



Fijian Reactions to Transgender-Directed Workplace Mistreatment: The Moderating Role of the Victim's Group Identification

James D. Johnson¹ · Monika Prasad¹ · David N. Sattler² · Geir Henning Presterudstuen³ · Maria Giuseppina Pacilli⁴  · Stefano Pagliaro⁵

Accepted: 12 December 2021 / Published online: 16 January 2022

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2022

Abstract

Across the world, there is anecdotal evidence that transgender women tend to minimize easily discernable identity cues to reduce the likelihood of facing anti-transgender prejudice and discrimination. Thus, we believe that an examination of whether variability in transgender women's group identification (i.e., strong or weak transgender group identification) might influence important life outcomes (e.g., workplace mistreatment) certainly seems warranted. Moreover, in the Pacific Island of Fiji there is strong qualitative evidence of a pervasive pattern of anti-transgender prejudice. However, there has been minimal empirical examination of factors that might influence such prejudicial reactions. We explored ($N=294$), in a case of transgender-related workplace mistreatment (i.e., unfair termination), whether victim group identification (i.e., strong vs. weak) would influence perceived victim culpability, endorsement of co-worker support (i.e., agreeing that the victim should receive co-worker support), and termination endorsement (i.e., support for the termination) among Fijian participants. We further examined whether transgender-related prejudice moderated these effects. At high levels of prejudice, there was greater negative responding (i.e., greater perceived culpability, less support endorsement, greater termination endorsement) towards the strongly identified victim relative to the weakly identified victim. Conversely, at low levels of prejudice, there was no impact of group identification level on perceived culpability. Unexpectedly, low prejudice individuals also reported a "favorability bias" (i.e., greater support endorsement, less termination endorsement) towards the strongly relative to the weakly identified victim.

Keywords Transgender bias · Group identity · Stereotypes · Workplace mistreatment

✉ Maria Giuseppina Pacilli
maria.pacilli@unipg.it

Extended author information available on the last page of the article

Introduction

There is clear evidence that minority group members are fully aware of the “inter-group perils” associated with strong in-group identification. For example, minority Americans may engage in “resume whitening” (i.e., omit from their resume any cues linked to their minority status or identity) to reduce the likelihood that they will become the targets of stereotypical biases in their employment searches. In one of the few empirical analyses of this issue, Kang et al. (2016) found that almost 40 percent of Black and Asian students had engaged in resume whitening to enhance the likelihood of employment. More relevant for the current examination, there is also anecdotal evidence that transgender women will minimize easily discernable identity cues to reduce the likelihood that they will become victims of anti-transgender prejudice beliefs and/or discrimination (Howe, 2018). We here examine whether this type of “identity dampening” might influence important *life outcomes* (e.g., transgender-directed workplace mistreatment such as employment termination). We also explored whether the influence of identity dampening on such outcomes would vary as a function of third-party transgender prejudice level. Our central research questions, in the context of an incident involving transgender-directed workplace mistreatment, are: (a) Would victim group identification (i.e., strong vs. weak) influence perceived victim culpability, endorsement of co-worker support (i.e., beliefs that victim should receive support from co-workers), and termination endorsement (i.e., beliefs that victim “deserved” to be terminated) among Fijian participants ($n=294$); and (b) Would the influence of victim group identification on the relevant outcome variables be moderated by transgender-related prejudice.

LGBTI+ Perspectives: The Case of Fiji

Transgender individuals have a gender identity or gender expression that does not match their sex assigned at the time of birth (Andrasik et al., 2014). While social scientists interested in intergroup prejudice have given an extensive amount of attention to factors that influence both the frequency and perpetuation of transgender-related prejudice (Grant et al., 2011; James et al., 2016; Scheim et al., 2017), the majority of the research in this area has been limited to Western and developed nations. In order to give greater attention to the examination of psychological processes associated with this form of prejudice in understudied populations (Heinrich et al., 2010; Undark, 2020), the current examination involved participants from the developing country of Fiji which is located in the “Pacific Region” (including countries such as Samoa, Tonga, and the Solomon Islands). Throughout the region, local forms of non-heteronormative and non-binary gender identities, including fa’afafine (Samoa), fakaleiti (Tonga), raerae (Tahiti) and vaka sa lewa lewa (Fiji), remain important social forms but belie easy categorization outside their local context (cf. Besnier & Alexeyeff, 2014; Presterudstuen, 2019). For analytical purposes in this research project, we follow contemporary LGBTI+ activists and voices, such as the *Pacific Sexual and Gender Diversity Network*, to consider these various gender identities within the catch-all framework of ‘transgender’ but acknowledge that significant

cultural variation about how these categories are understood, experienced and performed exist that may have impact for the generalizability of data across the region. Although the Pacific Islands have a long cultural tradition of gender variance, any conceptualization of transgender has come into local parlance relatively recently and still holds limited purchase outside social activist and political contexts. However, within Fiji, there is increasingly a shared and consistent understanding of characteristics associated with transgender individuals driven by human rights-based advocacy and LGBTI+ activism (see Presterudstuen, 2019).

From a legal perspective, Fiji is one of the first of few countries in the world to explicitly ban discrimination based on sexual orientation and gender identity in its constitution while also decriminalizing same-sex relations (Equaldex, 2018). Underlying these overt measures of acceptance, however, are various forms of everyday forms of prejudice that can be linked to high levels of gender-based violence and discrimination (Presterudstuen, 2014, 2019). Legal recognition of LGBTI+ rights was immediately followed by local controversy and increased public condemnation of public representation of non-heteronormativity (George, 2008), and calls for equal rights are frequently met by attempts to delegitimize sexual and gender variance through fundamental Christian morality or overt homophobia at local, national and regional level. More importantly, there is significant qualitative evidence of persistent LGBTI+-related discrimination, reflected in both emotional and physical violence, in this area of the world (Bhatia, 2019; Carruthers, 2016; Graue, 2018) and Fiji (Hill, 2017; Movono, 2017).

Most recently, the leader of the *Pacific Sexual and Gender Diversity Network* in Fiji argued that greater attention should be given to the “harassment, violence and even murder of transgender people” in Fiji (Kumar, 2018, page 1). Indeed, on the 2018 *International Day against Transphobia*, a transgender woman in Fiji was murdered due to her being transgender. Since a young gay male was murdered a month earlier, this was the second LGBTI-related murder in Fiji within a very short period. Further, in cases of LGBTI-related violence in Fiji, friends of the victims state that they have significant concerns regarding community reprisals if they report the incidents to the authorities (Fox, 2018; Movono, 2017). Despite these specific incidents and the broader concerns regarding LGBTI-related prejudice in the Pacific Region, social scientists have given little attention to examining factors that might influence *any form* of LGBTI+-related prejudicial responding in this area of the world. To the best of our knowledge, the current study represents one of the first empirical examinations of factors that might influence LGBTI+-related prejudice in Fiji, in particular, and the Pacific Region, in general.

Transgender-Directed Workplace Discrimination

Despite the support of international human rights groups and laws against discrimination based on sexual orientation or gender identity (International Commission of Jurists, 2009), transgender individuals are extremely likely to experience varying degrees of social and economic marginalization, harassment, discrimination, and violence (Bockting et al., 2013; Grant et al., 2011; James et al., 2016). Importantly,

there is also significant evidence that transgender individuals face bias and discrimination in *all phases* of the employment process. In one recent survey of 1000 employers, it was shown that nearly 47% of the employers were unsure about hiring a potential transgender employee while 88% agreed they had no trans-inclusive workplace policy in place to accommodate transgender workers (Recruiting Times, 2018). Grant et al. (2011) found that approximately 50% of transgender individuals reported being terminated from their job, not being recruited for a job, or denied a promotion as a result of transitioning to another gender. They have also reported being prevented from customer contact (Minter & Daley, 2003), wage inequity (Schilt & Wiswall, 2008), receiving poor job evaluations due to their transgender status (Irving, 2015), and exclusion or loss of health insurance benefits (Baker, 2017).

To our knowledge, the present study represents one of the first empirical examinations of factors that might influence *societal reactions* responding to transgender workplace mistreatment. This is relevant because Skarlicki and Rupp (2010) contend that, for every victim of workplace mistreatment, a large pool of relevant third parties (i.e., friends, families, co-workers) tends to exist. The authors further suggest that an examination of their responses is important because individuals who become aware of employee mistreatment can engage in retributive responses (e.g., badmouthing, boycotting, and encouraging victim retaliation) towards the company or their products even when they are *not* directly affected by the actual mistreatment. There is also a possibility that third parties can convince the victim that their rights have been violated (Barley, 1991) and/or to take legal action against the employer (Goldman, 2001). Finally, and more broadly, Gracia and Herrero (2007) contend that third party strong beliefs regarding the problematic nature of the unfair treatment against disadvantaged individuals tends to create a “climate of social intolerance” which could lead to improved social control of such mistreatment.

The Prejudice Distribution Account: The Moderating Role of Prejudice Level

The Prejudice Distribution Account (Kaiser & Pratt-Hyatt, 2009) suggests that majority group members will tend to react more negatively toward strongly identified minorities relative to weakly identified minorities. Although the underlying processes have not been directly examined in non-

Western nations, at least in developed Western nations, such negative responding occurs because of concerns that strongly identified minority group members are perceived to be a threat to hierarchal social systems (see Major et al., 2007). In the first direct examination of their prejudice distribution perspective, Kaiser and Pratt-Hyatt (2009) demonstrated that White Americans expressed more negative attitudes and expressed more negative behavioral intentions (e.g., less likely to friend the target on Facebook) toward strongly identified racial minorities than toward weakly identified minorities. Whereas the extant prejudice distribution account literature has clearly demonstrated that minority member group identification can influence *general attitudes* and *behavioral intentions* towards that individual (Kaiser & Pratt-Hyatt, 2009), one goal of the current study was to provide a more robust test of the

theory by examining outcomes that focus on third party responses to “harmful treatment” of a minority group member.

A second goal of the study was to extend the prejudice distribution account research by exploring the *moderating* role of observer prejudice level. Why might prejudice level moderate the impact of minority group identification? Devine and her colleagues (Devine, 1989; Devine et al., 1991) clearly show that low prejudice individuals are “truly low” in their endorsement of any form of prejudicial beliefs and are unlikely to engage in any form of prejudicial treatment of disadvantaged group members (Devine, 1989, p. 195). Moreover, there is clear evidence that low prejudice individuals’ reactions tend to be driven by egalitarian goals and justice-seeking motivations (see Devine, 1989; Dovidio & Gaertner, 1986; Plant & Devine, 1998). Consequently, they should *equally* inhibit the use of stereotypical biases in their reactions to both high and low identified minority group victims of mistreatment. For these individuals, when presented with a workplace scenario involving a victim that engaged in clearly benign behavior, their responses (which should reflect empathy for the victim) should not vary as function of victim identity level.

Importantly, the strongly identified victim should represent the “prototype” for transgender persons (Rothbart & John, 1985; Rothbart & Lewis, 1988; Weber & Crocker, 1983). Thus, for high prejudice individuals, simple exposure to the strongly identified victim was expected to be sufficient to activate an array of negative stereotypical beliefs (e.g., highly sexual, homosexual, mentally unstable) which could independently or jointly be applied to their reactions to an incident of transgender workplace mistreatment. Thus, these individuals should report greater victim culpability, less endorsement for victim-directed support, and greater termination endorsement for the strongly relative to the weakly identified victim.

The Present Study

We asked participants to read a passage involving a transgender individual who was appealing her termination for a minor work infraction. In order to assess the impact of level of the target transgender identification on the relevant outcome measures, participants were randomly assigned to either the *strong* (i.e., “highly immersed” in her transgender identity) or *weak* (i.e., “very superficially tied” to her transgender identity) condition. Participants then completed measures of their endorsement of *transgender-related stereotypical beliefs, perceived victim culpability, endorsement of co-worker support, and termination endorsement*.

We hypothesized an interaction between transgender group identification and observer prejudice level such that, at higher prejudice levels, those in the strong identification condition should report greater perceived victim culpability (HP1), less endorsement for victim-directed support (HP2), and greater termination endorsement (HP3) than those in the weak identity condition. However, at lower prejudice levels, there should be no impact of identity type on any of the relevant outcome variables.

Method

Participants

There were no data exclusions. To our knowledge, only one study has manipulated target group identification (racial identity; Kaiser & Pratt-Hyatt, 2009), with effect sizes of $d=0.70$ for main effects and 0.46 for interactions. Assuming similar effect sizes for manipulated transgender identification, a sample size of 294, and 3 predictors, then the power to detect main effects and interactions would be 0.99 and 0.92, respectively. Thus, we recruited 294 participants (195 male (66%) and 99 female students) aged 18–40 ($M=21.4$, $SD=2.2$) from student societies on campus from The *University of the South Pacific* (Suva, Fiji) participated in the study. They were compensated for their time with \$10.

The lead author has been a professor at the university for 8 years. His Fijian graduate students at the university were utilized to contact the various student society presidents to facilitate participant recruitment. Thus, we utilized a snowball procedure.

Measures

To assess the extent that participants endorsed prejudicial transgender beliefs, they completed the nine-item *Transgender Prejudice Scale* ($\alpha=0.87$), which has demonstrated strong convergent, construct, and discriminant validity (Davidson, 2014). Items from the measure, scored on a 1-strongly disagree to 5-strongly agree scale, include “*Transgender people shouldn’t become doctors because their patients would never feel comfortable around them,*” and “*Transgender people are just not manly enough to serve along-side real men on the front lines in the military.*”

Procedure

The project was reviewed and approved by the University of the South Pacific Institutional Review Board and complied with the American Psychological Association ethics guidelines. The University of the South Pacific does not have a dedicated pool of participants to conduct experimental research. Participants were recruited through student organizations via email requests. For the current study, per recruitment emails which provided the time and location for the session, participants gathered in a large auditorium to complete the questionnaires. Once the requisite number of participants arrived the session was closed. There were five data collections sessions (with male and female experimenters) with both conditions (strong identity, weak identity) included in each session. In order to obscure the exact nature of the research, the “cover story” (presented on page one of the questionnaires) was that that the study focused on factors influencing decision-making processes in a variety of contexts.

We utilized English for all of our experimental materials. While there are regional dialects and languages, English is taught in most schools and is the dominant

language utilized in most official spheres (Mangubhai & Mugler, 2003). Consequently, our participants would have had minimal problems understanding and responding to any of our directives, terms, or statements that were written in English. To begin the experimental portion of the study, participants read a passage (i.e., hypothetical case) describing an event that occurred in the workplace. The overview of the situation stated that a transgender individual, named Suzan Williams, believed she was terminated from her position as an account manager without a legitimate cause. She felt her mistreatment was because she was transgender. She was seeking to have her termination rescinded and position restored. Further “background information” (which included the same picture of Suzan in both conditions) on the incident showed that:

Two weeks before she was terminated (i.e., fired), Suzan raised a few questions to her supervisor regarding the audit procedures used for a client. In response, the supervisor told her that the issues and concerns were not important and had no effect on the client’s annual report. Later that day, Suzan discussed the matter with one of her colleagues in the staff room. Her supervisor overheard the discussion, and then placed Suzan on a two-month suspension without pay for “disobeying supervisor’s orders.” After her suspension period was over, Suzan was told she was being terminated and that her position was advertised in the newspaper. Suzan filed a letter of appeal.

The background information also included statements to give “greater insight into Suzan’s personality.” In the *weak group identification condition*, Suzan stated that being transgender was “not a major part of her identification.” She further states that she would never consider joining a transgender organization and she rarely attends meetings to support transgender rights¹. In the *strong group identification condition*, she states that being transgender “is a major part of her identity.” She further states that she is the president of a local transgender organization and she attends all of transgender rights support meetings. Participants then responded to a number of items, of a priori interest, that served as the *central outcome measures* for the study.

Manipulation Checks

Forty independent raters (20 males and 20 females from the same university as the participants) read the low identification (10 male, 10 female) and high identification (10 male, 10 female) passages. *Perceived Transgender Group Identification* was assessed by averaging rater responses to three items ($\alpha=0.91$). The exact questions were: (a) To what extent does Suzan identify with being transgender? (1-a small extent, 7-a great extent); (b) What level of identity is reflected by Suzan’s association with transgender organizations/meetings? (1-a small level, 7-a high level); (c) To what extent is being transgender an important part of Suzan’s self-image? (1-a small extent, 7-a great extent). Higher scores denoted greater perceived transgender group identification. The findings revealed that transgender group identification

¹ Previous research has shown that memberships and activities within “group-based” organizations indicate substantial group identification (Kaiser & Pratt-Hyatt, 2009).

was manipulated successfully. Specifically, the raters perceived the high identity victim ($M=5.80$, $SD=0.59$) as being more identified than the low identity victim ($M=2.03$, $SD=0.51$), $t(38)=21.53$, $p<0.001$, $\eta_p^2=0.92$, 95% C.I [4.12; 3.41]. Similar independent rater manipulation checks have been employed in previous intergroup prejudice research (Johnson & Lecci, 2019a, 2019b; Johnson et al., 2019).

Central Outcome Measures

Perceived victim culpability Perceptions of victim culpability were assessed by averaging responses to two items on 7-point Likert scale: (a) *Is Suzan solely responsible for her termination? (1-definitely no, 7-definitely yes)*; and (b) *To what extent is Suzan responsible for her termination? (1-a very small extent, 7-a great extent)*. The two-item Spearman Brown reliability coefficient for these items is 0.70 (see Eisinga et al., 2013). Higher scores indicate perceptions that Suzan was more responsible for her termination.

Endorsement of Co-Worker Support Participants answered the following question: *“Did Suzan deserve any form of support from her coworkers?” (1-Definitely no, 7-Definitely yes)*. The measure was included because one form of dehumanization involved the perception that a person is not “worthy” of any form of support or humane treatment when they are harmed (Gray et al., 2007; Haslam & Loughnan, 2014;). Moreover, Baron and Richardson (1994) contend that this form of dehumanization occurs when an individual believes that another person is undeserving of the respect, kindness, and support that is usually afforded to one’s self and other, more worthy, individuals.

Termination endorsement. To determine the extent that the participants sanctioned (i.e., endorsed) the termination of the target, they were asked *“Do you think Suzan deserved to be suspended and terminated by her supervisor?” (1-Definitely no, 7-Definitely yes)*.

Additional Outcome Measures

Victim dehumanization Dehumanization was assessed by items focused on *mind attribution* which involves the assumption that the target is not capable of experiencing higher level emotional and cognitive experiences (see Gray et al., 2007). For this measure, participant responded to four items that assessed the frequency with which they projected that the transgender victim engaging in four mental activities (planning activities, abstract thinking, logical thinking, and feelings for others) on a 7-point scale from 1 (hardly ever) to 7 (very frequently). The averaged ($\alpha=0.81$) reverse scores denote dehumanization.

Interaction Acceptability To determine perceptions regarding whether it was appropriate for the victim to interact with the clients, they were asked *“Do you think that Suzan (or any other transgender person) should be allowed to interact with clients? (1-Definitely no, 7-Definitely yes)*.

All results for the additional outcome measures are presented in the *Supplemental Analysis*.

Statistical Analysis Plan

Analysis of the Interaction

Because transgender prejudice is a continuous variable, PROCESS Model 1 was run (Hayes, 2013) to determine the significance of the expected interaction between identity type and transgender prejudice. PROCESS is a software application that executes path analysis–based moderation and mediation analysis using ordinary least squares (OLS) regression. Prejudice scores were mean-centered (Aiken & West, 1991).

Probing the Interactions

We predicted an interaction such that the influence of victim identity type would be greater for the high relative to the low prejudice participants. To probe this expected interaction between identity type and transgender prejudice, the Omnibus Groups Regions of Significance (OGRS, Hayes & Montoya, 2017; Montoya, 2016) Macro was employed. OGRS probes the effect of X on Y using an approximation of the Johnson-Neyman procedure. The macro produces a table of the lowest to highest values of the continuous variable (i.e., centered transgender prejudice scores) and F -ratios for the effect of the dichotomous variable (i.e., identity type) at each of those values with the corresponding R^2 and p -values. This approach produces a robust and fairly accurate algorithm with maximum error estimates under 0.5% (Montoya, 2016). All of the reported differences will be at the 0.05 level or less.

Results

Assessing the Independence of Prejudice level and the Effect of Identity Type

The overall effect of identification type on transgender prejudice level did not reach significance, $t(292)=0.34$, $p=0.73$. Thus, it can be concluded that the measured individual difference variable of transgender prejudice level was independent of the experimental manipulation for victim identification.

Correlations Between Variables

Table 1 provides a summary of the correlations between the relevant variables.

Table 1 Pearson Correlations between the Major Variables of Interest (Full Data, Strongly Identified, Weakly Identified)

	TPL	VC	SE	TE
<i>Full data</i>				
Transgender prejudice level	–	.28***	–.16**	.35***
Victim culpability	–	–	–.33***	.55**
Support endorsement	–	–	–	–.41***
Termination endorsement	–	–	–	–
<i>Strongly Identified</i>				
Transgender prejudice level	–	–.38***	–.34***	–.51***
Victim culpability	–	–	–.43***	–.58***
Support endorsement	–	–	–	–.48***
Termination endorsement	–	–	–	–
<i>Weakly Identified</i>				
Transgender prejudice level	–	.15	.05	.16*
Victim culpability	–	–	–.21*	.54***
Support endorsement	–	–	–	–.34***
Termination endorsement	–	–	–	–

*Correlations are significant at $p < .05$ level (2 tailed tests of significance)

**Correlations are significant at $p < .01$ level (2 tailed tests of significance)

***Correlations are significant at $p < .001$ level (2 tailed tests of significance)

Perceived Victim Culpability

The impact of identity type did not reach significance for perceived victim culpability, $t(292) = 1.16, p = 0.247, \eta^2 = 0.005$.

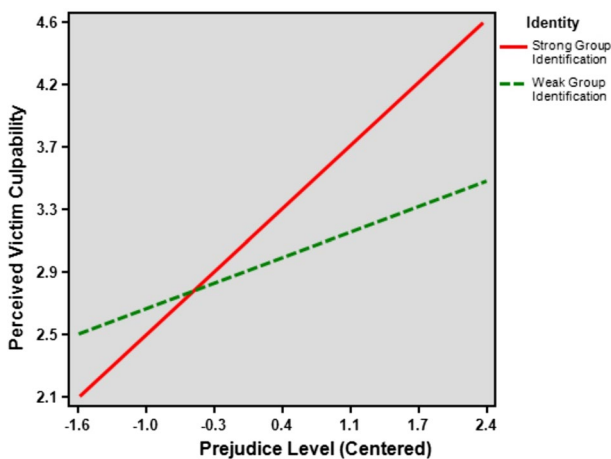


Fig. 1 Perceived victim culpability as a function of centered transgender prejudice scores. Greater values indicate greater perceived culpability and prejudice

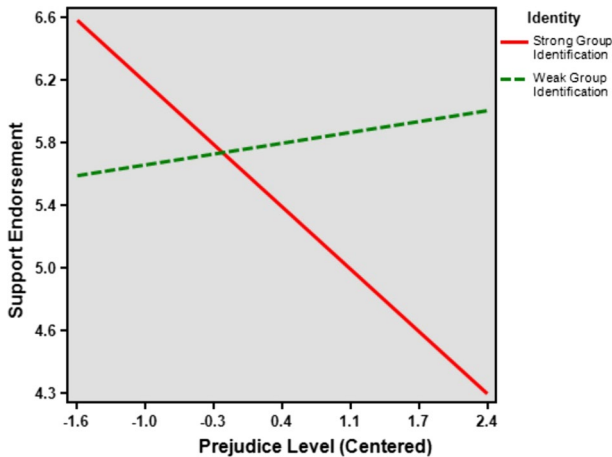


Fig. 2 Support endorsement as a function of centered transgender prejudice scores. Greater values indicate greater support endorsement and prejudice

Consistent with Hp1 (see Fig. 1), a PROCESS Model 1 (Hayes, 2013) analysis revealed that the interaction between victim group identification and prejudice level reached significance for perceived victim culpability, $R^2\text{-Change}=0.012$, $F(1, 290)=3.99$, $p=0.047$, $B=-0.38$, 95% C.I. $-0.75, -0.005$.

The OGRS analysis revealed that, at lower prejudice levels (values of 0.38 and below), there was no impact of identification type on perceived culpability. However, at higher prejudice levels (0.58 and above), participants reported greater perceived culpability in the strong group identification condition relative to the weak group identification condition. Transgender prejudice scores were centered at their mean. The centered prejudice level scores ranged from -1.62 to 2.38 .

Endorsement of Co-Worker Support

The impact of identity type did not reach significance for support endorsement, $t(292)=0.78$, $p=0.435$, $\eta^2=0.002$.

Consistent with Hp2 (see Fig. 2), the interaction between victim group identification and prejudice level reached significance for support endorsement, $R^2\text{-Change}=0.035$, $F(1, 290)=10.86$, $p=0.001$, $B=0.68$, 95% C.I. $0.27, 1.08$. Unexpectedly, the OGRS analysis revealed that at lower prejudice levels (values of -1.02 and below), participants reported a “favorability bias” towards the strongly relative to weakly identified victim. Specifically, there was greater support endorsement in the strong relative to the weak identity victim condition. At moderate prejudice levels (values of -0.82 to 0.38), there was no influence of identity type on support endorsement. However, at higher prejudice levels (0.58 and above), participants reported greater support endorsement in the weak relative to the strong identification condition.

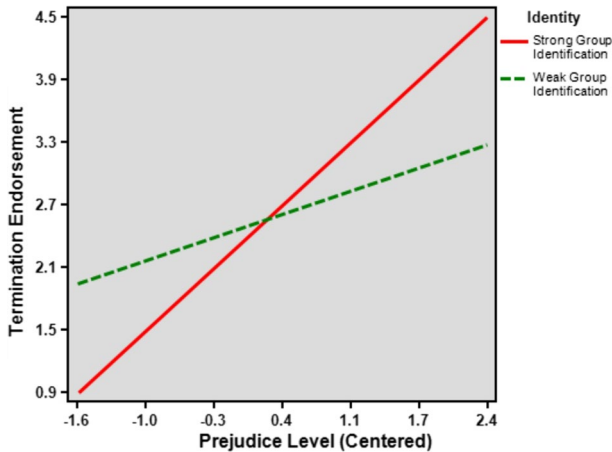


Fig. 3 Termination Endorsement as a function of centered transgender prejudice scores. Greater values indicate greater termination sanctioning and prejudice

Termination Endorsement

The impact of identity type did not reach significance for termination endorsement, $t(292) = 0.52$, $p = 0.602$, $\eta^2 = 0.001$.

Consistent with Hp3 (see Fig. 3), the interaction between victim identification and prejudice level reached significance for termination endorsement, $R^2\text{-Change} = 0.022$, $F(1, 290) = 7.47$, $p = 0.006$, $B = -0.56$, 95% C.I., $-0.97, -0.15$. Consistent with the support endorsement findings, OGRS analysis revealed that at lower prejudice levels (values of -0.42 and below), participants reported a “favorability bias” towards the strongly relative to weakly identified victim. Specifically, there was less termination endorsement in the strong relative to the weak identity victim condition. At moderate prejudice levels (values of -0.42 to 1.38), there was no influence of identity type on termination endorsement. However, at higher prejudice levels (1.58 and above), participants reported greater endorsement in the strong relative to the weak identification condition.

Discussion

Despite the support of international human rights groups and laws against gender identity anti-discrimination (International Commission of Jurists, 2009), there is still persistent evidence that transgender individuals face significant discrimination in all phases of the employment process (Baker, 2017; Irving, 2015; Schilt & Wiswall, 2008). The present study represents one of the first empirical investigations of factors that might influence societal reactions to such transgender-directed workplace mistreatment. As expected, at higher prejudice levels, those in the strong group identification condition reported greater perceived victim culpability, less endorsement for victim-directed support, and greater termination endorsement than those

in the weak identity condition. Surprisingly, at lower prejudice levels, there was evidence of participants reported a “favorability bias” towards the strongly relative to weakly identified victim. Specifically, there was greater endorsement for co-worker support and less termination endorsement in the strong relative to the weak identity victim condition.

More broadly, the current study provides an insight into LGBTI+-related discrimination in a cultural context with a complex history of gendered and sexual politics. Specifically, similar to other countries in the broader Pacific Region, Fiji has a traditional gender system that go beyond binary oppositions between men and women and included gendered categories such as *vaka sa lewa lewa* (lit. in the manner of a woman) that has invariably been considered an intermediate (Besnier, 1994) or third gender population (cf. Besnier & Alexeyeff, 2014; Herdt, 1994). Moreover, there is a substantial amount of qualitative evidence of persistent LGBT-related discrimination in the Pacific Region of the world (Bhatia, 2019; Carruthers, 2016; Graue, 2018) and Fiji (Hill, 2017; Movono, 2017). Importantly, the current research extended the LGBT-prejudice research by identifying *psychological mechanisms* that might underlie such prejudice in that region of the world.

The current study both supported and extended the Prejudice Distribution Account theoretical perspective in several ways. First, the present analysis moved beyond an assessment of prejudice distribution in the context of general attitudes and positive behavioral intentions (Kaiser & Pratt-Hyatt, 2009) by providing evidence of the robustness and “insidious nature” of prejudice distribution motivations by demonstrating that they can have a significant impact on third party responding to the *mistreatment* of a minority group member in a workplace setting. Second, the findings provided one of the first empirical demonstrations that prejudice distribution motivations can occur among individuals from a non-Western developing nation and influence non-race related responding (i.e., transgender bias in the workplace). Third, the present study demonstrated that the influence of minority group identification can be moderated by the degree of participant endorsement of prejudicial beliefs regarding that group.

Interestingly, in the current study, there was not a main effect of transgender group identification type on the main outcome variables. The findings revealed that the influence of identity type (i.e., the prejudice distribution effect) was moderated by participants endorsement of transgender prejudice. Consistent with previous research on intergroup bias processes (Johnson & Lecci, 2019a, 2019b), these results suggest that simple main effects analysis are not sensitive enough to detect the “fine grained and nuanced” processes (e.g., variability in racial identity or racial prejudice) that drive contemporary prejudicial responding. Moreover, unlike the studies with a Black target (Studies 1–4), the findings of Kaiser and Pratt-Hyatt (2009, Study 5) revealed that there was no main effect of the Latino target’s level of identification on subsequent attitudes toward the target. The authors speculated that White Americans may have a less well-developed sense of Latino American identification relative to Black American identity. Consequently, this could have led to significant variability in the responses associated with Latino identification (and reduced likelihood of main effects). Similarly, in the present study, it is possible that participants do not have a very clear concept of “transgender identity” which may

also have led to high variability in their responses. Transgender is a relatively recent social category in local discourse, and it is likely that various participants will have a different perception about its meaning depending on their social and cultural context. Further study that uses more established local terminology and social categorization for gender variance and non-heteronormative social performances should be conducted to contextualize these results. Future research to directly address this issue seems warranted.

Importantly, the current findings demonstrated that the strongly identified transgender victim “bared the brunt” of the impact of prejudice. Specifically, at high levels of prejudice among our participants, the strongly identified victim received greater negative and less positive outcomes than the weakly identified victim. In related research, relative to low levels of victim stereotypicality (i.e., the extent that they possess characteristics that are stereotypically associated with their group), high levels of minority group stereotypicality has also been shown to be more likely to facilitate negative outcomes for a disadvantaged group victim of mistreatment. Specifically, across three studies, there was a clear pattern of the stereotypical Black male target of police violence being impacted more negatively by participant characteristics (e.g., racial identification) than the counterstereotypical victim (Johnson & Lecci, 2019a, 2019b; Johnson et al., 2019). It would be interesting to assess whether such influences of transgender victim stereotypicality would be similarly moderated by participant characteristics.

One relevant issue involves the basis of strong identity favorability bias among low prejudiced participants (i.e., there was greater endorsement for co-worker support and less termination endorsement in the strong relative to the weak identity victim condition). We believe that these findings indicate that, contradictory to the assertion that low prejudiced persons are truly “unbiased” (Devine, 1989), these individuals actually harbor a “positivity bias” towards minority group members (especially those who face racially-driven mistreatment). Given that highly identified transgender individuals would likely be perceived as most prototypical (Rothbart & John, 1985), they received the “bulk of the benefit” from being strongly identified to their group. This assertion is consistent with theoretical perspectives demonstrating that those who are not strongly attached to hierarchical and racist social systems tend to be especially sensitive to the struggles of minority group members who face mistreatment from majority group members. For example, the *Social Explanations Framework* (Andreychik & Gill, 2009; Gill & Andreychik, 2007) suggests that Whites who do not feel a strong connection or derive any social value from being White (i.e., low identifiers) tend to show a significant degree of empathy and compassion for minority group members who suffer from any form of systematic and/or specific group-directed bias. Further, in their seminal paper, Pratto et al. (1994) defined *social dominance orientation* as the extent to which one desires that one’s in-group dominate and be superior to outgroups. They further stated that those lower on social dominance orientation tend to favor hierarchy-attenuating ideologies and policies that reflect support for eradicating or reducing ethnic inequality. Thus, they should report reactions that tend to favor struggling minority group members.

Practical Implications

Importantly, a number of studies have shown that perceptions of strong ethical practices within a company can influence the public's purchase intentions (Smith & Higgins, 2000; Varadarajan & Menon, 1988) and increase willingness to pay a greater price for products (Creyer & Ross, 1997; Ramasamy & Yeung, 2008). In addition, there is growing anecdotal (Birkner, 2016; Smith, 2013) and experimental (Arly & Tjiptono, 2014) evidence that public perceptions of fair and ethical treatment of employees can impact their consumer behavior towards that company. For example, Skarlicki & Rupp (2010) suggest that relevant third parties (i.e., friends, families, co-workers) who become aware of employee mistreatment can engage in retributive responses towards the company, convince the victim that their rights have been violated (Barley, 1991), and/or to take legal action against the employer (Goldman, 2001). Finally, Gracia and Herrero (2007) contend that third party strong beliefs regarding the unfair treatment against disadvantaged individuals tends to create a climate of social intolerance for such negative treatment. Importantly, the present finding provided evidence of the conditions (i.e., an interplay of victim identity type and third party prejudice level) that might facilitate or inhibit such third party corporate-directed negative reactions for employee mistreatment and the actual support of the victimized employee.

Given the current findings, line managers should always be cognizant of their own negative treatment (i.e., potential abusive supervisor) and the broader incidence and impact of unfairness towards those in the organization whose behavior, looks, or actions do not conform to conventional societal norms. In addition, our results have also important implications for diversity managers in organizations and unions who design, implement, and evaluate initiatives that aim at promoting diversity within a company or organization. It is likely that both line managers and diversity managers tend to focus on mistreatment of minority group members as a broad category. This focus seems reasonable given the significant amount of attention that has been focused on combatting abusive supervision and discrimination in the workplace based on group membership. For example, there are strong laws prohibiting gender-based, race-based, disability-based discrimination in the workplace in several countries (c.f. European Union Agency for Fundamental Rights and European Court of Human Rights—Council of Europe, 2011; United States Equal Employment Opportunity Commission, 2016). However, the current findings suggest that those who are responsible for organizational equity, diversity, and fair treatment should also give greater attention to potential “intragroup factors” (i.e., identity levels) that might lead to unfair treatment towards minority group members.

Limitations and Conclusion

One limitation of the current study involves whether the results from Fiji, a developing country in the Pacific Regions, will generalize to other parts of the world. Although future research needs to test this, one could argue that research findings from a Fijian population are more representative of the world than research

findings from an American or any other Western sample. Specifically, the United Nations classifies all of Europe and North America along with Japan, Australia and New Zealand as developed regions (representing only 15% of the world's population), whereas as many as 159 other countries are viewed as developing (Khokar, 2015). Moreover, there are vast differences in these developing countries that can be explored in future research. Furthermore, while the current study certainly extends the third party responding to the workplace mistreatment literature, it does not involve actual workplace mistreatment. Clearly, running experiments on actual unfair treatment in the workplace is difficult if not impossible due to ethical problems. Thus, using scenario experiments is likely the only way to obtain causal evidence in this kind of research. This is especially true when the empirical focus involves examining responses from the general public and not members of the relevant organization. Finally, our sample was limited to university students which could limit the generalizability of our findings to a broader sample.

In conclusion, the present findings clearly suggest that minority group member identity dampening may, in fact, be an effective means of reducing the likelihood of suffering the negative impact of majority group prejudice in the workplace. However, there was also evidence that identity dampening may lead to greater negative minority-group outcomes from those who do not endorse prejudicial beliefs. Finally, it would be worthwhile for future research to empirically explore the cognitive, social, and emotional *costs* of identity suppression among minority group members.

References

- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.
- Andrasik, M. P., Yoon, R., Mooney, J., Broder, G., Bolton, M., Votto, T., & Davis-Vogel, A. (2014). Exploring barriers and facilitators to participation of male-to-female transgender persons in preventive HIV vaccine clinical trials. *Prevention Science, 15*(3), 268–276. <https://doi.org/10.1007/s11121-013-0371-0>
- Andreychik, M. R., & Gill, M. J. (2009). Ingroup identity moderates the impact of social explanations on intergroup attitudes: External explanations are not inherently prosocial. *Personality and Social Psychology Bulletin, 35*(12), 1632–1645. <https://doi.org/10.1177/0146167209345285>
- Arly, D., & Tjiptono, F. (2014). Does corporate social responsibility matter to consumers in Indonesia? *Social Responsibility Journal, 10*, 537–549.
- Baker, K. E. (2017). The future of transgender coverage. *The New England Journal of Medicine, 376*(19), 1801–1804. <https://doi.org/10.1056/NEJMp1702427>
- Barley, S. R. (1991). Contextualizing conflict: Notes on the anthropology of disputes and negotiations. In M. Bazerman, R. Lewicki, & B. H. Sheppard (Eds.), *Research on negotiation in organizations* (Vol. 3, pp. 165–202). JAI.
- Baron, R. A., & Richardson, D. R. (1994). *Human aggression*. Plenum Publishing Corporation.
- Besnier, N. (1994). Polynesian gender liminality through time and space. In G. Herdt (Ed.), *Third gender: Beyond sexual dimorphism in culture and history* (pp. 285–328). Zone.
- Besnier, N., & Alexeyeff, K. (Eds.). (2014). *Gender on the edge: Transgender, Gay and other Pacific Islanders*. University of Hawaii Press.
- Bhatia, R. (2019). *Travellers should boycott Cook Islands over anti-gay law, Pacific leader says*. <https://www.stuff.co.nz/travel/117170608/travellers-should-boycott-cook-islands-over-antigay-law-pacific-leader-says>.

- Birkner, C. (2016). How treating employees well boosts brand value. Retrieved January 2, 2021 from <http://www.adweek.com/brand-marketing/how-treating-employees-well-boosts-brand-value-171409/>.
- Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health, 103*(5), 943–951. <https://doi.org/10.2105/AJPH.2013.301241>
- Carruthers, F. (2016). *Why the Pacific islands cry on 17 May*. <https://www.amnesty.org.nz/why-pacific-islands-cry-17-may>.
- Creyer, E. H., & Ross, W. T. (1997). The influence of firm behaviour on purchase intention: Do consumers really care about business ethics. *Journal of Consumer Marketing, 14*, 421–432. <https://doi.org/10.1108/07363769710185999>
- Davidson, M. (2014). Development and validation of the transgender prejudice scale. *Unpublished master's thesis*.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology, 56*, 5–18. <https://doi.org/10.1037/0022-3514.56.1.5>
- Devine, P. G., Monteith, M. J., Zuwerink, J. R., & Elliot, A. J. (1991). Prejudice with and without compunction. *Journal of Personality and Social Psychology, 60*(6), 817–830. <https://doi.org/10.1037/0022-3514.60.6.817>
- Dovidio, J. F., & Gaertner, S. L. (Eds.). (1986). *Prejudice, discrimination, and racism*. Academic Press.
- Eisinga, R., te Grotenhuis, M., & Pelzer, B. (2013). The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown? *International Journal of Public Health, 58*(4), 637–642. <https://doi.org/10.1007/s00038-012-0416-3>
- Equaldex (2018). *LGBT Rights in Fiji*. Retrieved January 12, 2021 from <https://www.equaldex.com/region/fiji>.
- European Union Agency for Fundamental Rights and European Court of Human Rights (2011). Retrieved January 15, 2020 from <https://fra.europa.eu/en/cooperation/council-of-europe>.
- Fox, L. (2018). *Murdered on International day against Transphobia: Fears Fiji killing is a hate crime*. <https://www.abc.net.au/news/2018-07-23/trans-woman-murdered-in-fiji-in-suspected-hate-crime/10026188>
- George, N. (2008). Contending masculinities and the limits of tolerance: Sexual minorities in Fiji. *The Contemporary Pacific, 20*(1), 163–189.
- Gill, M. J., & Andreychik, M. R. (2007). Explanation and intergroup emotion: Social explanations as a foundation of prejudice-related compunction. *Group Processes & Intergroup Relations, 10*, 87–10. <https://doi.org/10.1177/1368430207071343>
- Goldman, B. M. (2001). Toward an understanding of employment discrimination claiming: An integration of organizational justice and social information processing theories. *Personnel Psychology, 54*, 361–386. <https://doi.org/10.1111/j.1744-6570.2001.tb00096.x>
- Gracia, E., & Herrero, J. (2007). Perceived neighborhood social disorder and attitudes toward reporting domestic violence against women. *Journal of Interpersonal Violence, 22*(6), 737–752. <https://doi.org/10.1177/0886260507300755>
- Grant, J. M., Mottet, L. A., Tanis, J., Harrison, J., Herman, J. L., & Keisling, M. (2011). *Injustice at every turn: A report of the national transgender discrimination survey*. National Center for Transgender Equality and National Gay and Lesbian Task Force.
- Graue, C. (2018). *Pacific Islands Forum urged to pressure members on homosexuality laws*. <https://www.abc.net.au/radio-australia/programs/pacificbeat/lgbt-pac-petition/10024466>.
- Gray, H. M., Gray, K., & Wegner, D. M. (2007). Dimensions of mind perception. *Science, 315*(5812), 619–619. <https://doi.org/10.1126/science.1134475>
- Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology, 65*, 399–423. <https://doi.org/10.1146/annurev-psych-010213-115045>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Hayes, A. F., & Montoya, A. K. (2017). A tutorial on testing, visualizing, and probing an interaction involving a multicategorical variable in linear regression analysis. *Communication Methods and Measures, 11*(1), 1–30. <https://doi.org/10.1080/19312458.2016.1271116>
- Herdt, G. (Ed.). (1994). *Third Gender: Beyond sexual dimorphism in culture and history*. Zone.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*(2–3), 61–83. <https://doi.org/10.1017/S0140525X0999152X>

- Hill, B. (2017) *Day against homophobia marked in Fiji with press conference*. Retrieved on April 28, 2020 from <https://www.abc.net.au/radio-australia/programs/pacificbeat/day-against-homophobia-marked-in-fiji-with-press/8533992>.
- Howe, B. (2018). *Denying transgender identity has serious impact on mental health*. <https://www.sfchronicle.com/news/article/Denying-transgender-identity-has-serious-impact-13456675.php>.
- International Commission of Jurists. (2009). *Sexual orientation, Gender Identity and International Human Rights Law – Practitioners Guide No. 4*. <http://www.refworld.org/pdfid/4a783aed2.pdf>.
- Irving, D. (2015). Performance anxieties: Trans (women's) un(der)-employment experiences in postfordist society. *Journal of Australian Feminist Studies*, 30(83), 50–64. <https://doi.org/10.1080/08164649.2014.998455>
- James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. Transgender Survey [Internet]*. Washington, DC: National Center for Transgender Equality. <http://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF>.
- Johnson, J. D., & Lecci, L. (2019a). How caring is “nullified”: Strong racial identity eliminates White participant empathy effects when police shoot and unarmed Black male. *Psychology of Violence*. <https://doi.org/10.1037/vio0000228> Published ahead of print.
- Johnson, J., & Lecci, L. (2019b). Does empathy undermine justice? Moderating the impact of empathy for a white policeman on responses to police interracial violence. *British Journal of Social Psychology*. <https://doi.org/10.1111/bjso.12347> Published ahead of print.
- Johnson, J., Lecci, L., & Dovidio, J. (2019). Black intragroup empathic responding to police interracial violence: Effects of victim stereotypicality and blacks' racial identification. *Social Psychological and Personality Science*. <https://doi.org/10.1177/1948550619859316> Published ahead of print.
- Kaiser, C. R., & Pratt-Hyatt, J. S. (2009). Distributing prejudice unequally: Do Whites direct their prejudice towards strongly identified minorities? *Journal of Personality and Social Psychology*, 96, 432–445. <https://doi.org/10.1037/a0012877>
- Kang, S. K., DeCelles, K. A., Tilcsik, A., & Jun, S. (2016). Whitened résumés: Race and self-presentation in the labor market. *Administrative Science Quarterly*, 61(3), 469–502.
- Khokar, T. (2015). *Should we continue to use the term “developing world”?* <http://blogs.worldbank.org/opendata/should-we-continue-use-term-developing-world>.
- Kumar, V. (2018). *Transgender call for protection*. <https://www.fijitimes.com/transgender-call-for-protection/>.
- Loughnan, S., Haslam, N., Murnane, T., Vaes, J., Reynolds, C., & Suitner, C. (2010). Objectification leads to depersonalization: The denial of mind and moral concern to objectified others. *European Journal of Social Psychology*, 40(5), 709–717. <https://doi.org/10.1002/ejsp.755>
- Mangubhai, F., & Mugler, F. (2003). The language situation in Fiji. *Current Issues in Language Planning*, 4(3 & 4), 376–458. <https://doi.org/10.1080/14664200308668058>
- Major, B., Kaiser, C. R., O'Brien, L. T., & McCoy, S. K. (2007). Perceived discrimination as worldview threat or worldview confirmation: Implications for self-esteem. *Journal of Personality and Social Psychology*, 92, 1068–1086. <https://doi.org/10.1037/0022-3514.92.6.1068>
- Minter, S., & Daley, C. (2003). *Trans realities: A legal needs assessment of San Francisco's transgender communities*. <http://www.nclrights.org/wp-content/uploads/2013/07/transrealities0803.pdf>.
- Montoya, A. K. (2016). *Extending the Johnson-Neyman technique to categorical independent variables: Mathematical derivations and computational tools* (Master's thesis). The Ohio State University.
- Movono, L. (2017). *Fiji Victims Of Anti-Gay Violence Often Fear Community Repercussions If They Report Attacks To Police*. Pacific Islands Report, 3 December 2017. <http://www.pireport.org/articles/2017/03/12/fiji-victims-anti-gay-violence-often-fearcommunity-repercussions-if-they-report>.
- Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75, 811–832. <https://doi.org/10.1037/0022-3514.75.3.811>
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741–763. <https://doi.org/10.1037/0022-3514.67.4.741>
- Presterudstuen, G. H. (2014). Men Trapped in Women's Clothing: Homosexuality, cross-dressing and manhood in Fiji. In N. Besnier & K. Alexeyeff (Eds.), *Gender on the edge: Transgender, Gay and other Pacific Islanders* (pp. 162–183). University of Hawaii Press.
- Presterudstuen, G. H. (2019). Understanding Sexual and Gender Diversity in the Pacific Islands. In J. Ravulo, T. Mafile'o, & B. Yeates (Eds.), *Pacific social work: Navigating practice, policy and research* (pp. 161–171). Routledge.

- Ramasamy, B., & Yeung, M. (2008). Chinese consumers' perception of corporate social responsibility. *Journal of Business Ethics*, 88, 119–132.
- Recruiting Times. (2018). *One in three UK employers say they are 'less likely' to hire a transgender Employee*. <https://recruitingtimes.org/news/23539/one-in-three-uk-employers-say-they-are-less-likely-to-hire-a-transgender-employee/>.
- Rothbart, M., & John, O. P. (1985). Social categorization and behavioral episodes: A cognitive analysis of the effects of intergroup contact. *Journal of Social Issues*, 41, 81–104. <https://doi.org/10.1111/j.15404560.1985.tb01130.x>
- Rothbart, M., & Lewis, S. (1988). Inferring category attributes from exemplar attributes: Geometric shapes and social categories. *Journal of Personality and Social Psychology*, 55, 861–872. <https://doi.org/10.1037/0022-3514.55.6.861>
- Scheim, A. I., Bauer, G. R., & Shokoohi, M. (2017). Drug use among transgender people in Ontario, Canada: Disparities and associations with social exclusion. *Addictive Behaviors*, 72, 151–158. <https://doi.org/10.1016/j.addbeh.2017.03.022>
- Schilt, K., & Wiswall, M. (2008). Before and after: Gender transitions, human capital, and workplace experiences. *Journal of Economic Analysis and Policy*, 8(1), 1–28. <https://doi.org/10.2202/1935-1682.1862>
- Skarlicki, D. P., & Rupp, D. E. (2010). Dual processing and organizational justice: The role of rational versus experiential processing in third-party reactions to workplace mistreatment. *Journal of Applied Psychology*, 95, 944–952. <https://doi.org/10.1037/a0020468>
- Smith, W., & Higgins, M. (2000). Cause-related marketing: Ethics and the ecstatic. *Business and Society*, 39, 304–322. <https://doi.org/10.1177/000765030003900304>
- Smith, J. (2013). *The Companies With the Best CSR Reputations*. Retrieved January 1, 2021 from <http://www.forbes.com/sites/jacquelynsmith/2013/10/02/the-companies-with-the-best-csr-reputations-2/#54d1eedb22bc>.
- Undark, M. (2020). *Psychology Research Skews White and Wealthy*. <https://www.spectrumnews.org/opinion/psychology-research-skews-mostly-white-and-wealthy/>.
- United States Equal Rights Employment Opportunity Commission (2016) Laws enforced by the EEOC. Retrieved on October 2016 from <https://www.eeoc.gov/laws/statutes/>.
- Varadarajan, P. R., & Menon, A. (1988). Cause-related marketing: A coalition of marketing strategy and corporate philanthropy. *Journal of Marketing*, 52, 58–74. <https://doi.org/10.1177/002224298805200306>
- Weber, R., & Crocker, J. (1983). Cognitive processes in the revision of stereotypic beliefs. *Journal of Personality and Social Psychology*, 45, 961–977. <https://doi.org/10.1037/0022-3514.45.5.961>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Authors and Affiliations

James D. Johnson¹ · Monika Prasad¹ · David N. Sattler² · Geir Henning Presterudstuen³ · Maria Giuseppina Pacilli⁴  · Stefano Pagliaro⁵

¹ The University of the South Pacific, Suva, Fiji

² Western Washington University, Bellingham, USA

³ Western Sydney University, Penrith, Australia

⁴ University of Perugia, Perugia, Italy

⁵ Università degli Studi di Chieti-Pescara, Chieti, Italy