#### ORIGINAL PAPER

# **Tolerance of Sexual Harassment: A Laboratory Paradigm**

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**Abstract** The present study attempted to develop a laboratory analogue for the study of tolerance for sexual harassment by using an online speed-dating paradigm. In that context, the relation between participants' sexual harassment attitudes, perpetrator attractiveness, perpetrator status, and perceived dating potential of the perpetrator were examined as factors influencing participants' tolerance of sexually harassing behavior. Participants were 128 female college students from a small northeastern public university. Results indicated that attractiveness, high social status, and attitudinal beliefs about sexual harassment were all predictive of tolerance for sexual harassment, providing preliminary support for the validity of this paradigm. In addition, participants' self reported likelihood to date a bogus male dating candidate was also predictive of tolerance for sexual harassment, over and above the aforementioned variables, suggesting that dating potential can play a role in perceptions of sexual harassment. Further, this experiment demonstrated that perceptions of sexual harassment can be assessed using the in vivo measurement of behavior. In addition, using an online environment not only provides a contemporary spin and adds a greater degree of external validity compared to other sexual harassment analogues, it also reduces any risk of potential physical sexual contact for participants.

**Keywords** Sexual harassment · Laboratory analogue · Attractiveness · Social status

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# Introduction

The primary purpose of this study was to develop a laboratory analogue to assist our understanding of sexual harassment from a potential victim's perspective. In addition, we used this analogue, guided by evolutionary theory, to specifically examine whether the "dating potential" of a man could influence a woman's tolerance of sexually harassing behavior. While several laboratory paradigms for the study of sexual harassment are reported in the literature, experimentation has mainly focused on the factors that influence perpetration of such acts and none focus on the victim's perspective.

Conceptual and Empirical Perspectives on Sexual Harassment

One useful typology for studying sexually harassing behavior was developed based on theory and extensive psychometric investigation using the Sexual Experiences Questionnaire (SEQ; Fitzgerald, Gelfand, & Drasgow, 1995; Fitzgerald et al., 1988; Fitzgerald, Swan, & Magley, 1997). In these studies, it was possible to classify sexually harassing behaviors into three broad categories ranging in severity: gender harassment, unwanted sexual attention, and sexual coercion. The behaviors identified in the category of gender harassment involved insulting, hostile, and degrading comments and actions toward women, while behaviors identified in the category of unwanted sexual attention involved unwanted touching, sexual advances, and propositions for sex. Behaviors identified in the category of sexual coercion involved sexual bribery and sexual blackmail.

Surveys among students and people in the workforce have found behaviors consistent with gender harassment to be the most common form of sexual harassment, and to occur most



often between a male perpetrator and a female victim (Fitzgerald et al., 1988; Gutek, 1985; Ivy & Hamlet, 1996). Further, while the SEQ categorization can be thought to reflect a continuum of severity, this by no means reduces the serious impact or negates the consequences that can affect victims of gender harassment. In fact, the experience of sexual harassment, regardless of severity, can lead to many negative consequences on the psychological and physical well being of those who experience these acts (Cortina, Swan, Fitzgerald, & Waldo, 1998).

Research into the nature of the relationship between victims and perpetrators of sexual harassment has revealed that only a minority of instances occur between individuals who have a relationship marked by unequal social roles (e.g., supervisor/supervisee, teacher/student; Fitzgerald et al., 1988; Frazier, Cochran, & Olson, 1995; Lim & Cortina, 2005; Shepela & Levesque, 1998). The majority of sexual harassment instances occur between people on equal social footing. Thus, peer sexual harassment consisting of instances of gender harassment involving a male perpetrator and a female victim appears to be the most frequent type of sexually harassing behavior. However, the less severe behaviors also appear to mark a difference of perception between men and women. While both men and women tend to agree that sexual coercion constitutes sexual harassment, women are more likely than men to perceive instances of gender harassment and unwanted sexual attention as sexual harassment while men are more likely to perceive them as harmless (Burgess & Borgida, 1997; Fitzgerald & Ormerod, 1991; Frazier et al., 1995; Rotundo, Nguyen, & Sackett, 2001; Russell & Trigg, 2004).

#### Tolerance of Sexual Harassment

Over the last few years, researchers have attempted to understand why women are less tolerant of sexual harassment than men. One avenue of research suggests that the gender differences in perceptions of sexual harassment are mediated by contextual factors (Pryor & Day, 1988). For example, while undergraduate women were more likely than undergraduate men to identify various sexually inappropriate behaviors as sexually harassing, this difference was cancelled out when certain gender roles (i.e., women high in masculinity and men high in femininity) were held constant (Russell & Trigg, 2004; Sheffey & Tindale, 1992). In addition, tolerance for behaviors consistent with sexual harassment increased when observers were exposed to a female victim employed in a traditional male occupation compared to a female victim working in a traditional female occupation (Golden, Johnson, & Lopez, 2001). Further, male employees appear to consider the workplace norms while women consider the intent of the perpetrator when determining the extent to which a behavior is sexual harassment (Hurt, Wiener, Russell, & Mannen, 1999; Russell & Trigg, 2004).

Contextual factors also seem to influence the decision making process and subsequent perceptions of sexual harassment in dating situations. For example, when attempting to initiate a relationship with a woman, some men use sexually toned verbal behaviors as a means to gauge whether or not the woman is interested in them (Buss, 1994). If a woman expresses an interest in dating that person, she may expect sexually toned verbal behaviors and view them as flattering (Cook, 1995). For women with no interest in pursuing a dating relationship with the man, the same behaviors may be perceived as sexually harassing. Thus, from an evolutionary perspective, the potential interest in pursuing a relationship with a man could serve as a contextual factor impacting a woman's perception of sexual harassment in a dating situation (Sheets & Braver, 1999). That is, some women may be unaware of, or more willing to tolerate, sexually inappropriate behaviors from a man who has "dating potential."

One defining characteristic of dating potential is physical attractiveness. Physical attractiveness has been found to serve as a major influence on people's impressions of others, since attractive people are thought to possess a variety of socially desirable traits, including sociability, dominance, sexual warmth, and mental health (Dion, Berscheid, & Walster, 1972; Feingold, 1992). In fact, physically attractive individuals are perceived as less sexually harassing than unattractive individuals (Hendrix, Rueb, & Steel, 1998). Further, in a study simulating jury deliberation about sexual harassment charges, mock jurors were less likely to convict an attractive defendant and more likely to convict an unattractive defendant of committing sexual harassment (Castellow, Wuensch, & Moore, 1990). Thus, physical attractiveness may act as a situational cue in dating situations that can to initiate inferences that attractive men have little need to or do not engage in sexual harassment (Golden et al., 2001).

Another defining characteristic of dating potential is social status (or prestige). Similar to physical attractiveness, social status has also been found to serve as a major influence on people's impressions (Buss, 1994). Women tend to regard high status men as desirable because of the association between status and resource acquisition such that men with greater status may be better able to "provide" for their partners. For example, female flight attendants reported that they would feel more embarrassed, nervous, and intimidated by unwanted sexual attention from the cleaning staff when compared to pilots (Littler-Bishop, Seidler-Feller, & Opaluch, 1982). Women also reported being least upset when they imagined being harassed by a man of high occupational status (e.g., premedical student, graduate student, successful rock star) and most upset when being harassed by a man of



low occupational status (e.g., construction worker, garbage collector, cleaning men, gas station attendant) (Buss, 1994). Thus, social status also may act as a situational cue in dating situations that can initiate inferences that higher status men (when there was not a power relationship involved) are less likely engage in harassing behavior than low status men (Bourgeois & Perkins, 2003; Hendrix et al., 1998).

#### The Study of Sexual Harassment in the Laboratory

Typically, researchers have relied on the use of vignette scenarios as a preferred methodology for understanding people's perceptions of sexual harassment. Research participants are asked to read a brief story in which sexual harassment occurs as a function of some experimental manipulation (e.g., victim and/or perpetrator alcohol use; physical attractiveness of the perpetrator). Unfortunately, participants' responses to vignette scenarios may not accurately reflect their real world behaviors; thus, there is a need for analogues to assist our understanding of tolerance of sexually harassing behavior (Woodzicka & LaFrance, 2001). In fact, the use of a laboratory analogue as a means to examine perceptions of sexual harassment may be preferred over other research methodologies. Unlike surveys and questionnaires, laboratory analogues allow researchers to examine "real world" behaviors in vivo, while maximizing internal validity (Mitchell, Hirschman, Angelone, & Lilly, 2004). Naturally, the challenge of developing any laboratory analogue of sexual harassment is identifying a design that is both ethical and comparable to a real world situation.

Investigations within an electronic domain may be the next logical step for researchers interested in understanding perceptions of sexual harassment using a laboratory analogue. Nielson//NetRatings estimates that the world online population has reached 1.25 billion people (World Internet Usage, 2007). Further, recent estimates suggest that online dating is a booming industry for all age groups (Donaldson-Evans, 2003). In addition, social scientists believe that speed dating procedures can serve as an optimal test of hypotheses involving interpersonal relationships and hypotheses related to attraction (Finkel, Eastwick, & Matthews, 2007).

Given the popularity of electronic communication, researchers have recently explored sexual harassment in the electronic domain by creating a mock e-mail inbox and asking participants to evaluate each message (Khoo & Senn, 2004). In the end, e-mails with sexual content were perceived less favorably than e-mails without such content and women were less tolerant of this behavior than men. In another study, participants were made to believe that they would be electronically exchanging photos and drawings (some of which were pornographic) with a female partner in order to examine the personal and situational factors that may increase a man's

propensity to sexually harass (Dall'Ara & Maass, 1999). Taken together, these experiments demonstrate the usefulness of using an electronic paradigm for studying sexual harassment in the laboratory. Thus, the present study represented an additional step toward the development of a computer based laboratory analogue, specifically an analogue to examine tolerance for sexual harassment. Building on previous laboratory analogues and research using electronic stimuli, we integrated the popular technology of online dating into a cover story that enabled examination of the factors that may influence tolerance for sexual harassment.

# The Present Study

There were two main goals of the current study. The first was to establish preliminary support for the validity of a new laboratory analogue for the study of perceptions of sexual harassment. Given the established literature connecting physical attractiveness and social status of the perpetrator with perceptions of sexual harassment, we hypothesized that:

- 1. Participants exposed to a physically attractive dating partner would tolerate a greater number of sexually harassing responses than participants exposed to an unattractive dating partner.
- Participants exposed to a high status dating partner would tolerate a greater number of sexually harassing responses than participants exposed to a low status dating partner.
- Participants with greater attitudinal acceptance of sexual harassment would tolerate a greater number of sexually harassing responses than participants with lower attitudinal acceptance of sexual harassment.

A second goal of the study was to investigate the role of dating potential on women's tolerance for sexual harassment in the context of developing a new laboratory analogue. Specifically, we hypothesized that:

4. Participants reporting a greater interest in dating their partner would tolerate a greater number of sexually harassing responses than women reporting a lower interest in dating their partner.

### Method

#### **Participants**

A total of 128 female undergraduate students from a small northeastern public university participated in the study as one of several options for research credit. Data from eight other participants were excluded for various reasons. For



example, one participant was observed to be randomly responding to the study materials and another did not have a full understanding of the procedure. Also, some responses to the manipulation check indicated an understanding of the true purpose of the study. The participants mean age was 19.6 years (SD=1.6) and ranged from 18-25. The self-identified ethnic breakdown of the sample was 66% White/Non-Hispanic, 13% African American/Black, 12% Hispanic/Latino/Latina, 3% Asian/Pacific Islander, and 6% other.

#### Measures

#### Bogus Dating Candidate Profiles

Pilot research was conducted to develop profiles of physically attractive or unattractive and high status or low status bogus dating candidates. First, written consent was obtained from 8 young men (between 20 and 30 years of age) of Caucasian descent who agreed to allow their face to be used for research. Next, 34 male and female undergraduate and graduate students were provided with a questionnaire containing pictures of the 8 faces. They were asked to rate each individual's physical attractiveness based on their opinion of the faces provided. A 7-point Likert-type scale was used and ranged from "extremely unattractive" (a rating of 1) to "extremely attractive" (a rating of 7). The face with the highest rating and the face with the lowest rating were chosen in order to maximize differences in the perceived attractiveness of the bogus dating candidates. A t-test revealed that the attractive face (M = 4.91, SD = 0.71) was rated as significantly more attractive than the unattractive face (M = 2.12, SD = 0.95), t(33) = 14.5, p < .0001, d = 3.36.

In regard to social status, a combination of undergraduate and graduate students worked collectively to develop two distinct profiles varying the status of the bogus dating candidates. Initially, these students developed a list of high status characteristics and a list of low status characteristics for the following demographic characteristics: occupation, income, education, and hobbies. The final stimulus attributes for the high status profile included a current internship at a major national bank with a full time job as a credit analyst making \$50,000 per annum arranged after graduation. In addition, the attributes included affiliation in Phi Beta Kappa, playing on the university soccer team, and interest in several outdoor hobbies. The final stimulus attributes for the low status profile included a current job as a sales clerk at a video rental store while working toward an associate's degree in automotive technology from a local community college. Other attributes included affiliation with a bowling league and an interest in playing video games.



Pilot research was conducted to develop a set of questions for the ostensible speed date and the responses of the bogus dating candidate to the questions. In order to create the questions and responses, extensive discussions occurred among undergraduate and graduate students serving as research assistants in the laboratories of the first and second authors. First, one group of research assistants developed a list of plausible speed-dating questions. For example, one question was, "What would your past girlfriend/boyfriend say is your worst quality?" Next, these same research assistants developed potential instant message (I.M.) format responses that could be sexually harassing. For example, in response to the question above, the bogus candidate's response was, "I have been told that I can come on pretty strong...That's me! I have a big personality...big heart...and a big..."

After establishing a group of potential questions along with their sexually harassing responses, these stimuli were sent to a different group of research assistants for evaluation. This group was asked to quantitatively evaluate each response on a 10-point Likert-type scale ranging from "not sexually harassing" to "extremely sexually harassing" and to qualitatively evaluate each response. From a quantitative perspective, the responses were seen as sexually harassing, with mean ratings above the mid-point and ranging from 5 to 9. From a qualitative perspective, one of the questions and responses was discarded because the evaluators found it contrived and unlikely to occur in a speed dating forum. The qualitative assessment also resulted in some items being toned down because their content was too strong and other items being more provocative to make their sexually inappropriate content stronger. In addition, it was believed that two questions with neutral responses should be included prior to any sexually harassing responses as another mechanism to improve the plausibility of the bogus candidate's behavior.

In the end, the final stimulus items for the online speed-dating script consisted of 11 speed-dating questions and the sham responses for the bogus dating candidate (see "Appendix"). The responses to the first two questions were neutral in content to ease participants into the interaction with the bogus dating candidate. For example, one question was, "What is your favorite type of movie" and the bogus candidate's response was, "Anything that can make me laugh!" The responses to the remaining nine questions were sexually harassing. The sexually harassing items were ordered using a face valid approach to include the "less harassing" question and responses first and the "most harassing" question and responses last. In other words, while the responses were relatively equal in their ratings, the evaluators believed that some questions and responses would be too abrupt or



obnoxious if presented early in a speed date, which could compromise the plausibility of the analogue.

The Marlowe-Crowne Social Desirability Scale (SDS; Crowne & Marlowe, 1960)

The SDS is a 33-item true/false measure that assesses an individual's tendency to present in a socially desirable manner. The scale was included in the study to control for the effects of participants' tendencies to distort their self-presentation by presenting themselves in a positive light. An example of an item is, "No matter who I'm talking to, I'm always a good listener." Higher scores on the scale indicate greater socially desirable responding. The SDS has shown good psychometric utility in other studies (Richardson reliability coefficient = .88 and test-retest correlation = .89; Crowne & Marlowe, 1960) and exhibited good internal consistency for the current sample (coefficient alpha = .80).

Sexual Harassment Attitude Scale (SHAS; Mazer & Percival, 1989)

The SHAS is a 19-item measure that assesses tolerance of sexual harassment. Individuals are asked to rate their agreement with statements reflecting attitudes about sexual harassment on a 5-point Likert-type scale ranging from "strongly disagree" to "strongly agree." Sample items include, "A lot of what people call sexual harassment is just normal flirtation between men and women" and "One of the problems with sexual harassment is that some women can't take a joke." Higher scores indicate more acceptance and tolerance of sexual harassment and less agreement with contemporary feminist descriptions about its causes. The SHAS has demonstrated good internal consistency in previous research (coefficient alpha = .84; Mazer & Percival, 1989) and in the current study (coefficient alpha = .80).

Participants' also answered demographic questions for gender, age, ethnicity, academic rank, sexual orientation, and current dating status. In addition, using a 7-point Likert-type scale, participants were asked to rate the candidate's physical attractiveness (1 = "extremely unattractive," 7 = "extremely attractive") and social status (1 = "extremely unimpressive," 7 = "extremely impressive"), as well as their likelihood to date the candidate (1 = "would never date," 7 = "would definitely date"). The participants were required to respond to these questions immediately after viewing the candidate's profile (before the interaction) and then subsequent to their interaction.

#### Procedure

Prior to any data collection, the project was approved by the Institutional Review Board of the first author. Over the course

of the semester, female participants signed up for this study, which was entitled "Beta Testing Online speed-dating Software." Participants were initially greeted by a female experimenter and were told that they would be piloting a new online speed-dating service for college students, called "Edudate." This software ostensibly permitted speed-dating partners to have a brief instant message exchange in which the interaction between the partners would be limited to answering a specific set of predetermined questions. The participants were led to believe that the experimenter was interested in obtaining feedback on the software before it was introduced into the market place.

All participants were asked to respond to demographic questions, the SDS, and filler questions designed to maintain the guise that the study was interested in beta testing new online speed-dating software. After completing these questions, the participants viewed the profile of the bogus dating candidate with whom they would be having the speed date. In actuality, there was no male partner. The profile contained a photo, which was randomized, that depicted a college aged male that had been rated as physically unattractive or physically attractive during pilot work. The profile also included demographic information that was randomized and described the male as of high or low social status. Thus, there were four randomly assigned profiles for the bogus dating candidate: high status/physically attractive, low status/physically unattractive, high status/physically unattractive, or low status/ physically attractive. After viewing the profile, the participant was asked to rate the physical attractiveness, social status, and their likelihood to date the bogus dating candidate.

The interaction with the bogus dating candidate proceeded in a structured and predetermined manner. All participants were exposed to the same online speed-dating script consisting of the aforementioned 11 questions and responses. Initially, participants were presented with the first stimulus question and prompted to respond to the question. After they entered their response, they were presented with their bogus dating candidate's response, which presumably had been typed at the same time. As noted, the bogus dating candidate responded to the first two questions in an innocuous manner. However, his responses to the succeeding nine questions were scripted to be sexually harassing. Participants were given the opportunity to end the speed date after the third question (which presented them with the first sexually harassing response from the candidate). If participants chose to go on, they could respond to as many as eight additional questions. However, after each response, they were continually provided with an opportunity to end the date or continue to the next question. In addition, after the final question, participants were told that the speed date had been ended by the software package. Thus, a measure of the number of sexually harassing responses that each participant was



willing to tolerate served as a dependent variable and ranged from 1 to 9.

After participants chose to end the speed-date or reached the final question, they were asked to respond to the same initial three questions about the physical attractiveness, social status, and likelihood that they would date the bogus dating candidate. Next, participants were prompted to respond to several additional measures, including an openended query about the true purpose of the study, and the SHAS. The SHAS was administered last since many of the items included the term "sexual harassment," and could potentially tip off participants as to the true purpose of the study. Upon completion of the SHAS, participants were fully debriefed. Debriefing was conducted orally and in writing. The experimenter explained the nature of the deception employed, the true purpose of the study, and the reasons that deception was used. Participants were informed how they could gain more information about the study, including contact information for the principal investigator, and provided an opportunity to qualitatively discuss their experiences with the analogue. No participants expressed discomfort regarding the procedure. On the other hand, several participants commented about the believability of the paradigm, including the use of a "real" male partner and the inappropriateness of his responses. Prior to leaving, all participants were asked not to discuss the nature of the study with other potential participants so as to avoid contamination of the participant pool.

#### Results

#### Descriptive Data for Attractiveness and Status

Mean scores on participants' ratings of the bogus candidate's physical attractiveness and social status before and after the interaction are shown in Table 1. Attractiveness ratings were subjected to an 2 (Attractiveness: Attractive vs. Unattractive)  $\times$  2 Time (pre vs. post) analysis of variance (ANOVA). This analysis yielded a significant main effect of Attractiveness, F(1, 126) = 107.1, p < .0001,  $partial \eta^2 = .46$ , and an Attractiveness  $\times$  Time interaction, F(1, 126) = 5.0, p < .05,  $partial \eta^2 = .04$ . Consistent with expectations and pilot data, participants rated the attractive profile as more attractive than the unattractive profile. For the interaction, simple effects of time revealed that participants exposed to the attractive profile significantly decreased their attractiveness ratings from pre- to post-interaction, F(1, 65) = 4.8, p < .05,  $partial \eta^2 = .07$ . There were no significant changes

<sup>&</sup>lt;sup>1</sup> This analysis represents a comparison of the means for the attractive and unattractive profiles averaged across the pre- and post-interaction ratings (M = 4.5 and M = 2.7, respectively).



Table 1 Mean attractiveness and status ratings pre- and postinteraction

	Pre-interaction		Post-interaction	
	M(SD)	n	M(SD)	n
Physical attractiveness				
Attractive candidate	4.7 (1.1)	66	4.4 (1.1)	66
Unattractive candidate	2.6 (1.1)	62	2.7 (1.1)	62
Social status				
High status candidate	4.8 (1.4)	64	4.4 (1.3)	64
Low status candidate	3.6 (1.0)	64	3.5 (1.0)	64

between the pre- and post-interaction attractiveness ratings for the unattractive profile.

Next, status ratings were subjected to a 2 (Status condition: High vs. Low)  $\times$  2 (Time: pre vs. post) ANOVA. This analysis yielded a significant main effect of Status, F(1, 126) = 29.5, p < .0001, partial  $\eta^2 = .19$ , and a Status  $\times$  Time interaction, F(1, 126) = 5.2, p < .05, partial  $\eta^2 = .04$ . Consistent with expectations and pilot data, participants rated the high status profile as having greater status than the low status profile. Analysis of simple effects of time revealed that participants exposed to the high status profile significantly decreased their status ratings from pre- to post-interaction, F(1, 63) = 11.08, p < .001, partial  $\eta^2 = 15$ . There were no significant changes between the pre- and post-interaction status ratings for the low status profile.

#### Descriptive Data for Sexual Harassment Tolerance

Overall, 23% (n=29) of participants ended their interaction with the bogus candidate after they received the first sexually harassing response. The remaining 77% (n=96) tolerated two or more sexually harassing responses. About 5% (n=6) of participants tolerated all nine sexually harassing responses. The mean number of sexually harassing responses tolerated was 2.62 (SD=1.86) and this did not vary by ethnicity.

The number of sexually harassing responses tolerated was subjected to an 2 (Attractiveness)  $\times$  2 (Status) ANOVA. This analysis yielded a significant main effect of Attractiveness,  $F(1, 124) = 14.7, p < .001, partial \eta^2 = .11$ , and a significant main effect for Status, F(1, 124) = 4.1, p < .05, partial  $\eta^2 = .03$ . Participants exposed to the attractive profile (M = 3.2, SD = 2.1) tolerated a greater number of sexually harassing responses than participants exposed to the unattractive profile (M = 2.0, SD = 1.2). Also, participants exposed to the high status profile (M = 3.0, SD = 2.2) tolerated a greater number of sexually harassing responses than

<sup>&</sup>lt;sup>2</sup> This analysis represents a comparison of the means for the high status and low status profiles averaged across the pre- and post-interaction ratings (M = 4.6 and M = 3.6, respectively).

participants exposed to the low status profile (M = 2.3, SD = 1.4).

Prior to conducting the planned regression analyses, a series of Pearson product moment correlation analyses were conducted on the SHAS, likelihood to date the candidate, social desirability, and the number of sexually harassing responses tolerated. Scores on the SHAS were significantly correlated with the number of sexually harassing responses tolerated, r(126) = .32, p < .0001: as scores on the SHAS increased (indicative of more acceptance of sexual harassment), the number of sexually harassing responses tolerated increased. Participants' rating of their likelihood to date the candidate was also significantly associated with the number of sexually harassing responses tolerated, r(126) = .49, p < .0001: as a profile's likelihood to date rating increased, so did the number of sexually harassing responses that participants were willing to tolerate. Overall, there was no relationship between participants' scores on the SDS and the number of sexually harassing responses they tolerated, r(126) = .004.

# Comparisons Between White and Non-White Participants on The Study Variables

Given the large number of non-White participants and the use of only White bogus dating candidates, we next examined whether participants' responses to all measures differed by ethnicity using a series of t-tests. Overall, the non-White participants rated the bogus dating candidates as less attractive (M = 3.0, SD = 1.6) than did White participants (M = 4.0, SD = 1.3), t(126) = 3.75, p < .0001, d = .69. In addition, the non-White participants reported less interest in dating the candidate (M = 2.7, SD = 1.7) than White participants (M = 3.6, SD = 1.7), t(126) = 3.0, p < .01, d =.53. Finally, non-White participants scored significantly higher on the SDS (M = 19, SD = 5.5) than did White participants (M = 16.6, SD = 5.3), t(126) = -2.38, p <.05, d = .44. However, there were no significant differences between White and non-White participants on perceived status of the candidate, SHAS scores, or the number of sexually harassing responses they were willing to tolerate from the bogus candidate. Given the aforementioned differences, all subsequent predictive analyses controlled for the effects of ethnicity and SDS scores.

#### Predicting Sexual Harassment Tolerance

In order to establish the initial validity for use of this laboratory analogue and to determine whether dating potential can influence tolerance for sexual harassment, a hierarchical regression analysis was conducted. Table 2 summarizes the results of the regression. SDS scores were entered on the first step. Ethnicity was entered on the second step. Attractiveness

 Table 2
 Summary of regression analysis for variables predicting sexual harassment tolerance

Variable	В	SE B	β
Step 1			
SDS	.001	.030	.004
Step 2			
Ethnicity	624	.352	160
Step 3			
Attractiveness	1.19	.294	.320**
Status	.701	.294	.189*
SHAS	.074	.016	.365**
Step 4			
Likelihood to date	.420	.107	.368**

*Note*:  $\Delta R^2 = .25$  for Step 3;  $\Delta R^2 = .08$  for Step 4 (ps < .0001). \* p < .05; \*\* p < .001

condition, status condition, and SHAS scores were entered on the third step. A significant model emerged: F(5, 122) = 9.2, p < .0001, and attractiveness condition, status condition, and SHAS scores emerged as significant predictors of tolerance for sexual harassment. The model explained 24% of the variance (adjusted  $R^2 = .24$ ). Exposure to the physically attractive profile, exposure to the high status profile, and greater attitudinal acceptance of sexual harassment were all associated with tolerating a greater number of sexually harassing responses.

Given this analysis suggesting the psychometric utility of the current paradigm, we next attempted to address whether dating potential can influence tolerance for sexual harassment. Pre-interaction ratings on the likelihood to date the bogus candidate were added as a fourth step to the regression presented in Table 2 to determine if likelihood to date could add predictive utility on top of the attractiveness condition, status condition, and SHAS scores. A significant model emerged, F(6, 121) = 11.1, p < .0001. The model explained 32% of the variance (adjusted  $R^2 = .32$  and  $\Delta R^2 = .08$ ). A greater likelihood to date the bogus candidate was associated with tolerating a greater number of sexually harassing responses.

#### Discussion

The primary goal of the present study was the development of a laboratory paradigm to investigate tolerance to sexually harassing behavior. In our "Edudate" paradigm, tolerance of sexual harassment was operationalized as the number of times a female participant would interact with a male sending her sexually inappropriate instant messages in an online speed-dating environment. We found that participants' with greater attitudinal tolerance of sexual harassment were willing to receive more sexually harassing responses from the



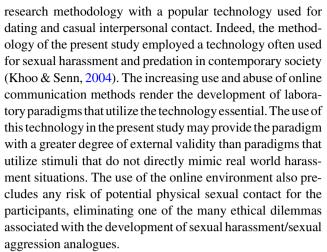
bogus candidate. We also found that participants exposed to a physically attractive bogus candidate were willing to receive more sexually harassing responses from the bogus candidate, as were participants exposed to a high status bogus candidate. Considered together, these findings provide initial support for the validity of the paradigm, and further underscore the importance that an individual's attractiveness and status can have on the impressions of others in social situations.

A secondary goal of the present study was to study the relation between the perceived dating potential of the bogus candidate and the degree to which his sexually harassing behavior would be tolerated by participants. Participants were asked to rate their likelihood to date the candidate prior to their online interaction with him, and these ratings were highly correlated with, and predictive of, their subsequent degree of interaction with the candidate. As ratings of likelihood to date increased, so did the number of sexually harassing messages participants were willing to receive. Therefore, as the dating potential of an individual becomes more desirable, the individual's sexually harassing behavior was more likely to be tolerated, further suggesting that dating potential is one variable that influences tolerance of sexual harassment.

Tracking the pre-to post-interaction ratings demonstrated an interesting pattern for both the attractiveness and status manipulations and offer further details about the impact of physical attractiveness and status on perceptions of sexually harassing behavior. That is, while there was a significant decrease in attractiveness ratings for the attractive profile from pre- to post-interaction with the bogus daring candidate, the attractive profile was rated higher than the unattractive profile post-interaction. Similarly, while there was a significant decrease in status ratings for the high status profile from pre- to post-interaction with the bogus daring candidate, the high status profile was rated higher than the low status profile post-interaction. Thus, exposure to attractive and high status individuals was not only associated with a greater tolerance of sexual harassment, but those individuals were still held in a relatively positive light even after engaging in sexually inappropriate behaviors. This suggests that the behavior of physically attractive and high status individuals may have fewer negative consequences than individuals with less desirable qualities.

#### Strengths, Limitations, and Future Directions

The primary strength of the Edudate paradigm was its potential to complement existing measurement options in the area of sexual harassment. The in vivo measurement of participant behavior can provide a useful adjunct to commonly used attitude and post hoc survey measurement strategies. Another strength of the Edudate paradigm is its online environment, which marks an integration of sexual harassment



One limitation of the paradigm is that the participants were not necessarily seeking dating partners as are actual online dating customers. It is possible that if they had been actually been seeking partners through an online speed-dating service, their tolerance to a bogus candidate's behavior may have been different. For example, customers of an actual speed-dating service may be less willing to tolerate inappropriate comments from a partner they initially perceive as unattractive because they will wish to move on to the next potentially more attractive partner. It is possible, therefore, that participants in the present study may have been more willing to tolerate sexually harassing responses from someone they initially perceived as unattractive than actual customers of online speed-dating services.

Another limitation of the present study concerns the use of Caucasian/non-Hispanic males for the bogus candidate profile. Only 66% of participants in the study self-identified as Caucasian/non-Hispanic. Therefore, the remaining 34% of the participants were rating and responding to a male that was of a different ethnic background. While this did not seem to impact the role of the independent variables in the prediction of the dependent variables, it may have impacted the attractiveness ratings of the candidate by non-Caucasian participants. Future research with the paradigm should include candidates from a variety of ethnic backgrounds to better represent our diverse society and match the ethnicity of the bogus candidate profile with that of the participant to examine potential in inter- versus intra-racial tolerance to sexual harassment.

A final limitation of the present study could be that some participants did not perceive the bogus candidate's responses as sexually inappropriate. However, pilot data, qualitative discussion during the debriefing, and the fact that few participants displayed a willingness to tolerate more than a handful of responses suggests that the bogus candidate's responses were indeed perceived sexually inappropriate by the vast majority of participants. Those participants who did not perceive them as such would be a small minority. The role



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of participants' personality characteristics on the dependent variables was only explored as far as attitudes toward sexual harassment. In the future, investigating other participant personality characteristics, such as attitudes toward sexuality, gender roles, and sensation seeking may shed light on individual differences in tolerance toward sexual harassment.

Future research using this paradigm should include further validation of the speed dating script. For example, experts in the field of sexual harassment could be asked to rate the script and categorize the responses in terms of categories derived from the SEQ. Further validation of the paradigm should also focus on participants perceptions of the bogus dating candidate (e.g., would they label his behavior as sexual?). Future research can adapt the Edudate paradigm to the study of various victim, perpetrator, and situational variables that may influence tolerance of sexual harassment. Varying the ethnic background of the bogus candidate and participant may be a useful first step in establishing the validity of the paradigm with non-White participants, studying any differences in tolerance of sexual harassment between groups (if they exist) and determining if, and what, modifications would need to be made to make the paradigm multi-cultural. The administration of alcohol prior to the paradigm could allow for the direct examination of alcohol on tolerance to sexual harassment. Another important situational variable for future research with the paradigm and dating potential concerns the issue of choice. Participants in the present study did not get a choice of their online speed-dating candidate. The role that choice plays in moderating tolerance to sexual harassment may be important. It may be that participants able to choose their candidate may feel greater investment in the process, and therefore engage in more interaction with the candidate, despite his behavior. The paradigm also has the potential to be adapted to the study of female on male sexual harassment and same sex sexual harassment.

In conclusion, the present study described a new laboratory paradigm for the study of tolerance of sexual harassment. A computer program was created as a means to examine the possible influences that affect women's tolerance of sexual harassment. Real-world stimuli in the form of sexually inappropriate messages were used to examine a typical Internet experience faced by college students. Initial findings regarding the validity of the paradigm are promising, and the integration of other variables into the laboratory analogue in future research can provide further analysis of the validity of this new paradigm. We specifically examined the role that dating potential may play in tolerance to sexually harassing behavior and found that individual's with a greater initial dating potential are able to engage in more sexually inappropriate behavior before being "shown the door" so to speak.

#### **Appendix**

Speed dating script with bogus dating partner's response (in I.M. language)

Query #1  $\sim$  What is your favorite type of movie?

"Anything that can make me laugh!"

Query #2  $\sim$  What is your favorite type of food?

"Im a college kid...so I live off pizza and fast food."

Query #3 ~ What would your past girlfriend/boyfriend say is your best quality?

"I think they would say that Im a loyal friend...there 24/7...and willing to please and attend to ALL of their needs..."

Query #4  $\sim$  Tell me about the book you are reading now, or the one you have just finished.

"Right now Im reading the DaVinci Code. If you read it already...don't tell me how it ends. Im locked in and can't put it down. I wish I read books more often. I do have various subscriptions to magazines, I get FHM...maxim...and hustler so I can get tips on how to please my women..."

Query #5 ~ What's your idea of a night out with friends? "We don't get together often but when we do we go all out...We usually drive to the city...grab some cheese steaks...catch a game...then hit some clubs. By the end of the night we have pooled our money and stopped by the strip club for lap dances and shots of tequila. You'd be surprised what u can get for \$100."

Ouery #6  $\sim$  What are you looking for in a partner?

"Compatibility. Someone who can laugh...who is not uptight...and will go wherever their feelings may lead. Someone who is sexually adventurous and open to try ANYTHING..."

Query #7 ~ What's your idea of a good first date?

"Depends on the time of day...Afternoon—Im ok w/ something outdoors like a hike, roller-blading, or hangin on the beach. Evening—I like to start w/dinner...I like good food...good conversation...and think that eating is very sensual. After, there will be dancing...drinks...and hopefully whipped cream and strawberries back at my place."

Query #8 ~ What's your dream job?

"If I didn't have to think about money...it would be to be a personal trainer...U get paid to stay in shape...hang out in the gym...watch women who are in peak physical condition and help them out when needed...;)"

Query #9 ~ What would your past girlfriend/boyfriend say is your worst quality?

"I have been told that I can come on pretty strong...That's me! I have a big personality...big heart...and a big..."

Query # $10 \sim$  What's the most interesting vacation you've taken?



- "2 years ago I went to Mardi Gras in New Orleans. That was def interestin...Women pulling up their shirts in exchange for beads...Now that is my idea of how free trade should work..."
- Query #11  $\sim$  What accomplishment are you most proud of?
- "Goin to college. I m the first in my fam to do so. I am also very "accomplished" in the bedroom...I'll save those stories for when me and u meet..."

#### References

- Bourgeois, M. J., & Perkins, J. (2003). A test of evolutionary and sociocultural explanations of reactions to sexual harassment. Sex Roles, 49, 343–351.
- Burgess, D., & Borgida, E. (1997). Sexual harassment: An experimental test of sex-role spillover theory. *Personality and Social Psychology Bulletin*, 23, 63–75.
- Buss, D. M. (1994). The evolution of desire: Strategies of human mating. New York: Basic Books.
- Castellow, W. A., Wuensch, K. L., & Moore, C. H. (1990). Effects of physical attractiveness of the plaintiff and defendant in sexual harassment judgments. *Journal of Social Behavior and Personality*, 5, 547–562.
- Cook, S. L. (1995). Acceptance and expectation of sexual aggression in college students. *Psychology of Women Quarterly*, 19, 181–194.
- Cortina, L. M., Swan, S., Fitzgerald, L. F., & Waldo, C. (1998). Sexual harassment and assault: Chilling the climate for women in academia. *Psychology of Women Quarterly*, 22, 419–441.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychol*ogy, 24, 349–354.
- Dall'Ara, E., & Maass, A. (1999). Studying sexual harassment in the laboratory: Are egalitarian women at higher risk? Sex Roles, 41, 681–704.
- Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology*, 24, 285–290.
- Donaldson-Evans, C. (2003). *Online dating is net success*. Foxnews.com. Retrieved January 3, 2008, from http://www.foxnews.com/story/0,2933,87256,00.html.
- Feingold, A. (1992). Good-looking people are not what we think. *Psychological Bulletin*, 111, 304–341.
- Finkel, E. J., Eastwick, P. W., & Matthews, J. (2007). Speed-dating as an invaluable tool for studying romantic attraction: A methodological primer. *Personal Relationships*, 14, 149–166.
- Fitzgerald, L. F., Gelfand, M. J., & Drasgow, F. (1995). Measuring sexual harassment: Theoretical and psychometric advances. *Basic* and Applied Social Psychology, 17, 425–445.
- Fitzgerald, L. F., & Ormerod, A. J. (1991). Perceptions of sexual harassment: The influence of gender and academic context. *Psychology of Women Quarterly*, *15*, 281–294.
- Fitzgerald, L. F., Shullman, S. L., Bailey, N., Richards, M., Swecker, J., Gold, Y., et al. (1988). The incidence and dimensions of sexual harassment in academia and the workplace. *Journal of Vocational Behavior*, 32, 152–175.
- Fitzgerald, L. F., Swan, S., & Magley, V. J. (1997). But was it really sexual harassment? Legal, behavioral, and psychological definitions of

- the workplace victimization of women. In W. O'Donohue (Ed.), *Sexual harassment: Theory, research, and treatment* (pp. 5–28). Boston: Allyn & Bacon.
- Frazier, P. A., Cochran, C. C., & Olson, A. M. (1995). Social science research on lay definitions of sexual harassment. *Journal of Social Issues*, 51, 21–37.
- Golden, J. H., Johnson, C. A., & Lopez, R. A. (2001). Sexual harassment in the workplace: Exploring the effects of attractiveness on perception of harassment. Sex Roles, 45, 767–784.
- Gutek, B. A. (1985). Sex and the workplace: The impact of sexual behavior and harassment on women, men, and organizations. San Francisco, CA: Jossey-Bass.
- Hendrix, W. H., Rueb, J. D., & Steel, R. P. (1998). Sexual harassment and gender differences. *Journal of Social Behavior and Personality*, 13, 235–252.
- Hurt, L. E., Wiener, R. L., Russell, B. L., & Mannen, R. K. (1999). Gender differences in evaluating social-sexual conduct in the workplace. *Behavioral Sciences and the Law*, 17, 413–433.
- Ivy, D. K., & Hamlet, S. (1996). College students and sexual dynamics: Two studies of peer sexual harassment. *Communication Education*, 45, 149–166.
- Khoo, P. N., & Senn, C. Y. (2004). Not wanted in the inbox! Evaluations of unsolicited and harassing e-mail. *Psychology of Women Quarterly*, 28, 204–214.
- Lim, S., & Cortina, L. M. (2005). Interpersonal mistreatment in the workplace: The interface and impact of general incivility and sexual harassment. *Journal of Applied Psychology*, 90, 483–496.
- Littler-Bishop, S., Seidler-Feller, D., & Opaluch, R. E. (1982). Sexual harassment in the workplace as a function of initiator's status: The case of airline personnel. *Journal of Social Issues*, 38, 137–148.
- Mazer, D. B., & Percival, E. F. (1989). Ideology or experience? The relationships among perceptions, attitudes, and experiences of sexual harassment in university students. Sex Roles, 20, 135–147.
- Mitchell, D., Hirschman, R., Angelone, D. J., & Lilly, R. S. (2004). A laboratory analogue for the study of peer sexual harassment. *Psychology of Women Quarterly*, 28, 194–203.
- Pryor, J. B., & Day, J. D. (1988). Interpretations of sexual harassment: An attributional analysis. Sex Roles, 18, 405–417.
- Rotundo, M., Nguyen, D. H., & Sackett, P. R. (2001). A meta-analytic review of gender differences in perceptions of sexual harassment. *Journal of Applied Psychology*, 86, 914–922.
- Russell, B. L., & Trigg, K. Y. (2004). Tolerance of sexual harassment: An examination of gender differences, ambivalent sexism, social dominance, and gender roles. Sex Roles, 50, 565–573.
- Sheets, V. L., & Braver, S. L. (1999). Organizational status and perceived sexual harassment: Detecting the mediators of a null effect. *Personality and Social Psychology Bulletin*, 25, 1159– 1171.
- Sheffey, S., & Tindale, R. S. (1992). Perceptions of sexual harassment in the workplace. *Journal of Applied Social Psychology*, 22, 1502– 1520.
- Shepela, S. T., & Levesque, L. L. (1998). Poisoned waters: Sexual harassment and the college climate. *Sex Roles*, *38*, 589–612.
- Woodzicka, J. A., & LaFrance, M. (2001). Real versus imagined gender harassment. *Journal of Social Issues*, 57, 15–30.
- World Internet Usage. (2007). Internet usage statistics. Retrieved January 3, 2008, from http://www.internetworldstats.com/stats. htm.

