

PSYC 235: Research Methods
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By submitting this essay, I attest that it is my own work, completed in accordance with University regulations. —Andre Faria

The Effects of Social Rejection on Sexist Attitudes in Men
by Andre R. Faria '21

1. Introduction

On April 23, 2018, a man rented a van and drove through a crowd of people in Toronto, killing 10 people and injuring 16. The man who committed this attack claimed this violence was done as retribution for being denied sex by women throughout his lifetime. The man was a member of an online group of men called “incels”, or *involuntary celibates* (Cecco, 2019). These men describe the world as an unfair misandristic battleground that leaves young men unable to find sexual and romantic partners. The incel forums, where almost all incel communication occurs, are filled with endless posts spewing hatred against women, degrading them and blaming them for nearly all of the world’s problems. Incels consistently condone violence, citing attacks such as the one in Toronto as the only way to show the world they are “oppressed.” While obviously no “justification” of such a heinous act will ever be acceptable, the brutality of the Toronto attack does raise a question: how does extreme sexism in this form develop?

In order to understand the violent actions from incels, it may be useful to look at another type of multiple-victim aggression: school shootings. Leary et al. (2003) conducted case studies of fifteen school shootings in the United States and found that thirteen of the shooters had experienced social rejection. Moreover, of the fourteen male perpetrators, seven had cited recent romantic rejection from women as precipitating their violent actions. The link between romantic rejection in particular and violence is further evidenced by Andrighetto et al. (2019), which found that men who were rejected by potential partners showed an increase in aggression.

Furthermore, Gaertner et al. (2008) found a causal relationship between multiple-victim aggression and general social rejection. Interestingly, the study showed that this type of aggression was not caused by rejection alone, but perceived “groupness” also. This is to say that when a person experiences rejection, if the rejector’s group membership is salient, the person being rejected is more likely to “retaliate” and conduct violence against the said group. In the case of incels, who claim to experience romantic and sexual rejection from women, the group membership of gender is most certainly salient, as incels are heterosexual men looking exclusively for women.

Nevertheless, the literature discussed above primarily focuses on the general aggression that comes as a result of social rejection. Rejection can explain the incel’s violent actions, but, judging by the volume of posts on incel forums, not all incels end up committing such acts. Most seem to remain entrenched in these forums, posting memes degrading women and formulating grand theories of male oppression. If we are to understand incels as a group, we must also understand their non-violent members’ sexist attitudes. Do sexist, but not necessarily violent, attitudes increase after rejection from women?

This study aimed to answer that question, by testing if experiencing rejection from women led to increased sexist attitudes in men. To begin, male participants were asked to play a prisoner’s dilemma game against either a man or a woman. While participants believed the game was being played against another person, they were actually playing a preprogrammed game, which simulated being rejected by their in-game partner. Afterwards, participants were asked to pretend they were hiring a grocery store manager and were given a resume and a letter of recommendation from either a male or female applicant. Participants were then asked to rate the

applicant in terms of their competency, warmth, and hireability and also what starting salary they would offer the applicant.

It was hypothesized that men would show increased sexist attitudes towards women after experiencing social rejection from a woman when compared to men who were rejected by a man. The sexist attitudes were measured in the domains of sociability, competence, hireability, and salary offerings. While it was expected, in line with current research from Moss-Racusin et al. (2012), that participants would offer women lower average salaries overall, it was hypothesized that men who were rejected by other men would show weaker sexist attitudes in the domains above when compared to men who were rejected by women. This was hypothesized because men who felt rejection from a woman were expected to experience higher levels of discomfort, thus would show higher levels of sexist attitudes, as group membership of gender would be more salient when experiencing rejection from a differently-gendered person than from another man.

2. Method

Male participants from the US were recruited through Amazon's Mechanical Turk ($N = 200$). After exclusions, 194 participants remained ($M_{age} = 38.92$, 92.5% straight, 4.5% gay, 2.0% bisexual/pansexual, 1.0% other). See below for details of the exclusion criteria. A 2 (Game Condition: male vs. female) x 2 (Applicant Condition: male vs. female) between-subjects factorial design was used, where conditions were randomly assigned to participants.

Participants were told they were completing two separate studies in order to prevent suspicion. In the first "study", participants were asked to play a prisoner's dilemma game in order to simulate social rejection. In this game, participants were told they would play five rounds, and after these rounds, if they had earned at least ten points, which were earned by

cooperation between players as shown in Figure 1, they would receive a prize. Participants were led to believe that they were playing online against another person, while in reality it was a preprogrammed game. They were asked to select a nickname and avatar which “best represents” them. They were then shown who they were playing against, either a female avatar named Mary or a male avatar named Matt, in the *female game* and *male game conditions*, respectively. The opponent cooperated in the first round, but for the next four rounds chose to sabotage the participant, making it impossible to earn the points necessary for a prize.

After the prisoner’s dilemma game, participants moved on to the second “study”, which asked them to take the role of a grocery store owner who needed to hire a manager. Participants were shown an application containing a resume and a letter of recommendation from a male applicant (Nathan) or a female applicant (Natalie) in the *male applicant* and *female applicant conditions*, respectively. Participants were told that the average grocery store manager made between \$70,000-\$90,000, and then were asked, if they were to hire this applicant, how much would they offer as the starting salary. Moreover, participants were asked using a 4-point Likert scale (*1=strongly agree, 4=strongly disagree*) how they felt about multiple statements referring to the applicants’ sociability and competence. The full battery of questions can be found in the appendix. Then, participants were asked if they would hire the applicant, this time in a 5-point scale (*1=definitely yes, 3=unsure, 5=definitely no*). Finally, an attention check was used, asking what the gender of their opponent and applicant were. Participants were excluded if they did not complete the set of questions, if they did not make any selections during the game, if their gender identity was not male, or if they failed the applicant gender attention check. Lastly, participants were asked for their gender identity, sexual orientation, and age.

3. Results

Because four different dependent variables were collected, the results have been split up based on variable. The results diverged from the hypothesis in the hireability and competence domains.

Hireability

A 2 (Game Condition: male vs. female) x 2 (Applicant Condition: male vs. female) ANOVA test was carried out. There was no statistically significant difference between the ratings of applicant hireability in the *male game condition* ($M = 1.02, SD = 0.76$) and the *female game condition* ($M = 1.13, SD = 0.84; F(1, 190) = 1.32, p > .05$). Likewise, there was no statistically significant difference between the ratings of hireability in the *male applicant condition* ($M = 1.03, SD = 0.88$) and the *female applicant condition* ($M = 1.12, SD = 0.73; F(1, 190) = 0.93, p > .05$).

However, there was a marginally significant interaction effect, $F(1, 190) = 2.83, p = .09$. Independent-samples t-tests show that the interaction effect was obtained because participants rated male applicant hireability in the *female game condition* ($M = 1.17, SD = 0.84$) than in the *male game condition* ($M = 0.84, SD = 0.90; t(89) = 1.78, p = .08$), whereas ratings of female applicant hireability had no significant difference between the *female game condition* ($M = 1.08, SD = 0.85$) and the *male game condition* ($M = 1.15, SD = 0.62; t(101) = -.043, p > .10$).

Graphical representations of these results can be seen in Figure 2.

Salary

A 2 (Game Condition: male vs. female) x 2 (Applicant Condition: male vs. female) ANOVA test was carried out. There was no statistically significant difference between salary offers in the *male game condition* ($M = 74429.70$, $SD = 7770.18$) and *female game condition* ($M = 74871.42$, $SD = 7598.78$; $F(1, 190) = 0.10$, $p > .05$). Likewise, there was no statistically significant difference between salary offers in the *male applicant condition* ($M = 75047.47$, $SD = 8204.80$) and *female applicant condition* ($M = 74321.33$, $SD = 7175.21$; $F(1, 190) = 0.36$, $p > .05$). Furthermore, there was no significant interaction effect, $F(1, 190) = 0.01$, $p > .05$.

Warmth

A 2 (Game Condition: male vs. female) x 2 (Applicant Condition: male vs. female) ANOVA test was carried out. There was no statistically significant difference between the ratings of applicant warmth in the *male game condition* ($M = 5.37$, $SD = 2.51$) and *female game condition* ($M = 5.57$, $SD = 1.97$; $F(1, 190) = 0.62$, $p > .05$). Likewise, there was no significant difference between ratings of warmth in the *male applicant condition* ($M = 5.36$, $SD = 2.48$) and *female applicant condition* ($M = 5.57$, $SD = 2.00$; $F(1, 190) = 0.66$, $p > .05$). Furthermore, there was no significant interaction effect, $F(1, 190) = 1.18$, $p > .05$.

Competence

A 2 (Game Condition: male vs. female) x 2 (Applicant Condition: male vs. female) ANOVA test was carried out. There was no statistically significant difference between the ratings of applicant competence in the *male game condition* ($M = 4.93$, $SD = 2.79$) and the *female game condition* ($M = 5.22$, $SD = 2.62$; $F(1, 190) = 1.22$, $p > .05$). Likewise, there was no statistically significant difference between ratings of applicant competence in the *male applicant*

condition ($M = 4.82, SD = 3.04$) and the *female applicant condition* ($M = 5.31, SD = 2.35; F(1, 190) = 2.41, p > .05$).

Nevertheless, there was a significant interaction effect, $F(1, 190) = 6.80, p = .01$.

Independent-samples t-tests show that the interaction effect was obtained because participants rated male applicant competence higher in the *female game condition* ($M = 5.41, SD = 2.50$) than in the *male game condition* ($M = 3.97, SD = 3.56; t(89) = 2.26, p < .05$), whereas ratings of female applicant competence had no significant difference between the *female game condition* ($M = 5.00, SD = 2.77$) and the *male game condition* ($M = 5.58, SD = 1.90; t(101) = -1.27, p > .05$). Graphical representations of these results can be seen in Figure 3.

4. Discussion

This study aimed to find the relationship between social rejection and sexist attitudes within men. The results showed that male participants who experienced social rejection by another man would rate potential male job applicants as significantly less competent and marginally significantly less hireable than female applicants. Moreover, male participants who experienced rejection by a woman would see no significant difference in hireability or competency ratings between male and female applicants. No significant differences between conditions were found for offered salary and ratings of warmth. The results diverge from the hypothesis, which predicted that men who experienced social rejection from a woman would rate female job applicants lower in competence, hireability, offered salary, and warmth than male applicants and men who were rejected by other men.

A possible explanation for why men would rate male applicants as lower in competency and hireability after experiencing rejection from a man could be related to perceived threat. Kret

et al. (2011) found that men responded with higher perceived threat levels from a male threat than a female threat. Translating Kret et al.'s (2011) results into this study, it could be that male participants did not perceive social rejection from a woman as a threat to their status, thus saw no effect from the rejection task when playing against a woman. Likewise, male participants might have rated male applicants as worse for the same reason: the male applicant was seen as a threat whereas the female was not. Future research might aim to test this by asking participants more directly about threat levels or measuring cortisol levels during a similar social rejection task.

Another possible explanation for the results could be related to the concept of precarious manhood. Vandello and Bosson (2012) discuss precarious manhood as the constant need for men to “prove” their masculinity. They argue masculinity is difficult to earn and maintain. The maintenance aspect might provide insight into this study's findings. According to Winegard, Winegard, and Geary (2014), men use intergroup competition in order to establish hierarchies between men. In this study, when participants experienced social rejection from a man (intergroup competition) in the game, perhaps they were pushed down this hierarchy, and thus the participants' masculinity was threatened. Then, when given the option to rate another man, participants may have taken it as an opportunity to push the other man down the hierarchy by asserting dominance, one of the goals of male-male competition (Winegard et al., 2014). This act may have led to relief from the masculinity threat; although, there is no current literature to support or reject this claim. Future studies may look to see if asserting dominance does lead to a greater relief from masculinity threat when compared to men who do not have the opportunity to assert dominance.

Alternatively, the threat to participants' masculinity may have led to participants projecting their feeling of low masculinity. As Govorun, Fuegen, and Payne (2006) summarized,

oftentimes the “motivation to deny a negative trait leads people to attribute the trait to others.” After experiencing social rejection, perhaps participants were in a state of denial about their now-low masculinity status, so they projected low masculinity onto male applicants by rating them as unsuccessful, as success is a trait typically associated with masculinity (Savage, Stearns & Friedman, 1979). Future research may aim to test the relationship between social rejection and precarious manhood. A study going forward might test to see if men do in fact feel their masculinity is threatened after rejection from another man. Another study might look into the ways in which masculinity hierarchies form and what actions change men’s positions on them. Finally, it has yet to be found that act of rating other men as less masculine does anything to “prove” a man’s manhood, so looking into the effects of judging other men’s masculinity on male perception of manhood would also be a direction for future research.

An important limitation in this study is sexual orientation. While this study collected demographic data about sexual orientation, there was not a diverse enough pool of participants to conduct any analysis between sexual orientations. Men who identify as gay, bisexual, queer, or another sexual orientation likely have different views of masculinity and femininity, so sexism may express itself in different ways in these populations. A larger sample of men or a more targeted sample specifically queer men may provide insight into the complex relationships between gender expression and sexual orientation.

Finally, it is important to note that the dependent variables in this study are particularly related to jobs and employment. Although the workplace is often where sexism manifests, the occupation-focused lens may have affected the results. McDonald (2011) argues that, in male-dominated environments, such as the work environment, a woman’s gender becomes increasingly salient. In other less male-dominated environments, a woman’s gender might be less

salient, and, as discussed earlier, group saliency can affect the levels and ways in which sexism manifests (Gaertner et al., 2008). Thus, the results of this study should not be concluded to mean that men *in all situations* will respond to male social rejection by viewing other men more negatively. Perhaps such a response is specific to an occupational domain. Other domains may see contradictory or alternative responses from men. Future studies may look into the ways in which social rejection affects men's attitudes towards other men and women is affected by domain, which might bring forth a greater understanding of the ways in which sexism pervades society differently in different spaces.

References

- Andrighetto, L., Riva, P., & Gabbiadini, A. (2019). Lonely hearts and angry minds: Online dating rejection increases male (but not female) hostility. *Aggressive Behavior, 45*(5), 571-581.
- Cecco, L. (2019, September 27). *Toronto van attack suspect says he was 'radicalized' online by 'incels'*. The Guardian. <<https://www.theguardian.com/world/2019/sep/27/alek-minassian-toronto-van-attack-interview-incels>>.
- Gaertner, L., Iuzzini, J., & O'Mara, E. M. (2008). When rejection by one fosters aggression against many: Multiple-victim aggression as a consequence of social rejection and perceived groupness. *Journal of Experimental Social Psychology, 44*(4), 958-970.
- Govourn, O., Fuegen, K., & Payne, B. K. (2006). Stereotypes focus defensive projection. *PSPB, 32*(6), 781-793.
- Kret, M. E., Pichon, S., Grèzes, J., & de Gelder, B. (2011). Men fear other men most: Gender specific brain activations in perceiving threat from dynamic faces and bodies — an fMRI study. *Frontiers in Psychology, 2*(3), 1-11.
- Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior, 29*(1), 202-214.
- McDonald, P. (2011). Workplace sexual harassment 30 years on: A review of literature. *International Journal of Management Reviews, 14*(1), 1-17.
- Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. (2012). Science faculty's subtle gender biases favor male students. *PNAS, 109*(41), 16474-16479.
- Savage, J. E., Stearns, A. D., & Friedman, P. (1979). Relationship of internal-external locus of control, self-concept, and masculinity-femininity to fear of success in black freshmen and senior college women. *Sex Roles, 5*(3), 373-383.
- Vandello, J. A., & Bosson, J. K. (September 2012). Hard won and easily lost: A review and synthesis of theory and research on precarious manhood. *Psychology of Men and Masculinity, 1*-19.
- Winegard, B. M., Winegard, B., & Geary, D. C. (2014). Eastwood's brawn and Einstein's brain: An evolutionary account of dominance, prestige, and precarious manhood. *Review of General Psychology, 18*(1), 34-48.

Appendix

Participants were asked how they felt (about the applicants) in regards to the following statements (*1=strongly agree, 4=strongly disagree*):

1. Natalie would make a very trustworthy manager. (W)
2. Natalie would be warm to customers. (W)
3. Natalie would be a competent employee. (C)
4. Natalie is likely a sociable person. (W)
5. Natalie would not get along with coworkers. (W)
6. Natalie would be overwhelmed in a managerial position. (C)
7. Natalie is a weak candidate. (C)
8. Natalie is likely a disorganized person. (C)

The name Natalie was replaced with Nathan in the male applicant condition. Questions 5-8 were reverse coded, as they are negative statements. Statements with a “(C)” were compiled for the “competence” rating, and those with a “(W)” were compiled for the “warmth” rating.

		YOUR CHOICE:	
		CO-OPERATE	SABOTAGE
THEIR CHOICE:	CO-OPERATE	<p>YOU GET: 3 PTS THEY GET: 3 PTS</p>	<p>YOU GET: 4 PTS THEY GET: 0 PTS</p>
	SABOTAGE	<p>YOU GET: 0 PTS THEY GET: 4 PTS</p>	<p>YOU GET: 1 PTS THEY GET: 1 PTS</p>

Figure 1. Payoff matrix for the prisoner's dilemma game that participants were given. This matrix was provided to participants also.

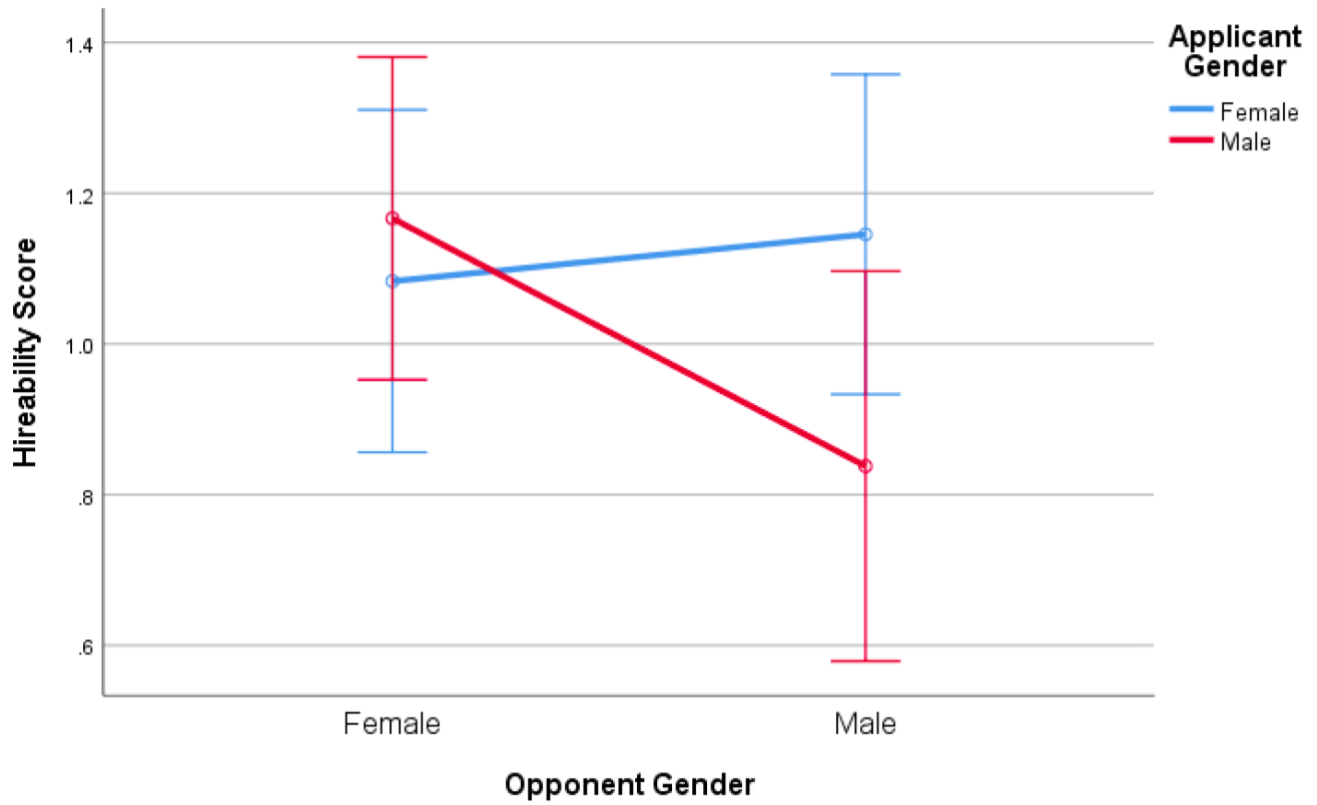


Figure 2. Hireability scores between applicant and game conditions. Note the marginally significant interaction effect.

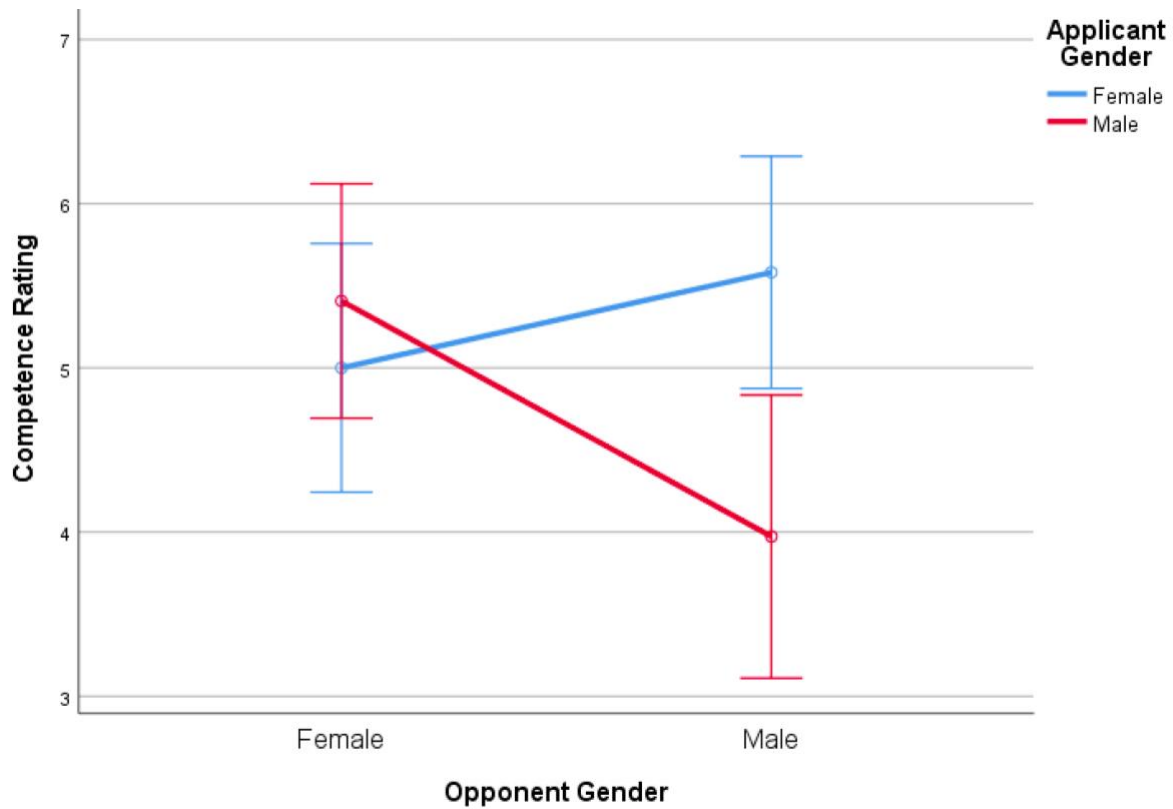


Figure 3. Competence ratings between applicant and game conditions. Note the significant interaction effect.