Predictors of Street Harassment Attitudes in British and Italian Men: Empathy and Social Dominance

Authors: Alessandra Giuliani [a,b] and Daniel Campbell-Meiklejohn[a]

[a]School of Psychology, University of Sussex, Falmer, Brighton, BN1 9RH, U.K.

[b]Present Address: Department of Psychology, University of Bath, Claverton Down, Bath, BA2 7AY, U.K.

Daniel Campbell-Meiklejohn, ORCID: 0000-0002-8916-265X

Alessandra Giuliani, ORCID: 0009-0002-4199-3611

Corresponding Author: Alessandra Giuliani, ag3152@bath.ac.uk

Abstract

Street harassment of women is a prevalent global problem with significant effects on the freedom and well-being of its victims. Change must come from the perpetrators and the cultures that enable this behaviour. However, little is known about attitudes and cognition contributing to tolerance of street harassment in societies. Independently, in two European cultures, we investigated the role of cognitive empathy (for victims of street harassment) and preference for social hierarchies (social dominance orientation, SDO) on tolerance of street harassment in heterosexual men. After being assessed for SDO and street harassment tolerance (i.e., belief in its acceptability in society), 136 Italian and 113 British heterosexual men viewed a video of a woman repeatedly subjected to street harassment. Afterwards, participants reported beliefs about emotions experienced by the woman and were again assessed for street harassment tolerance. The video had little impact on attitudes toward street harassment. However, results revealed that street harassment tolerance before and after the video was associated with both lower cognitive empathy and higher SDO. These effects replicated across two cultures. Together, these findings suggest two common possible attitudinal and cognitive targets for reducing street harassment tolerance and provide a springboard for further research in populations of other cultures, genders, and sexual orientations.

Keywords: street harassment, social dominance orientation, empathy, cross-national comparison, sexual harassment

1. Introduction

1.1. Street harassment definition, prevalence, and consequences

Street harassment is a form of aggravation that involves verbal, non-verbal, or physical unwanted behaviour perpetrated by a stranger in public. While not the only form of harassment on the street (e.g., racist, homophobic, sexual, and other discriminatory behaviour within and between different groups), our focus is a common form perpetrated by heterosexual male strangers against females, consisting of uninvited expressed sexual appreciation or advances for which motivations and executions may differ from the other states and contexts (Fileborn & O'Neill, 2023; Fischer & Good, 1994). Henceforth, when we use the term 'street harassment', we refer to this form.

Exposure to street harassment negatively impacts women's lives in several ways. It reduces victims' well-being through increased feelings of fear, anger, and violation (Bastomski & Smith, 2017; Betts et al., 2019; Kearl, 2014; Lenton et al., 1999; Macmillan et al., 2000; Nielsen, 2002). Victims will likely experience higher rates of depression, anxiety, inferior sleep (Betts et al., 2019; DelGreco & Christensen, 2020) and self-objectification (Fairchild & Rudman, 2008; Fredrickson & Roberts, 1997). The consequent enhancement of fear of sexual violence causes women to unwillingly reduce their freedom of movement, change their behaviour, constantly assess safety, and avoid travelling alone (Bastomski & Smith, 2017; Hickman & Muehlenhard, 1997; Lenton et al., 1999; Vera-Gray & Kelly, 2020). Street harassment also stokes social conflict. Women who experience or witness street harassment show higher levels of negative intergroup emotions and negative feelings toward men (Chaudoir & Quinn, 2010) while sharing a desire for justice against the harasser (Fileborn & Vera-Gray, 2017).

The problem of street harassment is compounded by its frequency. Street harassment is a widespread vehicle of sexual harassment behaviour in our societies (Macmillan et al., 2000). According to Gekoski et al. (2017), incidents of harassment on public transport, for instance, are widespread. Prevalence rates across cultures varied from 15% in the U.K. to as high as 98% among women in Egypt. A recent international survey of over 15,500 women from 15 countries revealed that 80% had experienced street harassment at least once in their lives (*International survey on sexual harassment in public spaces*, 2021).

1.2. Street Harassment literature and its limitations

Despite knowing more in recent years about the impact of street harassment on its victims, the factors contributing to harassment and its endorsement are still under-researched. This is a problem as the onus for social change rests on the shoulders of potential harassers and of the societies that tolerate this unwelcome behaviour. Perpetrators of street harassment usually go unidentified due to the brief nature of the encounters, being unknown to victims, and the lack of sanctions against them. This makes them not easily accessible to research; however, it is possible to study street harassment tolerance in societies (i.e., the degree of belief that street harassment is acceptable behaviour). Indirectly, this can be informative about the likelihood of harassment. Men who are more tolerant of street harassment and have peers who share that view are more likely to engage in harassing behaviour (Darnell & Cook, 2009). Attitudes toward rape, sexual harassment, and street harassment tend to predict engagement in these behaviours (DelGreco et al., 2021; Lanier, 2001; Reilly et al., 1992). More directly, by understanding the attitudes toward street harassment in societies, we can contextualise policy and sanction developments that increase social pressure to reduce street harassment and promote allyship for victims (Fingerhut, 2011; Goodman & Moradi, 2008).

1.3. Cognitive Empathy, Social Dominance Orientation, and differences between populations

Few studies have identified social predictors of street harassment and its tolerance (Mumford et al., 2020; Zietz & Das, 2018). Even fewer studies have researched cognitive and attitudinal predictors of that tolerance. On one hand, power over others seems to play a multifaceted role. Wesselmann and Kelly (2010) found that college men in the USA are motivated toward cat-calling by misogynistic attitudes and the ability to have power over women. DelGreco et al. (2021) correspondingly found that men who feel less empowered were also likelier to engage in street harassment – motivated to generate control over the victim's response (however, the response was desired to be *positive*, not one of distress). In qualitative work, Zietz and Das (2018)

found that young men sampled in India capitalise on their powerful positions – perceiving street harassment through a self-serving lens of entitlement and misogyny that blames victims for the harassment. Support of social inequalities and the seeking of power within them is captured by the concept of social dominance orientation (SDO) (Pratto, 1994). Individuals with a high SDO may be more motivated to obtain or maintain power by embarrassing and objectifying others to assert, redress or maintain their status (Berdahl, 2007; Halper & Rios, 2019) or hold expectations that the victim would welcome sexual attention (Kunstman & Maner, 2011). Pryor (1994) found that men who reported themselves as more likely to engage in sexual harassment rate highly in authoritarianism, a trait associated with SDO. However, SDO has not yet been directly linked to street harassment tolerance. Therefore, the first aim of this research is to explore whether SDO is positively associated with street harassment tolerance.

On the other hand, there may be links to one's empathy for victims. A study by Darnell and Cook (2009) explored the influence of a documentary about women's experiences of street harassment on men's distress and sympathy for a victim of street harassment. While the intervention had little effect on attitudes, it revealed an association between hostility towards women and lower empathy for street harassment victims. Empathy involves the tendency to understand and share the feelings of others. It has been conceptualised as comprising cognitive (understanding the thoughts and emotions of others) and affective (sharing the emotions of others) aspects (Blake & Gannon, 2008). Empathy's cognitive component is our focus here. A meta-analysis by Jolliffe and Farrington (2004) noted a correlation between criminal offending and a lack of cognitive empathy. Correspondingly, aggressive behaviours, as street harassment arguably is, also tend to be associated with lower cognitive empathy levels (Miller & Eisenberg, 1988). As an intervention, increasing empathy can reduce the acceptance of myths that serve to justify the harassment of women (Diehl et al., 2014). The experience of street harassment for women is overwhelmingly negative. This suggests that beliefs in a more negative victim experience demonstrate higher cognitive empathy (DelGreco et al., 2021). Therefore, the second aim of this study was to test whether low cognitive empathy for victims is associated with higher street harassment tolerance.

Empathy (Atkins et al., 2016) and social dominance orientation (Fischer, 2012) are known to vary between cultures. Our understanding of cultural influence on street harassment attitudes is under-researched despite its necessity for developing global interventions as well as interventions appropriate to a national context. To our knowledge, no study has analysed the factors contributing to men's street harassment tolerance in more than one national context. Here, we tested two Western cultures: Italy and the United Kingdom. Cultural differences in street harassment perception, frequency, and putatively related attitudes could mean that their interactions also vary between countries. A Gallup survey (Crabtree & Nsbuga, 2012) revealed that 40% of women feel safe walking alone at night in Italy, compared to 62% in the United Kingdom. In Southern European countries, such as Italy, gendered traditional values have persisted more than in Northern European countries, such as England (Bosoni & Baker, 2015). Historically, Italians have demonstrated lower levels of endorsement of established social rules, such as not swearing or criticising people in public, indulging in sexual activity and expressing emotions (Argyle et al., 1986). A comprehensive understanding of the nuances of cultural differences in street harassment tolerance is beyond the scope of this study. However, by independently conducting this study in two cultures, we allow for the replication of effects. This will increase confidence in identified relationships. This replication can also help to inform global campaigns and joint strategies to reduce street harassment. Differences between cultures may indicate that different approaches are needed in different countries. Therefore, the final aim is to explore the factors contributing to street harassment tolerance in two European populations, Italy and England.

1.4. Current Study

In summary, the present study aimed to start addressing the gaps within sex-based street harassment research by investigating individuals' attitudes underlying street harassment tolerance. First, we hypothesised that lower cognitive empathy for a person being harassed predicts higher street harassment tolerance in heterosexual men. Second, we hypothesised that higher SDO predicts higher street harassment tolerance in heterosexual men. These effects were tested for replication in two distinct countries.

2. Methods

2.1. Design

We used a correlational design, seeking to replicate effects in two online studies based on two different cultures. We tested associations between cognitive empathy, social dominance orientation, and street harassment tolerance.

2.2. Participants

Data were collected in April and March 2022. The inclusion criteria were male and above 18 years old. Only data from self-identified heterosexual males were analysed. This does not imply that street harassment does not occur within and between groups of other sexual orientations and genders. However, we expected the motivations and attitudes of individuals who do not identify with the perpetrators in the video stimulus to differ from those of heterosexual males, which would cloud the interpretability of findings. The final two samples in this study are heterosexual Italian (N = 136) and British (N = 113) individuals who identified themselves as men. Tables 1 and 2 describe the two samples in terms of age, education, and relationships. Participant ages ranged between 18 and 77 in the Italian sample and between 19 and 68 in the British sample. Participants were recruited through Prolific[1] and by sharing the questionnaire link on social media. Prolific recruitment included individuals who had signed up for the service as participants. Prolific settings were programmed to obtain 80 Italian and 80 British male participants above 18 years old who were paid £2.70 for their time. This recruitment was supplemented by posting in Italian and British community groups on Facebook, along with a brief description of the study and an invitation to participate. Participants recruited through social media were not offered compensation.

[1] Prolific is an online platform designed to assist researchers in recruiting participants for their online research. The researcher uploads the study, setting a reward per hour and adding participant criteria. The platform will display the study to the relevant users according to the study's pre-screening information.

2.3. Materials

Online Questionnaire

The questionnaire was designed and delivered using Qualtrics software (Copyright © 2022 Qualtrics). To ensure full comprehension from each population, participants could choose to complete the study in English or Italian. To ensure consistency between the two translations, the English questionnaire was translated into Italian by a bilingual individual and translated back to English by a second bilingual individual. Minor discrepancies between the two translations were identified and resolved.

SDO-7 Scale

The SDO-7 scale (Aiello et al., 2019; Ho et al., 2015) is an adaptation of the original version by Pratto et al. (1994), an established and reliable scale predicting an individual's preference for social group hierarchies and inequality. We used the more extended version containing 16 items with a 7-point Likert response scale, ranging from 1 ("strongly oppose") to 7 ("strongly favour"). Eight items refer to social dominance, and eight refer to anti-inequality. Eight items are reversed coded to reduce acquiescence and extreme response biases. Higher scores indicate higher levels of SDO. Scores on items were summed. Cronbach's alpha was .91 across both U.K. and Italian samples, indicating high internal consistency and reliability.

Street Harassment Tolerance Scale

This scale was modelled after the only attempt in the literature to measure one's street harassment tolerance (Darnell & Cook, 2009), which in turn was patterned after Goodchilds and Zellman's (1984) sexual aggression acceptance measure. Darnell and Cook's (2009) scale was taken due to its good internal consistency (Cronbach's alpha = .94). This is an 11-item questionnaire containing a 5-point Likert response scale, from 1 (not at all acceptable) to 5 (very acceptable). In Darnell and Cook's (2009) scale, all items begin with a common incipit: "How acceptable do you think it is for a man to make an unsolicited, unreciprocated, and unnecessary comment toward an unknown woman on the street (for example, saying 'hey baby' or 'nice ass') when". Then, each item concludes with one of the following situations: the woman is attractive, the

woman is dressed in sexy clothing (e.g., short skirt, tight clothes), the woman makes eye contact with him, the woman smiles at him, the woman is alone, the woman is with her friends, the woman is with a man, the woman is with her children, the man is alone, the man is with his friends, and the man is in an unfamiliar neighbourhood. In the present study, questions were slightly modified. The words “unreciprocated and unnecessary” were removed to avoid prompts. The last part was revised into “(for example, whistling and saying ‘hey baby’ or ‘nice ass’)” to capture a wider variety of street harassment behaviours. Higher scores indicated higher tolerance for street harassment. Cronbach’s alpha was .96 for the street harassment tolerance scale across both U.K. and Italian samples, indicating high internal consistency and reliability.

Video Stimulus

The video (Bliss, 2014) was taken from Rob Bliss’s account on YouTube (https://www.youtube.com/watch?v=b1XGPvbWn0A). It lasts two minutes and shows a woman walking in New York City while being the subject of cat-calling episodes, following, and staring. Street harassment was verbal and nonverbal, and the protagonist did not engage or express any welcome to the approaches from harassers.

Cognitive Empathy Scale

This scale was used to ascertain participants’ understanding of the women’s emotional responses. This scale is a 10-item self-reported questionnaire containing a 10-point Likert response scale, ranging from 1 (not at all) to 10 (very much). This is an adaptation of Fernandez and Marshall’s (2003) Rapist Empathy Scale, which measures people’s understanding that rape causes negative consequences for the victim. While Fernandez and Marshall (2003) used a vignette, these questions referred to the video watched during the survey. The common stem of the items was: “How much do you think the woman in the video was feeling”. Each item concluded with one of the following: “complimented, offended, proud, ashamed, self-confident, guilty, pleased, afraid, angry, and safe”. Darnell and Cook (2009) found that, compared to other scales, this one captures the women’s experiences of street harassment based on past research (Lenton et al., 1999) and anecdotal data (Darnell & Cook, 2009). Higher scores indicated increased cognitive empathy, with the assumption that street harassment is experienced as a negative experience. In addition, the scores of the items referring to positive emotions and those referring to negative emotions were

computed separately to form two sub-variables: Cognitive Empathy related to Positive and Negative Emotions, respectively. Cronbach's alpha was .81 for the cognitive empathy scale across both U.K. and Italian samples, indicating high internal consistency and reliability.

2.4. Procedure

The study was approved by the School of Psychology Ethics Board (application ID: ER/AG711/2). The study fully complied with British Psychological Society ethical guidelines.

Participants were asked to complete the survey independently and remotely on their computer or mobile device. Before completing the questionnaire, all participants were presented with an information and consent form, which stated their rights to withdraw, reassured the data anonymity, and contained study details. Participants were told the study would investigate the social interaction between men and women. Participants were warned they would have watched a video of males approaching a woman without invitation and were advised not to participate if they believed this would cause them severe discomfort. After consent was given, participants were taken to a captcha for the computer to verify they were human. The first part of the study collected the following demographic information: age, gender (male, female, non-binary, another gender, prefer not to say), sexual orientation (heterosexual, homosexual, bisexual, another sexual orientation, prefer not to say), relationship status ("Have you ever been in a long-term romantic relationship with a female?": Yes, No, Prefer not to say), friendship group gender information ("Have you ever had a meaningful close relationship with a female that isn't sexual (for example, friend, sister, mother etc.)?": Yes, No, Prefer not to say), the composition of their friendship group (Entirely Male, Mostly Male, A mix of gender, Mostly female, Entirely Female), and the highest level of education (high school, undergraduate degree, Masters, PhD). Next, the SDO and Street Harassment Tolerance Scale were administered in random order, followed by the video. After the video, the remaining scales (Cognitive Empathy Scale, Post-video Street Harassment Tolerance Scale, and additional measures not related to the focus of this study) were administered in a randomised order. Questions from each scale were displayed in blocks. Participants could only proceed to the following battery if they answered every question currently displayed and watched the whole video. No time limit was imposed so that participants could complete the survey at their

own pace. Finally, participants were debriefed and could withdraw their responses by clicking the "I do not consent to participate" option. At the end of the survey, links to mental well-being support were provided (National Health Service and University of Sussex Support Services).

3. Results

Table 3 describes our dependent collected data. Table 4 illustrates how they correlate with each other.

Five participants (one British, four Italian) with outlier pre-video street harassment tolerance ratings (> score of 41) were removed from the dataset before analysis.

3.1. Impact of Video on Street Harassment Tolerance

The impact of the video on street harassment tolerance was expected to be conservative because of the significant number of participants providing the lowest street harassment tolerance rating before viewing the video (34 British, 64 Italian). The correlation between street harassment tolerance scores pre- and post-viewing of the video was correspondingly high (Table 3). The video decreased street harassment tolerance in the British sample ($t(111)=-3.93$ $p < .001$, $d = -.37$) but not in the Italian sample, which was already relatively lower in street harassment tolerance pre-video ($t(131)=-1.00$, $p = 0.319$, $d = -0.087$).

3.2. Psychological Predictors of Street Harassment Tolerance

Street harassment tolerance responses had a floor effect, censored at a score of 11. It was predicted that if scores could go more negative than 'not at all acceptable' in terms of opinions of street harassment, we would have a more Gaussian distribution of responses. We constructed Tobit regression models (VGAM package in R) to consider this lower censor as we tested predictive relationships between Cognitive Empathy (Positive and Negative) to Street Harassment Tolerance, SDO to Street Harassment Tolerance, and a combination (Cognitive Empathy and SDO) to Street Harassment Tolerance. Predictions of Street Harassment Tolerance were completed both before and after viewing the video. Model comparison used the Akaike Information Criterion (AIC) to

select the simplest, best-fitting model, where appropriate. Models were fit separately to British and Italian samples. Adding main effects or interactions of age, friendship group gender balance, and education failed to improve the fit to street harassment tolerance in any national sample, and so the simpler models without these covariates were reported.

Cognitive Empathy

The first hypothesis of this study was that cognitive empathy predicts street harassment tolerance. Participants rated the emotions felt by a female protagonist in a video experiencing street harassment. Five of these emotions were positive, and five were negative. Composite scores were calculated by reverse coding positive emotion ratings and summing all scores. Positive and negative empathy were negatively correlated (British: Spearman's $r(111) = -.26$, $p = .005$; Italian: $r(134) = -.50$, $p < .001$). Positive empathy was skewed towards the lower values, and negative empathy was normally distributed around the middle rating (Figure 1). Since we wished to explore whether positive empathy, negative empathy and composite scores predicted street harassment tolerance, we examined all effects with Tobit regressions. Parameter estimates are reported in Table 5. The associations between composite empathy scores and street harassment tolerance are visualised in Figure 2. Model comparison using AIC demonstrated that composite scores provided the best fit to data, so composite scores were taken forward to a combined model with SDO (Table 6). All effects were replicated across British and Italian samples.

Social Dominance Orientation

The second hypothesis was that a higher SDO (Figure 3) would predict higher street harassment tolerance. Street harassment tolerance before the video (British: $b = .31$, Italian: $b = .31$) and street harassment tolerance after the video (British: $b = .30$; Italian: $b = .27$) ($ps < .001$) were predicted by SDO scores, replicating across samples (Figure 4).

Combined Model

We then tested whether SDO and cognitive empathy contributed independently to street harassment tolerance in a regression containing both predictors (SDO and composite cognitive empathy scores). Both predictors captured significant independent variance of street harassment tolerance across individuals in both samples (Table 6).

Across both samples, age was positively associated with street harassment tolerance (b =.16, p =.001). Due to the age difference between British and Italian samples (t(242) = 6.5, p < 001), any differences in street harassment tolerance between the British and the younger Italian sample may have been due to age rather than cultural differences and were therefore not explored in further detail. Neither education nor social relationship histories were associated with street harassment tolerance.

In a combined dataset, interaction effects between nationality and cognitive empathy or nationality and SDO were insignificant (ps > .45) and did not improve the fit to data. Therefore, the association of SDO and cognitive empathy with street harassment tolerance was not considered different between the Italian and British samples.

4. Discussion

This study aimed to research the relationship between cognitive empathy, SDO, and street harassment tolerance in British and Italian heterosexual male populations. Belief in relatively more positive emotions in the victim and preferences for social hierarchies and inequality were associated with greater street harassment tolerance in two distinct cultures.

This study investigated men's cognitive empathy towards a female victim's emotional experience during video-recorded street harassment episodes. The average cognitive empathy score suggested that men generally understand street harassment as a negative experience for the receiver. This corresponded to an overall low tolerance for street harassment. Within that range, however, lower cognitive empathy for the victim came with more tolerance for street harassment. This corresponds to suggestions that men who self-report harassment can be mistakenly motivated to evoke a positive response (DelGreco et al., 2021) and theories that sexual harassment by men is

related to the perception that it is less harmful and more welcome than it actually is (Jacques-Tiura et al., 2007; Stockdale, 1993).

The positive relationship between SDO and tolerance for street harassment could emerge from many mechanisms. SDO is a recognition and desire of dominance of one's own group over others. In one view, street harassment is an attempt to exert control over another person regardless of whether it is expected to be a positive (DelGreco et al., 2021) or negative (Leonardo, 1981) experience for the victim. However, if one already feels dominance, street harassment may also be motivated by assumptions that a woman would appreciate the attention (Kunstman & Maner, 2011), by the dehumanisation of outgroups (Ho et al., 2015), and the implementation of social scripts learned from living a patriarchal society (Seal & Ehrhardt, 2003). With the link between SDO and street harassment tolerance established, our understanding of the relationship would benefit from further research to better understand it.

While cognitive empathy and SDO have independent associations with street harassment tolerance, the two were correlated in accord with prior literature (Duckitt & Sibley, 2010; McFarland, 2010; Sidanius et al., 2013). Intriguingly, SDO correlated with expectations of positive experiences of the victim, but not the negative experience – which further supports the link between power motivations and assumptions of a positive response to the harasser's attention.

The lack of a strong effect of the video on street harassment tolerance corresponded to the lack of impact of video media street harassment attitudes in prior studies (Darnell & Cook, 2009). It may reflect the strong floor effect of street harassment tolerance (low tolerance) in our samples. Empathy links to street harassment tolerance both before and after viewing the video. So, street harassment tolerance could shape empathy for the victim, as well as empathy shaping street harassment tolerance. Similarly, SDO linked to street harassment tolerance both before and after the video.

Associations of cognitive empathy and SDO were similar between British and Italian samples. While there are likely to be cultural differences in street harassment problems, there are also be common targets for preventative education between countries, including increased understanding of the negative experience of victims and reducing the application of patriarchal social hierarchies in the street.

An incidental finding was that age predicted lower street harassment tolerance and greater cognitive empathy. As societal gender dynamics evolve, so may men's attitudes, with older generations holding more conservative views toward the acceptability of street harassment. The Italian sample was younger and had greater cognitive empathy for the victim, and this may explain why the Italian sample had somewhat lower street harassment tolerance overall. To test the influence of culture on street harassment tolerance, further research is needed with the precise matching of samples for age, education, and other demographic variables. Frequencies of a romantic or meaningful relationship with a female and friendship group's gender composition and education levels had surprisingly little influence on street harassment tolerance ratings relative to individual differences in cognitive empathy and SDO in our samples.

4.1. Limitations and Future Directions

As with all studies, these two experiments had limitations and further research is needed to go beyond them. Firstly, participants were opportunistically recruited through an online recruitment platform and social media, so it is conceivable that the sampling was subjected to a selection bias (Smart, 1966). Future studies could employ more random sampling techniques. A second limitation of the present study is the use of self-report measures, which allows for hiding attitudes perceived as socially undesirable (Jobe, 2003; Schwarz & Oyserman, 2001). The anonymity of an online design mitigated this risk, but other approaches could be employed to reduce it. Third, the correlational nature of this experiment does not allow us to infer any causal relationships. Lower empathy or enhanced social dominance orientation may or may not cause street harassment tolerance. Intervention studies would provide further insight. Diehl, Glaser, and Bohner (2014) demonstrate the feasibility of such studies, revealing that increasing perspective-taking of victims among college students reduced their likelihood of engaging in sexual harassment and acceptance of myths related to sexual harassment. Fourth, this study suggested that nationality does not significantly change the relationship between cognitive empathy, SDO, and street harassment tolerance in two Western countries. Further research is needed, however, to understand if these attitudinal and cognitive relationships hold across a greater diversity of cultures, as well as investigate the variability of effects between cultures of the same country. Fifth,

the field would benefit from research investigating allyship and empathy in other street harassment contexts, such as when the victim expresses discontent (Magley, 2002). Sixth, the reported link between tolerance of sexual harassment and street harassment is modest (DelGreco et al., 2021), so caution is encouraged before inferring the likelihood of street harassment perpetration from SDO and empathy. Finally, street harassment can also manifest in racist, homophobic, and other discriminatory behaviour, which may share some sources with sexually motivated street harassment toward women but likely varies in its motivation and execution (Fileborn & O'Neill, 2023). Individuals within the LGBTQ+ communities, for example, also frequently face harassment in the street (Chmielewski, 2017; Hollaback!). Future research should explore how empathy and the desire for dominance contribute to these other forms of harassment and harassment by individuals other than heterosexual males.

5. Conclusions

Since perpetrators and their peers are responsible for reducing harmful street harassment toward women, it is essential to understand the attitudes and cognition that underpin the phenomenon. This study represents initial insight into the independent roles of cognitive empathy and SDO in street harassment tolerance in two distinct cultures, presenting these as potential targets for positive social change.

Acknowledgement

This research received no specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Dataset

Alessandra Giuliani and Daniel Campbell-Meiklejohn, "Predictors of Street Harassment Attitudes in British and Italian Men: Empathy and Social Dominance", figshare, 2023, 10.6084/m9.figshare.24174003

References

Aiello, A., Passini, S., Tesi, A., Morselli, D., & Pratto, F. (2019). Measuring support for intergroup hierarchies: Assessing the psychometric proprieties of the Italian Social Dominance Orientation7 Scale. *TPM-Testing, Psychometrics, Methodology in Applied Psychology*, *26*, 373-383.

Argyle, M., Henderson, M., Bond, M., Iizuka, Y., & Contarello, A. (1986). Cross-cultural variations in relationship rules. *International journal of psychology*, *21*(1-4), 287-315. https://doi.org/10.1080/00207598608247591

Atkins, D., Uskul, A. K., & Cooper, N. R. (2016). Culture Shapes Empathic Responses to Physical and Social Pain. *Emotion (Washington, D.C.)*, *16*(5), 587-601. https://doi.org/10.1037/emo0000162

Bastomski, S., & Smith, P. (2017). Gender, Fear, and Public Places: How Negative Encounters with Strangers Harm Women. *Sex roles*, *76*(1-2), 73-88. https://doi.org/10.1007/s11199-016-0654-6

Berdahl, J. L. (2007). Harassment based on sex: protecting social status in the context of gender hierarchy. *Academy of Management Review*, *32*(2), 641-659. https://doi.org/10.5465/AMR.2007.24351879

Betts, L., Harding, R., Peart, S., Sjolin Knight, C., Wright, D., & Newbold, K. (2019). Adolescents' experiences of street harassment: creating a typology and assessing the emotional impact. *Journal of aggression, conflict and peace research*, *11*(1), 38-46. https://doi.org/10.1108/JACPR-12-2017-0336

Blake, E., & Gannon, T. (2008). Social perception deficits, cognitive distortions, and empathy deficits in sex offenders: A brief review. *Trauma, Violence, & Abuse*, *9*, 34-55. https://doi.org/10.1177/1524838007311104

Bliss, R. (2014). *10 hours of walking in NYC as a Woman*. https://www.youtube.com/watch?v=b1XGPvbWn0A

Bosoni, M., & Baker, S. (2015). The intergenerational transmission of fatherhood: Perspectives from the UK and Italy. *Families, Relationships and Societies*, *4*, 239-251. https://doi.org/10.1332/204674315X14236617437428

Chaudoir, S. R., & Quinn, D. M. (2010). Bystander Sexism in the Intergroup Context: The Impact of Cat-calls on Women's Reactions Towards Men. *Sex roles*, *62*(9-10), 623-634. https://doi.org/10.1007/s11199-009-9735-0

Chmielewski, J. F. (2017). A Listening Guide Analysis of Lesbian and Bisexual Young Women of Color's Experiences of Sexual Objectification. *Sex roles*, *77*(7-8), 533-549. https://doi.org/10.1007/s11199-017-0740-4

Crabtree, S., & Nsbuga, F. (2012). *Women Feel Less Safe Than Men in Many developed Countries*. Gallup.Com. Women Feel Less Safe Than Men in Many Developed Countries (gallup.com)

Darnell, A., & Cook, S. L. (2009). Investigating the Utility of the Film "War Zone" in the Prevention of Street Harassment. *Psychology of Women Quarterly*, *33*(3), 266-275. https://doi.org/10.1111/j.1471-6402.2009.01499.x

DelGreco, M., & Christensen, J. (2020). Effects of Street Harassment on Anxiety, Depression, and Sleep Quality of College Women. *Sex roles.*, *82*(7-8), 473-481. https://doi.org/10.1007/s11199-019-01064-6 info:doi/10.1007/s11199-019-01064-6

DelGreco, M., Ebesu Hubbard, A. S., & Denes, A. (2021). Communicating by Catcalling: Power Dynamics and Communicative Motivations in Street Harassment. *Violence against women*, *27*(9), 1402-1426. https://doi.org/10.1177/1077801220927085

Diehl, C., Glaser, T., & Bohner, G. (2014). Face the consequences: Learning about victim's suffering reduces sexual harassment myth acceptance and men's likelihood to sexually harass. *Aggressive behavior*, *40*(6), 489-503. https://doi.org/10.1002/ab.21553

Duckitt, J., & Sibley, C. G. (2010). Personality, Ideology, Prejudice, and Politics: A Dual-Process Motivational Model. *Journal of personality*, *78*(6), 1861-1894. https://doi.org/10.1111/j.1467-6494.2010.00672.x

Fairchild, K., & Rudman, L. A. (2008). Everyday Stranger Harassment and Women's Objectification. *Social justice research*, *21*(3), 338-357. https://doi.org/10.1007/s11211-008-0073-0

Fernandez, Y. M., & Marshall, W. L. (2003). Victim empathy, social self-esteem, and psychopathy in rapists. *Sexual abuse*, *15*(1), 11-26. https://doi.org/10.1023/A:1020611606754

Fileborn, B., & O'Neill, T. (2023). From "Ghettoization" to a Field of Its Own: A Comprehensive Review of Street Harassment Research. *Trauma, Violence, & Abuse*, *24*(1), 125-138. https://doi.org/10.1177/15248380211021608

Fileborn, B., & Vera-Gray, F. (2017). "I Want to be Able to Walk the Street Without Fear": Transforming Justice for Street Harassment. *Feminist legal studies.*, *25*(2), 203-227. https://doi.org/10.1007/s10691-017-9350-3 info:doi/10.1007/s10691-017-9350-3

Fingerhut, A. W. (2011). Straight Allies: What Predicts Heterosexuals' Alliance With the LGBT Community?1: STRAIGHT ALLIES. *Journal of applied social psychology*, *41*(9), 2230-2248. https://doi.org/10.1111/j.1559-1816.2011.00807.x

Fischer, A. R., & Good, G. E. (1994). Gender, Self, and Others: Perceptions of the Campus Environment. *Journal of counseling psychology*, *41*(3), 343-355. https://doi.org/10.1037/0022-0167.41.3.343

Fischer, R. (2012). Cultural and Institutional Determinants of Social Dominance Orientation: A Cross-Cultural Meta-Analysis of 27 Societies. *Political Psychology*, *33*(4), 437-468. https://doi.org/10.1111/j.1467-9221.2012.00884.x

Fredrickson, B. L., & Roberts, T.-A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, *21*, 173-206. https://doi.org/10.1111/j.1471-6402.1997.tb00108.x

Gekoski, A., Gray, J. M., Adler, J. R., & Miranda, A. H. H. (2017). The prevalence and nature of sexual harassment and assault against women and girls on public transport: an international review. *Journal of criminological research, policy and practice (Online)*, *3*(1), 3-16. https://doi.org/10.1108/JCRPP-08-2016-0016

Goodchilds, J. D., & Zellman, G. L. (1984). Sexual Signaling and Sexual Aggression in Adolescent Relationships**The research described was supported by PHS Grant #R01-MH 30655 from the National Center for the Prevention and Control of Rape. Importantly involved in the study, in addition to the two authors, were Paula B. Johnson and Roseann Giarrusso. *Pornography and sexual aggression /*, 233-243. https://doi.org/info:doi/10.1016/B978-0-12-466280-3.50019-1

Goodman, M. B., & Moradi, B. (2008). Attitudes and Behaviors Toward Lesbian and Gay Persons: Critical Correlates and Mediated Relations. *Journal of counseling psychology*, *55*(3), 371-384. https://doi.org/10.1037/0022-0167.55.3.371

Halper, L. R., & Rios, K. (2019). Feeling Powerful but Incompetent: Fear of Negative Evaluation Predicts Men's Sexual Harassment of Subordinates. *Sex roles*, *80*(5-6), 247-261. https://doi.org/10.1007/s11199-018-0938-0

Hickman, S. E., & Muehlenhard, C. L. (1997). College women's fears and precautionary behaviors relating to acquaintance rape and stranger rape. *Psychology of Women Quarterly*, *21*, 527-547. https://doi.org/10.1111/j.1471-6402.1997.tb00129.x

Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., . . . Stewart, A. L. (2015). The Nature of Social Dominance Orientation: Theorizing and Measuring Preferences for Intergroup Inequality Using the New SDO7 Scale. *Journal of personality and social psychology*, *109*(6), 1003-1028. https://doi.org/10.1037/pspi0000033

Hollaback! *Take action* https://www.ihollaback.org/take-action/

International survey on sexual harassment in public spaces. (2021).

Jacques-Tiura, A. J., Abbey, A., Parkhill, M. R., & Zawacki, T. (2007). Why Do Some Men Misperceive Women's Sexual Intentions More Frequently Than Others Do? An Application of the Confluence Model. *Personality & social psychology bulletin*, *33*(11), 1467-1480. https://doi.org/10.1177/0146167207306281

Jobe, J. B. (2003). Cognitive Psychology and Self-Reports: Models and Methods. *Quality of life research*, *12*(3), 219-227. https://doi.org/10.1023/A:1023279029852

Jolliffe, D., & Farrington, D. P. (2004). Empathy and offending: A systematic review and meta-analysis. *Aggression and violent behavior*, *9*(5), 441-476. https://doi.org/10.1016/j.avb.2003.03.001

Kearl, H. (2014). *Unsafe and harassed in public spaces: A national street harassment report.* http://www.stopstreetharassment.org/ourwork/nationalstudy/

Kunstman, J. W., & Maner, J. K. (2011). Sexual Overperception: Power, Mating Motives, and Biases in Social Judgment. *Journal of personality and social psychology*, *100*(2), 282-294. https://doi.org/10.1037/a0021135

Lanier, C. A. (2001). Rape-accepting attitudes: Precursors to or consequences of forced sex. *Violence Against Women*, *7*, 876-885. https://doi.org/10.1177/10778010122182802

Lenton, R., Smith, M. D., Fox, J., & Morra, N. (1999). Sexual Harassment in Public Places: Experiences of Canadian Women. *The Canadian review of sociology*, *36*(4), 517-540. https://doi.org/10.1111/j.1755-618X.1999.tb00962.x

Leonardo, M. d. (1981). The Political Economy of Street Harassment. *Aegis*, 51-57.

Macmillan, R., Nierobisz, A., & Welsh, S. (2000). Experiencing the Streets: Harassment and Perceptions of Safety among Women. *Journal of research in crime and delinquency.*, *37*(3), 306-322. https://doi.org/10.1177/0022427800037003003

Magley, V. J. (2002). Coping With Sexual Harassment: Reconceptualizing Women's Resistance. *Journal of Personality & Social Psychology*, *83*(4), 930-962. https://doi.org/10.1037/0022-3514.83.4.930

McFarland, S. (2010). Authoritarianism, Social Dominance, and Other Roots of Generalized Prejudice. *Political Psychology*, *31*(3), 453-478. https://doi.org/10.1111/j.1467-9221.2010.00765.x

Miller, P. A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin*, *103*, 324-344. https://doi.org/10.1037/0033-2909.103.3.324

Mumford, E. A., Okeke, N., & Rothman, E. (2020). Young Men's Attitudes and Neighborhood Risk Factors for Sexual Harassment Perpetration in the United States. *Journal of community health*, *45*(2), 245-251. https://doi.org/10.1007/s10900-019-00738-2

Nielsen, L. B. (2002). Subtle, Pervasive, Harmful: Racist and Sexist Remarks in Public as Hate Speech. *Journal of Social Issues*, *58*(2), 265-281. https://doi.org/10.1111/1540-4560.00260

Pratto, F. (1994). Social Dominance Orientation: A Personality Variable Predicting Social and Political Attitudes. *Journal of Personality & Social Psychology*, *67*(4), 741-763. https://doi.org/10.1037/0022-3514.67.4.741

Pryor, J. B. (1994). Sexual cognition processes in men high in the likelihood to sexually harass. *Personality & Social Psychology Bulletin*, *20*, 163-170. https://doi.org/10.1177/0146167294202003

Reilly, M. E., Lott, B., Caldwell, D., & DeLuca, L. (1992). Tolerance for sexual harassment related to self-reported sexual victimization. *Gender & Society*, *6*, 122-138. https://doi.org/10.1177/089124392006001008

Schwarz, N., & Oyserman, D. (2001). Asking Questions About Behavior: Cognition, Communication, and Questionnaire Construction. *The American journal of evaluation*, *22*(2), 127-160. https://doi.org/10.1177/109821400102200202

Seal, D. W., & Ehrhardt, A. A. (2003). Masculinity and urban men: Perceived scripts for courtship, romantic, and sexual interactions with women. *Culture, health & sexuality*, *5*(4), 295-319. https://doi.org/10.1080/136910501171698

Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Ho, A. K., Sibley, C., & Duriez, B. (2013). You're Inferior and Not Worth Our Concern: The Interface Between Empathy and Social Dominance Orientation. *Journal of personality*, *81*(3), 313-323. https://doi.org/10.1111/jopy.12008

Smart, R. G. (1966). Subject Selection Bias in Psychological Research. *Canadian psychologist*, *7a*(2), 115-121. https://doi.org/10.1037/h0083096

Stockdale, M. S. (1993). The role of sexual misperceptions of women's friendliness in an emerging theory of sexual harassment. *Journal of Vocational Behavior*, *42*, 84-101. https://doi.org/10.1006/jvbe.1993.1006

Vera-Gray, F., & Kelly, L. (2020). Contested gendered space: public sexual harassment and women's safety work. *International journal of comparative and applied criminal justice*, *44*(4), 265-275. https://doi.org/10.1080/01924036.2020.1732435

Wesselmann, E. D., & Kelly, J. R. (2010). Cat-Calls and Culpability: Investigating the Frequency and Functions of Stranger Harassment. *Sex roles*, *63*(7-8), 451-462. https://doi.org/10.1007/s11199-010-9830-2

Zietz, S., & Das, M. (2018). 'Nobody teases good girls': A qualitative study on perceptions of sexual harassment among young men in a slum of Mumbai. *Global public health*, *13*(9), 1229-1240. https://doi.org/10.1080/17441692.2017.1335337

Table 1. Age and Education of Samples

	Italian (N=136)	**British (N=113)**	**Overall (N=249)**
Mean Age (SD)	30.4 (11)	41.4 (15.3)	35.4 (14.2)
Education Level Achieved			
High School	50	77	127
Degree	28	45	73
Master	22	17	39
PhD	9	1	10

Table 2. *Relationship Information of Samples*

	Italian	**British**
Ever had a romantic relationship with a female		
Yes	102	93
No	28	18
Rather not say	6	2
Ever had a meaningful relationship with a female		
Yes	125	105
No	9	7
Rather not say	2	1
Gender composition of friendship group		
Entirely Male	8	7
Mostly Male	52	41
A mix of gender	59	61
Mostly female	17	4
Entirely Female	0	0

Table 3. *Descriptive Statistics*

		Italian (N=136)		**British (N=113)**	
Measure	**Possible Range**	**M**	**SD**	**M**	**SD**
Street Harassment Tolerance					
Before Video	11-55	16.7	8.0	18.9	7.7
After Video	11-55	16.1	7.1	17.1	7.0
Cognitive Empathy					
Positive Emotion	5-50	43.0	7.1	40.1	7.4
Negative Emotion	5-50	34.1	8.1	28.8	7.1
Combined	10-100	77.1	13.2	68.9	11.6
Social Dominance Orientation (SDO)	16-112	43.5	15.0	41.8	16.7

Table 4. *Correlations Between Measures*

	Street Harassment Tolerance, Pre-video	Street Harassment Tolerance, Post-video	Cognitive Empathy (combined)	Cognitive Empathy (negative)	Cognitive Empathy (positive)
British					
Street Harassment Tolerance, Post-video	0.79***	—			
Cognitive Empathy (composite)	-0.50***	-0.45***	—		
Cognitive Empathy (negative)	-0.29***	-0.24**	0.79***	—	
Cognitive Empathy (positive)	0.50***	0.47***	-0.81***	-0.29**	—
Social Dominance Orientation (SDO)	0.46***	0.49***	-0.19*	-0.10	0.20*
Italian					
Street Harassment Tolerance, Post-video	0.86***	—			
Cognitive Empathy (composite)	-0.57***	-0.60***	—		
Cognitive Empathy (negative)	-0.47***	-0.51***	0.89***	—	
Cognitive Empathy (positive)	0.54***	0.53***	-0.85***	-0.52***	—
Social Dominance Orientation (SDO)	0.44***	0.40***	-0.27***	-0.16	0.32***

Significant at *** < .001, ** <.01, * <.05

Table 5. *Cognitive Empathy Prediction of Street Harassment Tolerance, parameter estimates.*

	Before Video	***After Video***
British		
Positive Emotion	0.68	0.66
Negative Emotion	-0.47	-0.45
Composite Score	-0.46	-0.45
Italian		
Positive Emotion	0.66	0.76
Negative Emotion	-0.60	-0.72
Composite Score	-0.44	-0.52

Note. All significant at $p < .001$.

Table 6. *Regression Tables, Predicting Street Harassment Tolerance from SDO and Cognitive Empathy Composite Score*

Before video

British Sample

Variables	*Model R^2*	*b*	*S.E. (b)*	*z*	*p*
	.43				
(Constant)		32.0	5.07	6.3	<.001
Cognitive Empathy		-.38	.07	-5.84	<.001
Social Dominance Orientation (SDO)		.26	.04	6.08	<.001

Italian Sample

Variables	*Model R^2*	*b*	*S.E. (b)*	*z*	*p*
	.34				
(Constant)		31.3	6.1	5.1	<.001
Cognitive Empathy		-.38	.07	-5.5	<.001
Social Dominance Orientation (SDO)		.24	.06	4.18	<.001

After video

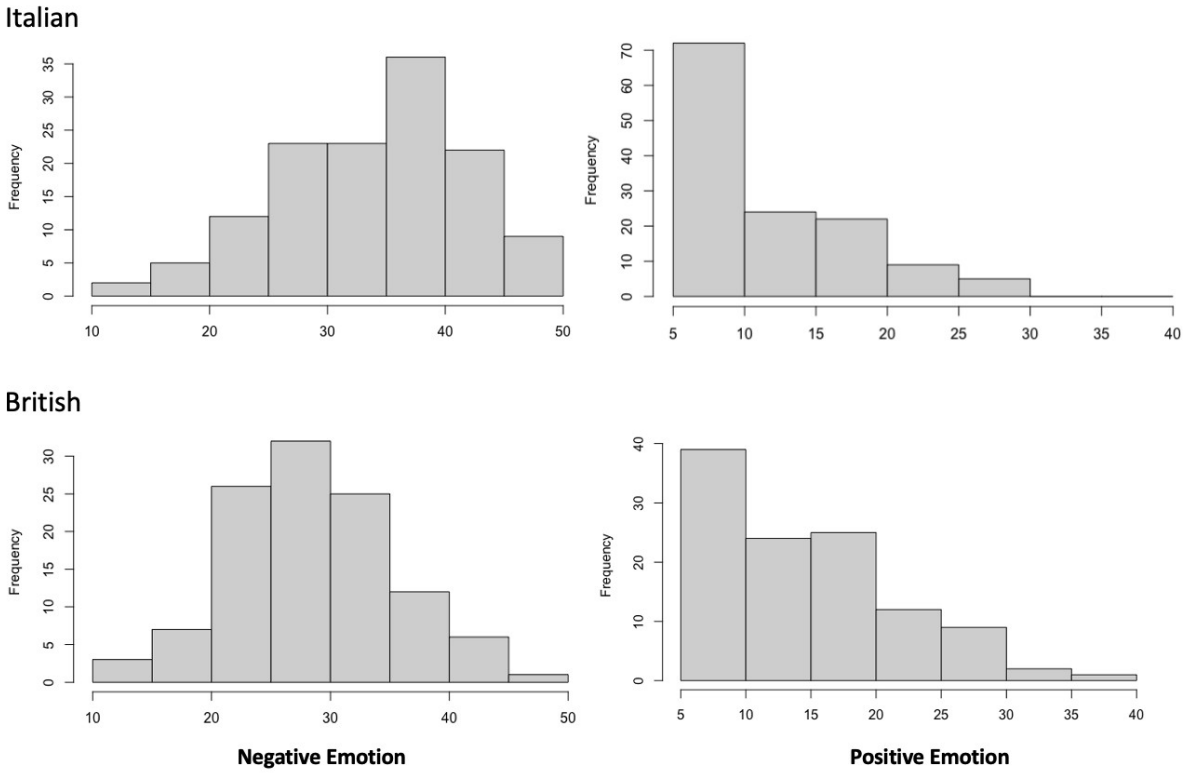
British Sample

Variables	*Model R^2*	*b*	*S.E. (b)*	*z*	*p*
	.37				
(Constant)		30.0	5.5	5.4	<.001
Cognitive Empathy		-.38	.07	-5.3	<.001
Social Dominance Orientation (SDO)		.26	.05	5.4	<.001

Italian Sample

Variables	*Model R^2*	*b*	*S.E. (b)*	*z*	*p*
	.34				
(Constant)		39.0	6.3	6.2	<.001
Cognitive Empathy		-.47	.07	-6.6	<.001
Social Dominance Orientation (SDO)		.2`	.06	3.5	.001

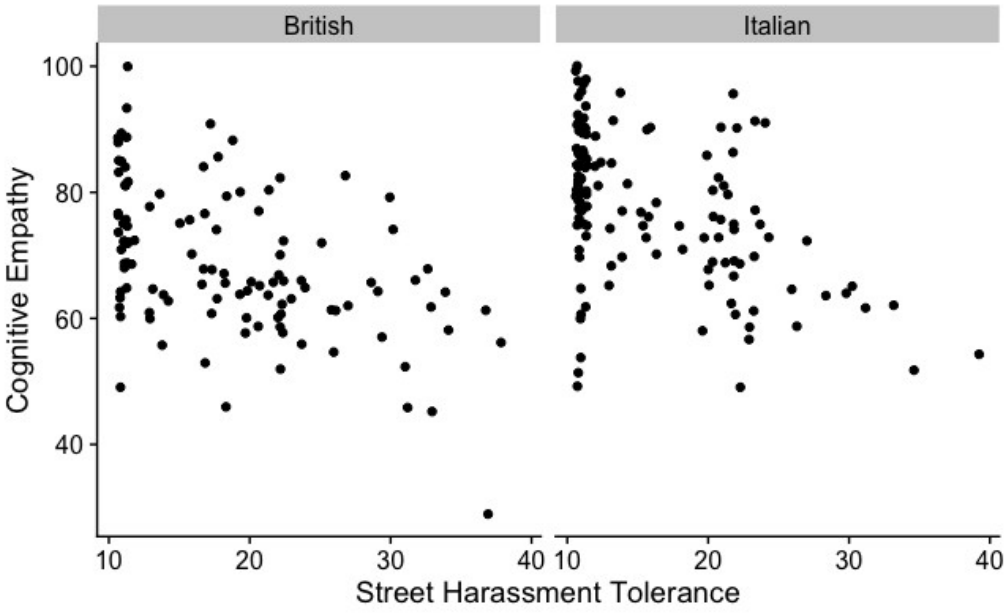
Figure 1. *Cognitive Empathy. Positive and Negative Emotion Believed Felt by the Female Experiencing Street Harassment.*



Note. Range of scores available from 5 to 55.

Figure 2. *Cognitive Empathy Composite Score and Street Harassment Tolerance*

Before Video



After Video

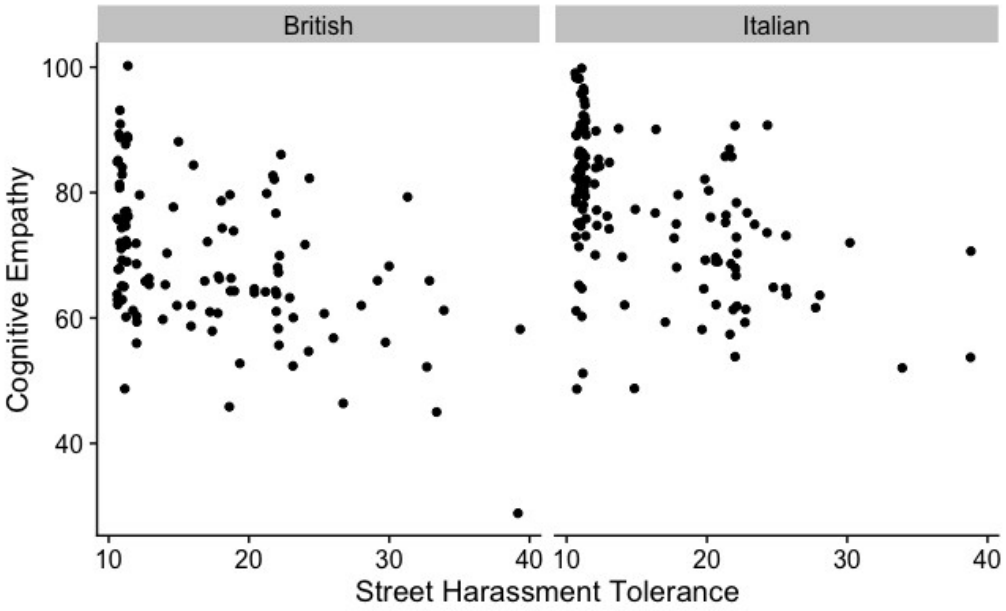


Figure 3. *Social Dominance Orientation (SDO) in British and Italian Samples.*

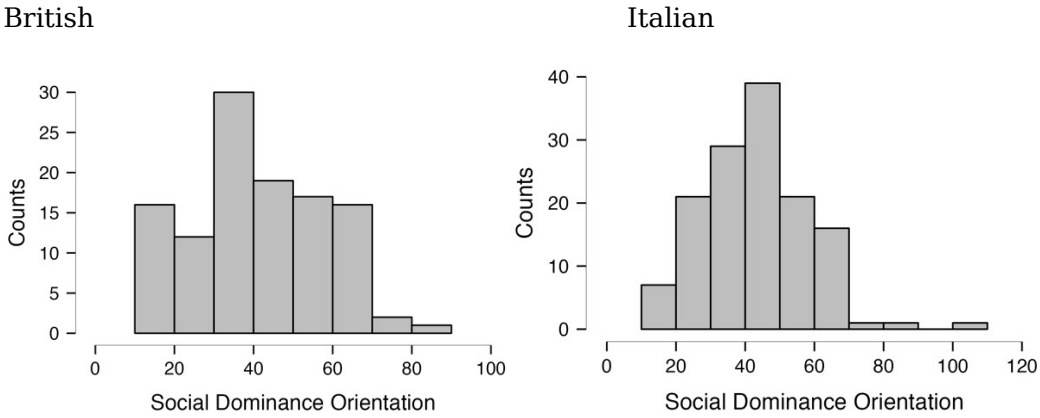
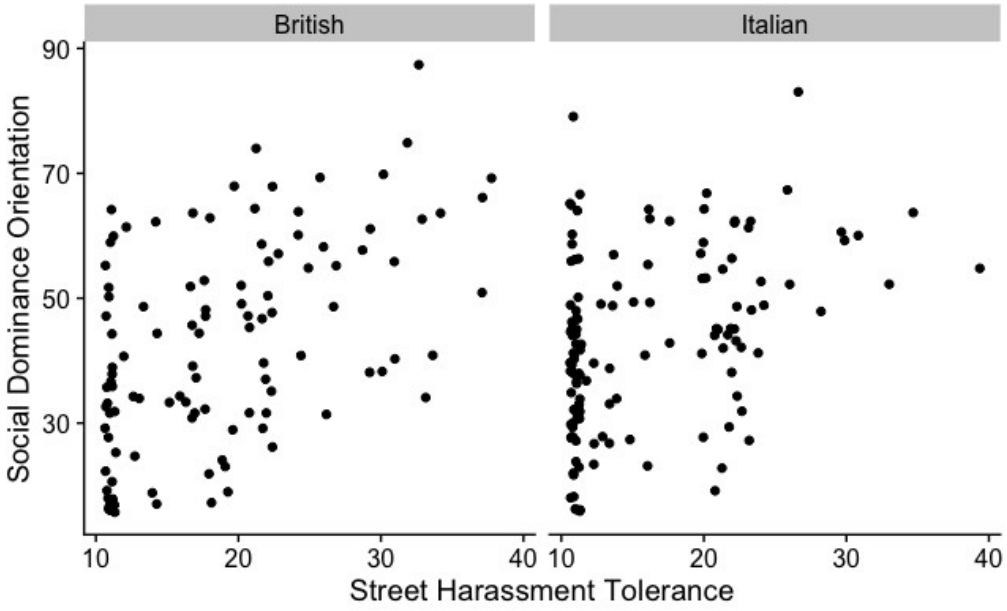


Figure 4. *Social Dominance Orientation (SDO) and Street Harassment Tolerance*

Before Video



After Video