 (direct vs. displaced aggression) ANCOVA, with the participant's win-loss ratio and the number of hours playing video games as covariates. These covariates were included because the number of wins might influence how threatened participants were during gameplay. Likewise, the amount of experience participants had playing video games might influence how threatened they felt by being beaten by a woman. The results revealed no significant effects of the manipulated variables or covariates on the belief that the partner was a woman ($p$’s > .16; see Table 2). During the debriefing it was discovered that uncertainty about whether the partner was a woman was likely due to the stereotypical belief that few women are gamers. For example, one participant said: "The person may be female, but in the gaming field it is simply harder to believe it because [sic] a large majority are men."

Additional 3 X 2 ANCOVAs revealed that the partner’s abilities (i.e., competence, skill, experience, and aggressiveness) were not influenced by the manipulated variables ($p$’s > .69; see Table 3). Interestingly, there were significant
negative correlations between hostile sexism and competence ratings, $r(200) = -.18, p < .001$ and between hypermasculinity and competence ratings, $r(200) = -.25, p < .001$, which suggests that sexist and hypermasculine men viewed the female confederate as less competent (see Table 5). Another 3 X 2 ANCOVA revealed that their partner's reactions to the jokes were not influenced by the manipulated variables ($p's > .34$; see Table 4). However, there was a negative correlation between the number of sexist jokes sent by the participant and how funny participants thought the confederate found the jokes to be, $r(200) = -.41, p < .001$. There was a negative correlation between the number of sexist jokes sent and competence ratings, $r(200) = -.20, p = .01$ (see Table 5). There was a positive correlation how funny participants thought the jokes were and benevolent sexism, $r(200) = .19, p < .001$.

The significant correlation between the number of sexist jokes sent and the partner's negative reaction to them demonstrates provides evidence that participants knew the sexist jokes were not appreciated by their female partner (see Table 2).

**Primary Results**

To test hypotheses 1-2, a 3 (feminist vs. traditional vs. anonymous female partner) X 2 (direct vs. displaced aggression) ANCOVA was conducted to test the main effects of type of confederate and type of aggression on the number of sexist jokes sent. The covariates were the participants' win-loss ratio and the number of hours playing video games (see Table 6). H1 was not supported, men did not send more sexist jokes to feminist female players ($M = 1.75, SD = 2.24$) than to traditional ($M = 1.42, SD = 1.41$) or anonymous female players ($M = 1.87, SD = 1.93$), $F(2, 182) = 1.03, p = .36$. H2 was
supported; men sent more sexist jokes to the woman they played against on the video game \((M = 1.98, SD = 2.02)\) than to an innocent female bystander \((M = 1.39, SD = 1.68)\), \(F(1, 182) = 4.63, p = .03, d = 0.32\). The two-way interaction between the factors was not significant, \(F(2, 182) = 0.13, p = .875\). The covariates were not significant, \(ps > .65\).

Given the participants’ ambiguity about whether the confederate was actually a female, another 3 (feminist vs. traditional vs. anonymous female partner) X 2 (direct vs. displaced aggression) ANCOVA was conducted using participants who at least slightly agreed that their partner was a woman \((n = 105; \text{see Table 7})\). The main effect for type of aggression was not significant, \(F(1, 90) = 2.72, p = 0.10, d = 0.29\). Participants were no more likely to send sexist jokes to the woman who beat them on the video game \((M = 2.07, SD = 2.08)\) than to an innocent female bystander \((M = 1.44, SD = 1.65)\). Similarly, there was no significant main effect of type of confederate on the number of sexist jokes sent, \(F(2, 90) = 0.93, p = .40\), anonymous female \((M = 1.70, SD = 2.03)\), traditional female \((M = 1.52, SD = 1.35)\), feminist female \((M = 2.15, SD = 2.28)\). The two-way interactions between the factors was not significant, \(F(2, 90) = 0.29, p = .75\). The covariates were not significant, \(ps > .65\).

**Person factors: Individual differences**

To test hypotheses 3a-3g, a correlational analysis was conducted. Table 5 contains the correlations between the individual difference variables, hostile sexism, hypermasculinity, gender self-esteem, toxic disinhibition, trait aggression and narcissism, and the number of sexist jokes sent. As can be seen in Table 5, male participants with high hostile sexism, high hypermasculinity, high trait aggression and high narcissism sent
more sexist jokes to women. However, gender identification and toxic disinhibition were not correlated with the number of sexist jokes sent.

To test H3f, a correlation was conducted with male participants who had sent sexist jokes to an innocent female bystander. H3f was supported, men with high trait displaced aggression sent more sexist jokes to an innocent female bystander than men low trait displaced aggression, \( r(99) = .21, p = .03 \).

**Post Hoc Analyses**

Additional ANCOVAs were conducted that included the main and interactive effects of type of female confederate (i.e., feminist, traditional, anonymous) and type of aggression (i.e., direct, displaced) along with all the individual differences, win-loss ratio and the number of hours playing video games as covariates. In this overall model with the number of sexist jokes (see Table 8), the following effects were significant: Hostile sexism, \( F(1, 166) = 14.32, p < .001 \), and hypermasculinity, \( F(1, 166) = 6.77, p = .01 \). The covariates were not significant, \( ps > .62 \).

The same analysis was conducted with the participants' competence rating of their female partner (see Table 9), and two individual differences were significant: hypermasculinity, \( F(1, 172) = 9.92, p < .01 \), and trait aggression, \( F(1, 172) = 4.90, p < .05 \). The covariates were not significant, \( ps > .40 \).
Chapter 5: Discussion

Research in sexual harassment has a dearth of experimental studies in determining the causal relations between the theorized predictive factors and sexually harassing behaviors. Amongst the few experimental studies, sexual harassment were operationalized through communicating sexist messages, such as sending pornographic images to sexist jokes, from a male perpetrator to an innocent female target (Dall'Ara & Maass, 1999; Maass et al., 2003; Siebler et al., 2008). These experiments and the current study test the predictions set forth within the sexual harassment literature and social identity theory, in particular social identity threat.

The present findings did not support hypothesis 1 with its predictions in terms of social identity threats. Prior experiments have found that men harassed feminist women more often than traditional women (Dall'Ara & Maass, 1999; Maass et al., 2003; Siebler et al., 2008). The rationale of such hostility is that the presence of a non-traditional woman threatens the men's social identity legitimacy from the opposite gender. Furthermore, gender priming stimuli were employed, such as exposing sexist entertainment (Mitchell et al., 2004), informing the study as examining gender differences in performance (Sible et al., 2008), receiving false feedback on a gender test (Hunt & Gonsalkorale, 2014). However, these gender priming stimuli were explicitly designed to degrade a gender, either male or female, such as sexist comedy routine or
false feedback from an ostensible test indicating below average rating of masculinity. The current study did employ different female identities, but did not explicitly employ any degrading gender priming stimuli. The video game session was surmised to be sufficient in priming gender, but was not degrading to either gender. The female confederate's overwhelming performance could be construed as another type of social identity threat—a threat to their masculinity (Branscombe et al., 1999). The male players' valued video game performance was undermined by a female player's performance, assumed to be inferior. These findings support a prior field experiment on online video game hostile interactions towards women by men (Kasumovic & Kuznekoff, 2015). Female player confederates received more negative comments from male players who performed poorly relative to the female confederate. As the current study had all male participants defeated by an ostensible female player by a large margin (72% win), it is reasonable to suggest that participants' masculinity was threatened by the actions of the female confederate rather than their presented identities. However it is not known whether their one-time video game performance on a simple game is reflectively or is important to their gender identity. A limitation is that the current study focused on participants' gender identity, but did not examine their gamer identity. It is possible that the social identity threat may stem from being beaten by a non-gamer rather than by a woman. For future research, researchers should examine gamer identity as a potential source of social identity threat.

The present study supported hypothesis 2 in that male players were more likely to sexually harass a female by sending her sexist jokes if she had beaten him on the video
game than if she was an innocent bystander. This replicates previous findings showing that direct aggression is often higher than displaced aggression (Marcus-Newhall, Pedersen, Carlson, & Miller, 2000). Within intergroup context, the presence of feminist women in a male-dominated environment is threatening for the men to sexually harass the women in order to protect their group status. Within the current study, the male participants were outperformed by a female partner, it is reasoned that the female partner represented an interpersonal threat. For future research, researchers should examine sexual harassment towards a single target versus a group target.

In regards to hypotheses 3, the current study replicate prior results in regards to personality traits, in particular to hostile sexism, hypermasculinity, trait aggression and narcissism. The results revealed a significant positive correlation between these individual differences and the number of sexist jokes. Many participants who sent multiple sexist jokes revealed during debriefing that they enjoyed the sexist jokes and did not think they were offensive, even though the female confederate disapproved of them by making comments such as, "That's disgusting." These sentiments were in line with previous studies showing that males high in hostile sexism rate sexist jokes as more enjoyable and less offensive, and are more likely to send them to women (Greenwood & Isbell, 2002; Thomas & Esses, 2004). A unique contribution from this study is the significant predictor of hypermasculinity towards sexual harassment behaviors. Greater hypermasculinity led to greater number of sexist jokes sent to a female confederate. Accounting for the current study and prior studies' results on individual trait differences such as ambivalent sexism, hypermasculinity, and gender self-esteem, there are other
individual difference that predict of sexual harassment, such as social dominance orientation, right wing authoritarianism, likelihood to sexually harass, conformity to masculine norms, and adversarial sexist beliefs (Hunt & Gonsalkorale, 2014; Mitchell et al., 2004; Siebler et al., 2008). These individual differences indicate a constellation of personality traits centered on a hostile and hierarchical gender roles.

The lack of empirical support for toxic disinhibition lends more support to the SIDE model than to the online disinhibition effect. However, participant's gender identification was neither a predictor. Previous findings revealed mixed results (Dall’Ara & Maass, 1999; Maass et al., 2003; Siebler et al., 2008). It is suggested that gender identification may become more relevant for certain kinds of social identity threats. It is likely that most of the participants in the current study do not identify their gender with video games and are thus felt less threatened by their loss to a female partner. Future research should examine sexual harassment with self-identifying gamer population.

The post hoc analysis on participants' competence rating on their female partner revealed interesting findings. Hypermasculine and highly aggressive men gave lower competence ratings to their female partner than non-hypermasculine and low aggressive men did. Other research has reported similar findings on negative evaluations on female job candidates, but ambivalent sexism was the predictive variable (Masser & Abrams, 2004). It is surmised that different trait would have a stronger influence for certain situations. Interestingly, there was a negative correlation between competence rating and the number of sexist jokes sent. This suggests that the partner rating is used as another avenue participants used to aggress against their female partner. In the current study,
participants may draw upon qualities suited for playing video games, which are aggression and masculinity.

**Practical Implications**

A practical implication from the current study relate to bystander research, in particular strategies in encouraging bystanders to intervene. As the current study suggest, sexist men will send more sexist jokes to a woman confederate, how a bystander stymie these behaviors is important. Past research has found that male participants are less inclined to send sexist material to a female confederate when a second male confederate discourages them (Hunt & Gonsalkorale, 2014; Parrott, Tharp, Swartout, Miller, Hall & George, 2012). The actions of an in-group member discouraging others from committing sexually harassing behaviors is an effective strategy, but whether bystanders confront harassers depends on situational and personality factors. Confronters may be dissuaded by potential ostracism from their in-group as they stand against their peers' group values (Shelton & Stewart, 2004; Dickter, 2012). Conversely, personality traits, such as masculinity, decrease the likelihood to confront as they do not perceive sexually harassing behaviors as problematic (Kroeper, Sanchez, & Himmelstein, 2013). Within online video games and on the Internet, sexual harassment confronters may be accused of being "white knights", defending women from harassers in exchange for sexual favors.

Another practical implication is the profiling of sexual harassers within computer mediated environments. Given that computer mediated communication is often textual, it is possible to correlate sexist communication patterns with the relevant personality traits, i.e. ambivalent sexism. Such correlations may allow automated flagging and disrupt
potentially harassing behaviors towards vulnerable targets. Conversely, such technique allow educational interventions to targeted individuals. Although, 21.2% of the current study had sent one joke, and did not followed up with another suggest that certain communicative messages may discourage further harassment. For certain individuals, a different type of message may be needed to persuade from further harassment. Additionally, this would call upon insights on social influence, that is whether the presence and number of bystanders would inhibit sexist behaviors. For future research, an exploration of message content is needed to uncover what would stop male individuals, in particular to those with sexist and hypermasculine tendencies, from escalating into full-blown sexual harassment.

Limitations, Strengths, and Future Research

One of the noted limitations is the female confederate's perceived gender identity. Less than half of participants were unsure or less inclined to believe that their partner was actually a woman. The analysis with only participants who were inclined to believe their partner is actually a woman revealed no main or interactive effect, but the result is due to a smaller sample size. In the current study, the few cues participants derive their partner's identity are their username, their personal information during their interview, their video game performance and their textual communication during the jokes task. Previous research indicated that these cues are enough to establish an individual's gender identity. Previous research have used similar and additional cues, such as the inclusion of a photograph, to establish the confederate's identity (Siebler et al., 2008; Postmes & Spears, 2002). An experiment demonstrated that a random gender assignment to avatars
affected participants’ behaviors, treating female avatars as they were even though they were aware of the random gender assignment (Lee, 2004a). Furthermore, a field experiment in an online video game found differences in helping behaviors from other players depending on the avatar's sex and the player's sex, in particular female players receiving less help if they played a male avatar (Waddell & Ivory, 2015). Other studies found that female avatars attracted unwanted attention from other players even if they are played by a male player (Brehm, 2013, Cote, 2015). However, the female confederate's video game overwhelming performance may have acted as a gender discounting cue given that women stereotypically do not play video games. Such performance may have led some male participants to question their partner's gender. Although, this is rather unsurprising as questioning a player's gender was identified as a harassing behavior (Fox & Tang, 2013). Thus, it is premature to discount the current study findings.

Anonymity is one of the unique affordances of computer mediated communication, allowing individuals uninhibited communication that would have been difficult in face to face communication, such affordance have both beneficial and adverse outcomes. Within the scope of the experiment, all participants were anonymous and only identified by their gender, their beliefs of online disinhibition was not a significant factor of online sexual harassment nor were the perceptions of anonymity towards their female confederate. Nevertheless, anonymity should not be discounted as there are various factors that may be "protective" for the perpetrator. Within the sexual harassment literature, anonymity was not an indicator in predicting sexual harassment, that is victims may know who their perpetrator were, suffer repeated actions and the perpetrator may not
suffer any retaliatory consequences. This suggests a social power dynamic between the perpetrator and target. In light of the experiment, it is suggestive that online harassers’ visibility may not matter as long as the latter could not effectively retaliate. What anonymity protects is from potentially effective retaliation from their targets, or at least, those who are capable of retaliating for the targets. According to SIDE, anonymity serve as a tool in the power dynamics between groups, especially the groups are unequal.

It should be noted that the power dynamic in the current study was supposedly between equal peers, as students. The results indicate a gender-based power dynamic at play, male participants may assert their relative superiority through their sexually harassing behaviors in retaliation of their poor performance on the video game. In the experiment, the female confederate protested, but could not retaliate against the male participants. Thus, some male participants took advantage of this opportunity to sexually harass. For future studies, possible retaliations may affect the power dynamic and thus the likelihood of sexual harassment, the female confederate may protest to the experimenter who take action against the male participants, such as reporting them to the authorities or losing their participation credit for undue harm. According to SIDE, the presence of a third party could shift the likelihood of the behaviors of the two parties, especially if the third party is an authority power (Klein, Spears, & Reicher, 2007).

Another direction for future research is to investigate the effects of video game genre. The current study used a simple beat-them-up video game because it is simple for both genders to play and requires little training. A different video game genre may have different effects. In particular, violent first person shooters are often attributed to be male
(Eden et al., 2010). It is likely that male participants beaten by a female partner on a violent first person shooters might sexually harass more.

There are several methodological limitations in the current study. The participants were asked to give an overall rating of the jokes they sent rather than rating each joke, which confound the sexist and non-sexist joke ratings. Another limitation is the female confederate manipulation check, the question was phrased as "I think my partner is actually a woman", which might cause participants to question whether their partner was female. For future studies, the phrasing should be :Is your partner: male, female or don't know?" A third limitation is the lack of a male control group as an additional comparison. We can say that male participants sent more sexist jokes to the woman who beat them on the video game than to an innocent bystander. However, without a male comparison group one cannot say that males did not sexually harass the innocent female bystander.

Nevertheless, there are methodological strengths in the current study. The video game was selected because it was easy to play. Furthermore, the characters in the video game were not sexualized, which minimized any gender priming effect.

**Conclusion**

Overall, there are some valuable conclusions to be drawn from the current study. The study established a causal relationship between masculinity threat and sexual harassment within an online video game setting. In particular, men are more likely to sexually harass women who pose a masculinity threat than to an innocent bystander. The study demonstrated that individual differences, such as hostile sexism and hypermasculinity, were predictive of sexual harassment. Furthermore, the current study's
results contribute to the causal versus selection ongoing debate because most of the variance in the present study was explained by personality traits. This begs many questions in whether the characteristics of a game caused sexual harassment or whether certain personality traits relevant to sexual harassment predict an attraction to certain video game genres. Future research should continue examining online sexual harassment through the Social Identity Model of Deindividuation Effects and the Social Identity theory. The current study brings much insight into sexual harassment in online video games and it will inspire future studies bringing hope in making video games a better place.
References


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Murnen, S. K., Wright, C., & Kaluzny, G. (2002). If ”boys will be boys,” then girls will be victims? a Meta-Analytic review of the research that relates masculine ideology to sexual aggression. *Sex Roles, 46* (11), 359-375. doi: 10.1023/a:1020488928736


69


Cyberpsychology, Behavior, and Social Networking, 17 (5). doi:
10.1089/cyber.2013.0331

10.1023/a:1025888824749


10.1023/a:1025776705629

10.1080/14680770600990036


Appendix A: Tables
Table 1. Number of participants discarded from each condition.

<table>
<thead>
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<th>Type of aggression</th>
<th>Feminist</th>
<th>Traditional</th>
<th>Anonymous</th>
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<td>Direct</td>
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<td>0</td>
<td>2</td>
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<tr>
<td>Displaced</td>
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<td>1</td>
<td>1</td>
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Table 2. Analysis of variance predicting on the belief that the partner was a woman.

Error df =181

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<th>F</th>
<th>p</th>
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<td>Win-Loss Ratio</td>
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<tr>
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Table 3. Analysis of variance predicting on partner's abilities.

Error df = 181

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Table 4. Analysis of variance predicting partners' reactions to jokes.

Error df = 181

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<td>Partner X Aggression</td>
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<td>Win-Loss Ratio</td>
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<td>.69</td>
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<td>Numer of hours of video games</td>
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Table 5. Correlations between variables of interest

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<th>16</th>
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<td>2. Partner abilities</td>
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<td>3. Competence</td>
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<td>5. Participant positive reaction to jokes</td>
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<td>-.04</td>
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<td>6. Age</td>
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<td>-.01</td>
<td>.07</td>
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<td>9. Benevolent sexism</td>
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<td>-.17*</td>
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<td>.06</td>
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<td>-.07</td>
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<td>-.08</td>
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<td>-.09</td>
<td>.00</td>
<td>-.07</td>
<td>.10</td>
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<td>.01</td>
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<td>.21*</td>
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<td>15. Online toxic disinhibition</td>
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<td>.08</td>
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<td>.16*</td>
<td>-.02</td>
<td>.41**</td>
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<td>-.07</td>
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<td>-.05</td>
<td>.93**</td>
<td>.73**</td>
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* p < 0.05, **p < 0.01.
Table 6. Analysis of variance predicting the number of sexist jokes sent.

Error df = 182

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<td>Aggression</td>
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<td>Partner X Aggression</td>
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<td>Win-Loss Ratio</td>
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<td>Numer of hours of video games</td>
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<td>0.09</td>
<td>.75</td>
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</table>
Table 7. Analysis of variance predicting the number of sexist jokes among participants who at least slightly agree that their partner is a woman.

Error df = 90

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<td>Aggression</td>
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<td>.75</td>
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<tr>
<td>Win-Loss Ratio</td>
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<td>0.20</td>
<td>.65</td>
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<tr>
<td>Numer of hours of video games</td>
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<td>0.21</td>
<td>.65</td>
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</table>
Table 8. Analysis of variance predicting the number of sexist jokes sent.

Error $df = 165$

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<tr>
<td>Partner</td>
<td>2</td>
<td>.52</td>
<td>.59</td>
</tr>
<tr>
<td>Aggression</td>
<td>1</td>
<td>10.10</td>
<td>.07</td>
</tr>
<tr>
<td>Partner X Aggression</td>
<td>2</td>
<td>.05</td>
<td>.96</td>
</tr>
<tr>
<td>Win-Loss Ratio</td>
<td>1</td>
<td>.09</td>
<td>.62</td>
</tr>
<tr>
<td>Number of hours of video games</td>
<td>1</td>
<td>.24</td>
<td>.77</td>
</tr>
<tr>
<td>Hostile sexism</td>
<td>1</td>
<td>14.32</td>
<td>.001</td>
</tr>
<tr>
<td>Benevolent sexism</td>
<td>1</td>
<td>3.42</td>
<td>.07</td>
</tr>
<tr>
<td>Hypermasculinity</td>
<td>1</td>
<td>6.67</td>
<td>.01</td>
</tr>
<tr>
<td>Gender self-esteem</td>
<td>1</td>
<td>.05</td>
<td>.81</td>
</tr>
<tr>
<td>Toxic disinhibition</td>
<td>1</td>
<td>.34</td>
<td>.56</td>
</tr>
<tr>
<td>Trait aggression</td>
<td>1</td>
<td>.08</td>
<td>.78</td>
</tr>
<tr>
<td>Narcissism</td>
<td>1</td>
<td>2.84</td>
<td>.09</td>
</tr>
</tbody>
</table>
Table 9. Analysis of variance predicting for the partner competence rating.

Error $df = 165$

<table>
<thead>
<tr>
<th>Variable</th>
<th>$df$</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner</td>
<td>2</td>
<td>1.41</td>
<td>.32</td>
</tr>
<tr>
<td>Aggression</td>
<td>1</td>
<td>1.06</td>
<td>.30</td>
</tr>
<tr>
<td>Partner X Aggression</td>
<td>2</td>
<td>0.55</td>
<td>.58</td>
</tr>
<tr>
<td>Win-Loss Ratio</td>
<td>1</td>
<td>0.71</td>
<td>.40</td>
</tr>
<tr>
<td>Number of hours of video games</td>
<td>1</td>
<td>0.01</td>
<td>.94</td>
</tr>
<tr>
<td>Hostile sexism</td>
<td>1</td>
<td>2.53</td>
<td>.11</td>
</tr>
<tr>
<td>Benevolent sexism</td>
<td>1</td>
<td>0.76</td>
<td>.38</td>
</tr>
<tr>
<td>Hypermasculinity</td>
<td>1</td>
<td>9.16</td>
<td>.003</td>
</tr>
<tr>
<td>Gender self-esteem</td>
<td>1</td>
<td>0.63</td>
<td>.43</td>
</tr>
<tr>
<td>Toxic disinhibition</td>
<td>1</td>
<td>0.78</td>
<td>.37</td>
</tr>
<tr>
<td>Trait aggression</td>
<td>1</td>
<td>3.84</td>
<td>.04</td>
</tr>
<tr>
<td>Narcissism</td>
<td>1</td>
<td>0.007</td>
<td>.93</td>
</tr>
</tbody>
</table>
Appendix B: Survey Measurement Items
Aggression Questionnaire (Short version)

Please rate each of the following items in terms of how characteristics they are of you.

<table>
<thead>
<tr>
<th></th>
<th>Not at all characteristic of me</th>
<th>slightly</th>
<th>Somewhat</th>
<th>Mostly</th>
<th>Extremely characteristic of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are people who pushed me so far that we came to blows</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I can't help getting into arguments when people disagree with me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My friends say that I'm somewhat argumentative.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I flare up quickly but get over it quickly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I often find myself disagreeing with people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I wonder why sometimes I feel so bitter about things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Other people always</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Seem to get the breaks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes I fly off the handle for no good reason</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Given enough provocation, I may hit another person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have trouble controlling my temper</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have threatened people I know.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Displaced Aggression Questionnaire

Directions: Fill out the following questionnaire to the best of your ability. Please be completely honest. Your responses will remain strictly confidential.

Rate each of the items below using the scale below. Write the number corresponding to your rating on the blank line in front of each statement.

1-----------2-----------3-----------4-----------5-----------6-----------7
Extremely Uncharacteristic
Characteristic
of Me

Take your time and pay attention to the wording. Sometimes the items are worded differently.

(1) _____ I keep thinking about events that angered me for a long time.
(2) _____ I get “worked up” just thinking about things that have upset me in the past.
(3) _____ I often find myself thinking over and over about things that have made me angry.
(4) _____ Sometimes I can't help thinking about times when someone made me mad.
(5) _____ Whenever I experience anger, I keep thinking about it for a while.
(6) _____ After an argument is over, I keep fighting with this person in my imagination.
(7) _____ I re-enact the anger episode in my mind after it has happened.
(8) _____ I feel angry about certain things in my life.

(9) _____ I think about certain events from a long time ago and they still make me angry.

(10) _____ When angry, I tend to focus on my thoughts and feelings for a long period of time.

(11) _____ When someone or something makes me angry I am likely to take it out on another person.

(12) _____ When feeling bad, I take it out on others.

(13) _____ When angry, I have taken it out on people close to me.

(14) _____ Sometimes I get upset with a friend or family member even though that person is not the cause of my anger or frustration.

(15) _____ I take my anger out on innocent others.

(16) _____ When things don't go the way I plan, I take my frustration out at the first person I see.

(17) _____ If someone made me angry I would likely vent my anger on another person.

(18) _____ Sometimes I get so upset by work or school that I become hostile toward family or friends.

(19) _____ When I am angry, I don't care who I lash out at.

(20) _____ If I have had a hard day at work or school, I'm likely to make sure everyone knows about it.

(21) _____ When someone makes me angry I can’t stop thinking about how to get back at this person.
(22) _____ If somebody harms me, I am not at peace until I can retaliate.
(23) _____ I often daydream about situations where I’m getting my own back at people.
(24) _____ I would get frustrated if I could not think of a way to get even with someone who deserves it.
(25) _____ I think about ways of getting back at people who have made me angry long after the event has happened.
(26) _____ If another person hurts you, it's alright to get back at him or her.
(27) _____ The more time that passes, the more satisfaction I get from revenge.
(28) _____ I have long living fantasies of revenge after the conflict is over.
(29) _____ When somebody offends me, sooner or later I retaliate.
(30) _____ If a person hurts you on purpose, you deserve to get whatever revenge you can.
(31) _____ I never help those who do me wrong.
Ambivalent Sexism Inventory

Below is a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement using the following scale.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Slightly disagree</th>
<th>Slightly agree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.

2. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality".

3. In a disaster, women ought not necessarily to be rescued before men.

4. Most women interpret innocent remarks or acts as being sexist.

5. Women are too easily offended.

6. People are often truly happy in life without being romantically involved with a member of the other sex.

7. Feminists are not seeking women to have more power than men.

8. Many women have a quality of purity that few men possess.

9. Women should be cherished and protected by men.

10. Most women fail to appreciate fully all that men do for them.

11. Women seek to gain power by getting control over men.

12. Every man ought to have a woman whom he adores.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>Men are complete without women.</td>
</tr>
<tr>
<td>14.</td>
<td>Women exaggerate problems they have at work.</td>
</tr>
<tr>
<td>15.</td>
<td>Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.</td>
</tr>
<tr>
<td>16.</td>
<td>When women lose to men in a fair competition, they typically complain about being discriminate against.</td>
</tr>
<tr>
<td>17.</td>
<td>A good woman should be set on a pedestal by her man.</td>
</tr>
<tr>
<td>18.</td>
<td>There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances.</td>
</tr>
<tr>
<td>19.</td>
<td>Women, compared to men, tend to have a superior moral sensibility.</td>
</tr>
<tr>
<td>20.</td>
<td>Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.</td>
</tr>
<tr>
<td>21.</td>
<td>Feminists are making entirely reasonable demands of men.</td>
</tr>
<tr>
<td>22.</td>
<td>Women, as compared to men, tend to have a more refined sense of culture and good taste.</td>
</tr>
</tbody>
</table>
Hypermasculinity Inventory

Please read both statements and decide which one is more like you by selecting a point on the scale. For example, if you strongly prefer staying on a Friday night, you would choose “1.” If you like both staying in and going out equally, you would choose “4.” If you slightly prefer going out, you would choose “5.”

I prefer staying in on a Friday night 1 2 3 4 5 6 7 I prefer going out on a Friday night
(Each 1-2 statement set are poles of a 7-point differential scale)

1. After I’ve gone through a really dangerous experience my knees feel weak and I shake all over.
2. After I’ve been through a really dangerous experience I feel high.

1. I’d rather gamble than play it safe.
2. I’d rather play it safe than gamble.

1. Call me a name and I’ll pretend not to hear you.
2. Call me a name and I’ll call you another.

1. Fair is fair in love and war.
2. All is fair in love and war.

1. I like wild, uninhibited parties.
2. I like quiet parties with good conversations.

1. I hope to forget past unpleasant experiences with male aggression.
2. I still enjoy remembering my first real fight.

1. Some people have told me I take foolish risks.
2. Some people have told me I ought to take more chances.
1. So-called effeminate men are more artistic and sensitive.

2. Effeminate men deserve to be ridiculed.

1. When I have a few drinks under my belt, I mellow out.

2. When I have a few drinks under my belt, I look for trouble.

1. Any man who is a man needs to have sex regularly.

2. Any man who is a man can do without sex.

1. When I have a drink or two I feel ready for whatever happens.

2. When I have a drink or two I like to relax and enjoy myself.

1. Risk has to be weighed against possible maximum loss.

2. There is no such thing as too big a risk, if the payoff is large enough.

1. I win by not fighting.

2. I fight to win.

1. It’s natural for men to get into fights.

2. Physical violence never solves an issue.

1. If you’re not prepared to fight for what’s yours, then be prepared to lose it.

2. Even if I feel like fighting, I try to think of alternatives.

1. He who can, fights; he who can’t, runs away.

2. It’s just plain dumb to fist fight.

1. When I’m bored I watch TV or read a book.

2. When I’m bored I look for excitement.

1. I like to drive safely avoiding all possible risks.

2. I like to drive fast, right on the edge of danger.
1. I would rather be a famous scientist than a famous athlete.

2. I would rather be a famous athlete than a famous scientist.

1. If you are chosen for a fight, there’s no choice but to fight.

2. If you are chosen for a fight, it’s time to talk your way out of it.

1. If you insult me, be prepared to back it up.

2. If you insult me, I’ll try to turn the other cheek.
Gender self-esteem

We are all members of different social groups or social categories. We would like you to consider your gender identity in responding to the following statements. There are no right or wrong answer to any of these statements; we are interested in your honest reactions and opinions. Please read each statement carefully.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often regret that I am a man.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>In general, I'm glad to be a man</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Overall, I often feel that being a man is not worthwhile</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel good about being a man</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Overall, being a man has very little to do with how I feel about myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>To be a man is an important reflection of who I am</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Being a man is unimportant to my sense of what kind of a person I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>In general, being a man is an important part of my self-image</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
## Online Disinhibition Scale

Read the following statements and select your level of agreement from the following scale.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

1. It is easier to connect with others through Internet communication technologies than talking in person
2. The internet is anonymous so it is easier for me to express my true feelings or thoughts
3. It is easier to write things online that would be hard to say in real life because you don't see the other's face
4. It is easier to communicate online because you can reply anytime you like
5. I have an image of the other person in my head when I read their email or messages online
6. I feel like a different person online
7. I feel that online I can communicate on the same level with others who are older or have higher status
8. I don't mind writing insulting things about others online, because it's anonymous
9. It is easy to write insulting things online because there are no repercussions
10. There are no rules online therefore you can do whatever you want
11. Writing insulting things online is not bullying
Demographics

What is your age? __________

What is your biological sex?

- Male
- Female
- Intersex
- Other:__________

What gender do you identify as?

- Man
- Woman
- Other:__________

What is your sexual orientation?

- Heterosexual
- Gay
- Lesbian
- Bisexual
- Other:______________

What is your race/ethnicity? Please check all that apply:=

- White
- Black/African-American
- American Indian
• Chinese
• Japanese
• Korean
• East Indian
• Filipino
• Vietnamese
• Samoan
• Native Hawaiian
• Other: _______________

What is your first or native language?

In what country were you born in?

# of years spent in College _________________

How long have you been playing video games (in years)? _________________

How many hours do you spend with each of the following items on an average day?
(simply round to the nearest hour)

a.) Internet:

    Weekday    ________ hours per day
    Weekend    ________ hours per day

b.) ALL video games

    Weekday    ________ hours per day
    Weekend    ________ hours per day

c.) Online video games

101
<table>
<thead>
<tr>
<th></th>
<th>________ hours per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekday</td>
<td></td>
</tr>
<tr>
<td>Weekend</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C: Experiment material
Partner question list

Please follow the order of set questions you will ask to your partner: (You can copy and paste the questions in the chat)

1. What is your name?
2. How old are you, what are you majoring and what do you want to be when you graduate?
3. Why did you enter that major?
4. What is your major and favorite TV show?
5. What is your favorite website?

Okay, that's all of the questions I have for you. Thank you!
Video game Characters

Participant's video game character.

Female partner's video game character.
**Jokes list and responses**

- Jokes with questions should have a mid-joke questions, such as 'what?' 'why?', etc.
- Typos are allowed

<table>
<thead>
<tr>
<th>Pair(s)</th>
<th>Joke 1</th>
<th>Joke 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Why did the chicken go to jail? Fowl play.</td>
<td>What do you get from a pampered cow?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spoiled milk.</td>
</tr>
<tr>
<td>RES</td>
<td>Oh God that was just awful</td>
<td>Haha thats ridiculous</td>
</tr>
<tr>
<td>2</td>
<td>What did one wall say to the other? I'll meet you at the corner.</td>
<td>Why is it called PMS? Because &quot;Mad Cow Disease&quot; was already taken.</td>
</tr>
<tr>
<td>RES</td>
<td>your jokes are so lame!!</td>
<td>SEE SEXIST RESPONSE</td>
</tr>
<tr>
<td>3</td>
<td>When I found out my toaster wasn't</td>
<td>What did the limestone say to the geologist?</td>
</tr>
<tr>
<td></td>
<td>waterproof. I was shocked.</td>
<td>Stop taking me for granite.</td>
</tr>
<tr>
<td>RES</td>
<td>You're so cheesy!</td>
<td>Just kinda meh</td>
</tr>
<tr>
<td>4</td>
<td>What do you call a woman that has lost 95% of her intelligence? Divorced.</td>
<td>Why did piglet look in the toilet? He was looking for Pooh.</td>
</tr>
<tr>
<td>RES</td>
<td>SEE SEXIST RESPONSE</td>
<td>Hahaha ewww</td>
</tr>
<tr>
<td>5</td>
<td>What do you call a cow with no legs? Ground Beef.</td>
<td>Why won't cannibals eat clowns? Because they taste funny.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>RES</strong></td>
<td>Hahaha lol</td>
<td>thats what i thought the response would be!</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>Why do sharks swim in salt water?</td>
<td>Why don’t women wear watches? There’s a clock on the stove.</td>
</tr>
<tr>
<td></td>
<td>Because pepper would make them sneeze!</td>
<td></td>
</tr>
<tr>
<td><strong>RES</strong></td>
<td>Not bad</td>
<td>SEE SEXIST RESPONSE</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>What’s the difference between an oral thermometer and a rectal thermometer? The taste.</td>
<td>How much does a hipster weigh? An Instagram</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RES</strong></td>
<td>Hahaha eww</td>
<td>That’s a good one!</td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>I went to a feminist picnic. It was great, but no one made sandwiches.</td>
<td>A man wanted to name his son a very long name. So he named him Miles.</td>
</tr>
<tr>
<td><strong>RES</strong></td>
<td>SEE SEXIST RESPONSE</td>
<td>haha what a long name</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>What happens when you don’t serve drinks at a party? There’s no punch line.</td>
<td>You heard the rumor going around about butter? Never mind, I shouldn’t spread it.</td>
</tr>
<tr>
<td><strong>RES</strong></td>
<td>Blergh, not that funny</td>
<td>haha another cheesy one!</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>What kind of bee can never be understood? A mumble-bee.</td>
<td>What do you call a woman with two brain cells? Pregnant.</td>
</tr>
<tr>
<td><strong>RES</strong></td>
<td>haha good onw</td>
<td>SEE SEXIST RESPONSE</td>
</tr>
<tr>
<td><strong>11</strong></td>
<td>What did the buffalo say to his son when he left for college? Bison</td>
<td>What do you call Santa’s helpers? Subordinate Clauses.</td>
</tr>
<tr>
<td>RES</td>
<td>Hahaha lol!</td>
<td>Hahaha lol!</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>12</td>
<td>Scientists have developed a food that reduces a woman’s sex drive by 90%. It’s called Wedding Cake.</td>
<td>What did the older terrorist say to the younger terrorist before he headed out for a party? Go on, have a blast.</td>
</tr>
<tr>
<td>RES</td>
<td>SEE SEXIST RESPONSE</td>
<td>Oooh (I winced, haha)</td>
</tr>
<tr>
<td>13</td>
<td>Patient: Doctor! I can't feel my legs! Doctor: That's because we had to amputate your arms.</td>
<td>I was asked for a small donation towards the local swimming pool. I donated a glass of water.</td>
</tr>
<tr>
<td>RES</td>
<td>Lol :)</td>
<td>Haha, that's kinda good :)</td>
</tr>
<tr>
<td>14</td>
<td>We live in a society where pizza gets to your house before the police.</td>
<td>I love fighting for women's right. Especially their right to remain silent.</td>
</tr>
<tr>
<td>RES</td>
<td>A bit lame,</td>
<td>SEE SEXIST RESPONSE</td>
</tr>
<tr>
<td>RES</td>
<td>Hahaha awww</td>
<td>Haha I love it!</td>
</tr>
<tr>
<td>16</td>
<td>My girlfriend texted me that she wanted to write a book. I told her she spelled &quot;grocery list&quot; wrong.</td>
<td>What's the difference between a teacher and a train? The teacher tells you to spit your gum out. The train says, &quot;Chew! Chew!&quot;</td>
</tr>
<tr>
<td>RES</td>
<td>SEE SEXIST RESPONSE</td>
<td>Lol that ones extra cheesy</td>
</tr>
<tr>
<td>Joke type</td>
<td>Response</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>1st sexist joke</td>
<td>That's not funny at all :(</td>
<td></td>
</tr>
<tr>
<td>2nd sexist joke</td>
<td>I don't like this joke at all</td>
<td></td>
</tr>
<tr>
<td>3rd sexist joke</td>
<td>This joke is not as funny as the others</td>
<td></td>
</tr>
<tr>
<td>4th sexist joke</td>
<td>That's an offensive joke</td>
<td></td>
</tr>
<tr>
<td>5th sexist joke</td>
<td>This joke is disgusting</td>
<td></td>
</tr>
<tr>
<td>6th sexist joke</td>
<td>That is one of the worst jokes I have ever read</td>
<td></td>
</tr>
<tr>
<td>7th sexist joke</td>
<td>Another offensive joke? Can you stop with those jokes?</td>
<td></td>
</tr>
<tr>
<td>8th sexist joke</td>
<td>Seriously? I don't find these jokes funny at all, they're offensive!</td>
<td></td>
</tr>
</tbody>
</table>

For sexist jokes, responses is according to how many times the participant had sent.
Video game ratings

Please rate the video game you have played in this project.

How difficult was the video game?

<table>
<thead>
<tr>
<th>Very easy</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very difficult</th>
</tr>
</thead>
</table>

How enjoyable was the video game?

<table>
<thead>
<tr>
<th>Not enjoyable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very enjoyable</th>
</tr>
</thead>
</table>

How frustrating was the video game?

<table>
<thead>
<tr>
<th>Not frustrating</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very frustrating</th>
</tr>
</thead>
</table>

How exciting was the video game?

<table>
<thead>
<tr>
<th>Not exciting</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very exciting</th>
</tr>
</thead>
</table>

How competitive was the video game?
How was the pace of the video game?

<table>
<thead>
<tr>
<th>Very slow</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Very fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

How realistic was the video game?

<table>
<thead>
<tr>
<th>Very unrealistic</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Very realistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

How violent was the video game?

<table>
<thead>
<tr>
<th>Very low</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Very high</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

How skillful was your partner?

<table>
<thead>
<tr>
<th>Not skillful at all</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Very skillful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

How competent was your partner?

111
<table>
<thead>
<tr>
<th>Not competent at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very competent</th>
</tr>
</thead>
</table>

How experienced was your partner?

<table>
<thead>
<tr>
<th>Not experienced at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very experienced</th>
</tr>
</thead>
</table>

How aggressive was your partner?

<table>
<thead>
<tr>
<th>Not aggressive at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very aggressive</th>
</tr>
</thead>
</table>
Please rate the jokes you have just completed.

In general, how funny were the jokes you sent?

<table>
<thead>
<tr>
<th>Not funny at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very funny</th>
<th>10</th>
</tr>
</thead>
</table>

In general, how much did you like the jokes you sent?

<table>
<thead>
<tr>
<th>Did not liked at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Liked them very much</th>
<th>10</th>
</tr>
</thead>
</table>

In general and according to your partner, how funny were the jokes you sent?

<table>
<thead>
<tr>
<th>Not funny at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very funny</th>
<th>10</th>
</tr>
</thead>
</table>

In general, how much did your partner like the jokes you sent?

<table>
<thead>
<tr>
<th>Did not liked at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Liked them very much</th>
<th>10</th>
</tr>
</thead>
</table>
Perceived anonymity

Please read the following statement and rate your level of agreement in regards to both your interactions in the game and communication with your partner in the jokes task.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Slightly disagree</th>
<th>Neither disagree nor agree</th>
<th>Slightly agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

I feel I am anonymous in this environment.
I feel that no one in this environment knows my real identity.
I feel that there’s no way anyone in this task would know me offline.
I feel other people are anonymous in this environment.
I don’t know the real identities of other people who play this game.
I couldn’t identify who any of these people are offline.
It is difficult for others to identify me as an individual.
I am confident that others do not know who I am.
I believe that my personal identity remains unknown to others.
I am easily identified as an individual by others.
Others are likely to know who I am.
My personal identity is known by others.
I think my partner is actually a woman.
I think my partner is actually a man.