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Group cohesion benefits individuals who express prejudice, but harms their group



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ABSTRACT

When someone expresses prejudice against an outgroup, how negatively do we judge the prejudiced individual and his or her ingroup? Previous lines of research suggest that the answer depends on the ingroup's *entitativity*—i.e., how cohesive it is—but they make different predictions about whether entitativity should increase or decrease outside observers' negative reactions to prejudice. We resolve this tension by demonstrating divergent consequences of entitativity for prejudiced individuals versus their groups. Mediational and experimental data from six studies (two pre-registered; N = 2455) support two hypotheses: Entitativity increases how responsible the group seems for its member's prejudice, which in turn *decreases* how unacceptable observers find the member's behavior and how much they condemn her (H1), but which also *increases* how much they condemn the group (H2). Thus, entitativity can grant individuals a license to express prejudice but can damage their group's reputation.

1. Introduction

In May of 2018, actress Rosanne Barr, a vocal Trump supporter, publicly compared Valerie Jarrett, a former Obama advisor, to an ape. Given that Jarrett is African American, the comment was widely labeled as racist. In the ensuing social media storm, commentators argued about how much condemnation Barr deserved, and how much to blame other Trump supporters who were not involved in the incident (Chow, 2018; Flood, 2018).

When an individual expresses prejudice, how harshly do observers judge the individual and the group to which he or she belongs? Research on intergroup relations suggests that the answer depends on how much of a cohesive, unified entity these observers believe the individual's ingroup is—that is, how *entitative* it seems (Campbell, 1958; Hamilton & Sherman, 1996). However, it is unclear exactly what effect these entitativity perceptions will have. One line of research suggests that group entitativity invites censure from outsiders when some group members commit transgressions (see Lickel, Hamilton, & Sherman, 2001). Another line of research suggests that group entitativity reduces censure when group members express prejudice (Effron & Knowles, 2015). The present research seeks to resolve this tension, and does so by offering a new perspective on when and how entitativity benefits versus harms groups and their members (Castano, Sacchi, & Gries, 2003; Dang, Liu, Ren, & Gu, 2017; Dasgupta, Banaji, & Abelson, 1999; Newheiser & Dovidio, 2015; Newheiser, Sawaoka, & Dovidio, 2012). We begin by outlining the two existing perspectives in more depth.

1.1. Entitativity invites more negative reactions to prejudice

There is reason to believe that entitativity will invite censure when a member of a group expresses anti-outgroup prejudice. Groups that appear more entitative are held more *collectively responsible* when a subset of members transgresses (e.g., Lickel & Onuki, 2015; Waytz & Young, 2012). In other words, the group is assumed to have caused or allowed the transgression directly or indirectly (Lickel et al., 2001), in part because observers think members of entitative groups readily influence each other's behavior (Denson, Lickel, Curtis, Stenstrom, & Ames, 2006). For example, the more cohesive people viewed a high school clique as being, the more responsible they held it for a school shooting committed by two of its members (Lickel, Schmader, & Hamilton, 2003). Extrapolating from existing research, it seems likely that more-entitative groups would be held more responsible for prejudice expressed by an individual member. Being held responsible for prejudice could damage the group's reputation and even invite retribution against the group (Gaertner, Iuzzini, & O'Mara, 2008; Sjöstström & Gollwitzer, 2015; Stenstrom, Lickel, Denson, & Miller, 2008). So according to this perspective, when a group member expresses prejudice, entitativity invites more negative reactions from observers outside the group.

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1.2. Entitativity invites less negative reactions to prejudice

In contrast to the collective-responsibility perspective, there is also evidence that a group's entitativity can reduce censure when a group member expresses prejudice by providing a license for the prejudice. The term *license* describes the degree of legitimacy someone has to do or say something that would otherwise be discrediting (Miller & Effron, 2010). The more license people have, the less unacceptable their behavior seems to the broader community (Effron & Knowles, 2015), and the less moral condemnation they receive (Effron & Monin, 2010). Prejudice rarely receives a complete pass (Fiske, 1998), but some people are afforded greater license for prejudice than others (Effron & Monin, 2010: Hornsey, Oppes, & Svensson, 2002: Thai, Hornsey, & Barlow, 2016). Suggesting that the appearance of group entitativity can license prejudice, participants estimated that their peers would find the same acts of racial, national, and religious bias less unacceptable when committed by members of more-entitative versus less-entitative outgroups (Effron & Knowles, 2015). The authors argued that observers tend to attribute prejudice in an entitative group to a "rationalistic" desire to defend or advance group interests rather than to irrational hatred, because entitative groups have better-defined collective interests than less-entitative groups. Because this prejudice seems rationalistically motivated, observers judge it to be less socially unacceptable. So according to this perspective, when a group member expresses prejudice, entitativity invites less negative reactions from observers outside the group.

1.3. Resolving the tension

1.3.1. Judgments of prejudiced individuals versus their group

Two different streams of work in the intergroup relations literature—one on collective responsibility, and the other on prejudice licensing—appear to make conflicting predictions about how negatively outside observers will respond to expressions of prejudice from moreversus less-entitative groups. Resolving this tension, we propose, requires distinguishing judgments of the specific member observed expressing prejudice from those of the group to which he or she belongs. The work on collective responsibility measures how people judge groups as a function of their entitativity when a member transgresses, but does not assess judgments of the transgressing member him or herself (e.g., Lickel et al., 2003). By contrast, the work on prejudice licensing measures how people judge an individual for expressing prejudice as a function of whether he or she belongs to an entitative group, but does not assess how people judge the individual's group as a whole (Effron & Knowles, 2015).

We suggest that entitativity will have different effects on an individual observed expressing prejudice versus the rest of his or her group. Consistent with the prejudice-licensing work, we argue that group entitativity makes an individual's prejudice seem more socially acceptable and less deserving of condemnation to outside observers. Simultaneously, consistent with the collective-responsibility work, group entitativity makes the group as a whole seem more responsible for an individual member's prejudice. Thus, when a group member expresses prejudice, entitativity may help get that member off the hook while putting the rest of the group on the hook.

1.3.2. How collective responsibility benefits the prejudiced individual

Further integrating and extending the collective-responsibility and prejudice-licensing perspectives, we argue that entitativity grants individuals a prejudice license precisely *because* entitativity makes the group seem more responsible for the individual's behavior. In other words, we propose collective responsibility as a novel mechanism explaining why entitativity licenses individuals' prejudice.

There are two reasons to expect that people afford greater license to

a prejudiced individual when they hold his or her group collective responsible. First, the prejudiced individual may seem less responsible in light of others' responsibility. This diffusion of responsibility from individual to group (cf. Darley & Latané, 1968; Mynatt & Sherman, 1975) would make the individual's behavior seem less unacceptable because people are judged less harshly when they bear less responsibility for wrongdoing (Shaver, 1985; Weiner, 1995). Second, collective responsibility may seem to justify the prejudice by implying other group members feel the same way. Expressing prejudice may seem less problematic when "everyone is doing it," even if the individual is still viewed as causally responsible for expressing those views (cf. Tedeschi & Reiss, 1981). Both these reasons point to our central claim: that outside observers hold highly entitative groups more responsible than less-entitative groups for an individual member's prejudice, and that these collective responsibility judgments make the individual's behavior seem more socially acceptable and less deserving of condemnation. Stated formally, we hypothesize the following indirect effect:

Hypothesis 1 (H1). Group entitativity increases how collectively responsible the group is held for individual members' prejudice, which in turn increases the license afforded to these specific individuals.

The process through which collective responsibility licenses individuals' prejudicial acts is conceptually distinct from the collectiveinterest mechanism identified in previous research (Effron & Knowles, 2015). The collective-interest mechanism involves judgments about an individual's reasons for acting (Malle, Knobe, O'Laughlin, Pearce, & Nelson, 2000)-whether he or she thinks expressing prejudice will advance or protect the group's interests. In contrast, the collective-responsibility mechanism involves judgments concerning the group's causal relationship to the act-whether the group caused or allowed the expression of prejudice (Lickel et al., 2001; Lickel & Onuki, 2015). Conceptually, collective interests can motivate prejudice without the group bearing any responsibility. For example, a White American could refuse to shop at stores owned by Asian Americans, despite the protests of his White friends, because he thinks Asians are putting White-owned stores out of business. Conversely, a group could bear responsibility for prejudice that is motivated by concerns other than collective interests. The White American could refuse to patronize Asian-owned stores, not because he thinks this will help Whites, but because his White friends convinced him all Asian stores sell poor-quality goods.

1.3.3. How collective responsibility harms the individual's group

We have argued that the collective responsibility pinned on entitative groups benefits the individual expressing prejudice. However, it may also harm the rest of the individual's group. People often condemn and punish those they hold responsible for a wrongdoing (Lickel, Miller, Stenstrom, Denson, & Schmader, 2006; Weiner, 1995). By increasing how responsible the group seems, entitativity could therefore increase how much observers condemn the group for a member's prejudice.

In this sense, entitativity may deprive groups of *collective license* for an individual member's prejudice, even as it grants the individual herself a license. Whereas individual license lets people off the hook for their own actions (Effron & Monin, 2010), collective license—a term we introduce here—lets groups off the hook for a member's actions. Like collective responsibility, collective license is a judgment about how an individual's behavior reflects on the rest of his or her group. But whereas collective responsibility is about causation (i.e., did the group directly or indirectly bring about the individual's behavior?; Lickel et al., 2001), collective license is about moral culpability (i.e., should the group be morally condemned for the individual's behavior?). To further investigate our claim that the appearance of entitativity benefits an individual who expresses prejudice while harming his or her group, we tested whether entitativity increases the degree of license afforded to the prejudiced individual while reducing the license afforded to his or her group.

Our secondary hypothesis is thus an indirect effect in the opposite direction as H1:

Hypothesis 2 (H2). Group entitativity increases how collectively responsible the group is held for individual members' prejudice, which in turn decreases the license afforded to the group.

1.4. Research overview

We tested our primary hypothesis (H1) in a pilot study, four experiments and a follow-up study in which participants considered expressions of prejudice by members of various groups. The pilot-in which participants judged prejudice by members of real religious groups—sought correlational evidence for the proposed relationship between entitativity, collective responsibility, and individual license. Experiment 1 sought causal evidence for this relationship by manipulating entitativity perceptions. Experiment 2 aimed to replicate Experiment 1's findings, empirically distinguish between collective responsibility and collective interests as separate mechanisms, and explore how people judged the prejudiced individual's responsibility. Experiment 3 manipulated collective responsibility to assess its causal role as a mechanism and to test a theoretically relevant boundary condition. Finally, Experiment 4 tested whether the effect predicted by H1 was robust to using a different measure of license, and tested our secondary hypothesis, H2: whether entitativity could reduce the degree of license afforded to the group as a whole for a single member's prejudice despite increasing the degree of license afforded to that member.1

The studies report all measures, conditions, and participant exclusions, and explain how sample sizes were determined (Simmons, Nelson, & Simonsohn, 2012). Experiments 3 and 4 were pre-registered. The Online Supplement reports supplemental analyses for Experiment 3 (Appendix 1), a Follow-Up Study that tests Experiment 3's generalizability (Appendix 2), verbatim study materials (Appendices 3–8), and pre-registration documents (Appendices 9 and 10).

2. Pilot study

This initial study sought correlational evidence in support of H1.

2.1. Method

2.1.1. Participants

Informed by previous work (Effron & Knowles, 2015), we aimed to recruit 250 participants. A sensitivity analysis shows that this sample size provides 80% power at α = 0.05 to detect a small correlation, r = 0.124 (Faul, Erdfelder, Lang, & Buchner, 2007), and an a priori power analysis, conducted with a Monte Carlo simulation (Schoemann, Boulton, & Short, 2017), shows that the sample provides > 88% power to detect the hypothesized indirect effect (H1) assuming modest correlations among all variables, rs = 0.25, and SDs = 1 (computed with 1000 resamples and 20,000 Monte Carlo draws).²

We invited local residents and students enrolled in a lab subject pool in London, England, to complete this online study for $\pounds 2$. They could

only begin if they correctly answered a reading comprehension question and were not using a mobile device to access the study. Of the 255 who began, 237 remained after applying a priori exclusions (i.e., duplicate IP address or participant ID; failed attention check [see below]). Participants represented 47 nationalities and multiple religions (60 Christians, 42 Atheists, 35 Agnostics, 21 Hindus, 14 Muslims, 9 Buddhists, 7 Jews, 28 who selected multiple religions, and 21 who selected "other").

2.1.2. Materials

Each participant considered two of the following three groups: Jews, Christians, and Muslims. For each group, they completed the following measures.

Independent variable: entitativity. Participants completed a sixitem entitativity measure (Denson et al., 2006): how much group members share knowledge, have common goals, have strong interpersonal bonds, have shared norms, can influence each other, and interact with each other ($1 = Not \ at \ all$; $7 = Very \ much \ so$; $\alpha s > 0.81$ for the two groups rated).

Mediator: collective responsibility. Participants assigned responsibility for each of seven prejudiced preferences and behaviors committed by a member of each group (e.g., a Christian who avoids shopping at stores owned by members of other religious groups; 0 = the individual is completely responsible; 100 = other members of the group are completely responsible; averaged across the seven behaviors, $\alpha s > 0.87$). (For a complete list of the prejudiced preference and behaviors, see Online Supplement, Appendix 3, and Effron & Knowles, 2015).

Dependent variable: *license.* As in previous work (Effron & Knowles, 2015), we measured license by asking participants how acceptable it would be, according to the average participant in the study, for a member of each group to commit each of the seven prejudiced behaviors (α s > 0.87; *Not at all, Slightly, Somewhat, Mostly,* and *Entirely* coded 1–5). This operationalization follows from the idea of license as perceived *social* acceptability, a belief about how much one's peers would condone the prejudice (see Miller & Effron, 2010). Estimating the average participant's attitudes also avoids potential floor effects due to participants' reluctance to be seen as personally condoning prejudice.

Control variables. As robustness checks, we measured and controlled for several variables that could covary with entitativity perceptions: a three-item measure of the perceived prevalence of prejudice against the group (e.g., "how common is it for people to be prejudiced against" the relevant group; 1 = Not at all, 7 = Very much so; α s > 0.75; Effron & Knowles, 2015); how warmly participants themselves felt towards the relevant group, and how warmly they thought the average participant in the study felt, rated on feelings thermometers from 0 = Cold to 100 = Warm with 50 = Neutral (Abelson, Kinder, Peters, & Fiske, 1982; Gawronski & Bodenhausen, 2006); a measure of perceived group size ("what percentage of people in Europe do you think identify as" members of the group?); the specific religious group rated (dummy-coded), and a 3-item measure of participants' religiosity adapted from survey research ("how religious do you consider yourself to be?" 1 = Not at all, 4 = Very religious; "how often do you attend religious services?" 1 = Never, 9 = Several times per week; and "howoften do you pray?" 1 = Never, 9 = Several times per day; each itemstandardized before averaging; $\alpha = 0.88$).

Attention check. Participants read a short paragraph that ended with the instruction to select an option labeled "other" and write the word "group" in the blank. As noted, participants who failed to follow directions were excluded (Oppenheimer, Meyvis, & Davidenko, 2009).

2.1.3. Procedure

We first assessed the independent and control variables for each group, and then did the same for the second group. Then we assessed the mediator for each group, and the dependent variable for each group.

¹ Our theorizing does not suggest hypotheses about whether entitativity has different effects on the license afforded to *one individual who expresses prejudice* versus *a group of individuals who all express prejudice* (see Abelson, Dasgupta, Park, & Banaji, 1998), but we explored this issue in Experiment 2 and discuss it in the General Discussion.

² Schoemann et al.'s methods produce power calculations for fully betweensubjects designs. Because the Pilot Study has a repeated measures component, its power exceeds 88%.

2.2. Results

2.2.1. Hypothesis test

We analyzed the data in a multilevel mediation model with random intercepts for participants because each participant rated two groups.³ Supporting H1, higher entitativity perceptions predicted greater collective responsibility attributions, which in turn predicted individual license – a significant indirect effect b = 0.02, z = 2.93, p = .003 (see Fig. 1). These results remained robust when we added the control variables, b = 0.02, z = 2.18, $p = .029.^4$ Examining the total effect of entitativity on license (i.e., without specifying a mediated pathway) showed higher entitativity was significantly associated with greater license overall, b = 0.07, z = 2.17, p = .030 without controls, and b = 0.09, z = 2.42, p = .016 with controls.

2.2.2. Exploratory analyses

We explored whether the relationships between entitativity, collective responsibility, and license were moderated by whether participants were members of the specific religious group rated (dummy-coded). Neither moderation effect was significant in a mixed model with random intercepts for participants, b = 1.06, z = 0.67, p = .505 and b = 0.10, z = 1.15, p = .251, respectively. We urge caution in interpreting these null effects, however, because participants rated their religious ingroups for only 70 out of 474 observations.

2.3. Discussion

These results are consistent with our claim that an indirect effect of group entitativity on individual license is mediated by collective responsibility (H1). However, this correlational study does not allow causal inferences. Additionally, because individual and collective responsibility were measured on the same scale, their effects cannot be disentangled. The following studies address these issues by using experimental designs and directly measuring collective responsibility on a separate scale.

3. Experiment 1

3.1. Method

3.1.1. Participants

We targeted 240 U.S.-based Mechanical Turk (MTurk) participants, paid \$0.51 each (Buhrmester, Kwang, & Gosling, 2011). A sensitivity analysis conducted with G*Power indicated that this sample size in our within-subjects design provides 80% power at $\alpha = 0.05$ to detect a mean difference of $d_z = 0.28$ (Cohen, 1988; Faul et al., 2007). An a priori power analysis showed that the power to detect an indirect effect with modest correlations among variables (r = 0.25) and an *SD* of 1 exceeded 85% (Schoemann et al., 2017).⁵

Participants could only access the study if they correctly answered a reading comprehension check, had a U.S. IP address, and were not on a mobile device. Of the 253 people who accessed the study, 221 remained (109 men, 106 women, and 6 unknown gender; M age = 31.33 years, SD = 10.43) after a priori exclusions: providing insufficient data for

analysis,⁶ or failing attention checks described below. There were no duplicate IP addresses or participant IDs.

3.1.2. Materials and procedure

3.1.2.1. Manipulation. Participants read about a pair of fictional religions. Using an established manipulation (Crump, Hamilton, Sherman, Lickel, & Thakkar, 2010), we described one religion as highly entitative (i.e., tightly structured with interdependent members) and one as less entitative (i.e., loosely structured with independent members). After completing the measures for the religious groups, participants read about a pair of fictional nations. To increase generalizability, we used a different entitativity manipulation (McConnell, Sherman, & Hamilton, 1997), describing one nation's members as similar in terms of background, opinions, beliefs, personalities, and behavior (high entitativity) and the other's members as different on these dimensions (low entitativity). We counterbalanced which pair of groups participants saw first, and whether the entitative or non-entitative group was described first within each pair.

3.1.2.2. Entitativity manipulation check. Participants rated each group's entitativity using the established, six-item measure described in the Pilot Study (Denson et al., 2006).

3.1.2.3. Mediator: Collective responsibility. Participants read about a different member of each group who displayed the seven prejudiced preferences and behaviors against outgroups (see Pilot Study). For each act of prejudice, participants used a unipolar scale to rate how responsible other group members should feel for the individual's behavior (*Not at all, Slightly, Somewhat, A lot, Extremely,* coded 1–5; α s > 0.94 for each of the four groups; see Lickel et al., 2003).

3.1.2.4. Dependent variable: License. As in the Pilot Study, we measured license by asking participants how acceptable it would be, according to the average study participant, for a member of each group to display each of the seven prejudiced preferences and behaviors ($\alpha s > 0.93$ for each group; Not at all, Slightly, Somewhat, Mostly, and Entirely coded 1–5). The mediator and dependent variable's order was counterbalanced.

3.1.2.5. Attention checks. We asked participants to identify which nation's members were more similar, and which religion's members were more interdependent. As noted, we excluded people who answered incorrectly. Finally, participants provided demographics.

3.2. Results and discussion

The two different entitativity manipulations produced the same results. The manipulation check showed that the entitative national and religious groups were indeed perceived as more entitative than the less-entitative corresponding groups, ps < .0001 using paired-samples *t*-tests (see Table 1).

We tested our main predictions in a multi-level mediation model to account for the fact that each participant rated two groups (see Pilot Study and Footnote 3). As predicted, collective responsibility perceptions significantly mediated a positive indirect effect of entitativity on license for both the national and the religious groups (see Fig. 2), b = 0.16 [0.04, 0.28], z = 2.59, p = .01 and b = 0.22 [0.08, 0.36], z = 3.08, p = .002, respectively. The total effect of entitativity on license (i.e., without specifying a mediation pathway) was also significant, p < .0001 (see Table 1).

These results, in support of H1, suggest that entitativity increases

³ In Stata 13, we used the *gsem* command to run the multilevel model with latent variables specifying random intercepts for participants, and the *nlcom* command to compute the indirect effect by multiplying the *a* and *b* paths together.

⁴ The model did not converge when we included a latent variable for each control variable, so we report results that only include latent variables for the mediator and dependent measure.

⁵ Schoemann et al.'s methods produce power calculations for fully betweensubjects designs. Because Experiment 1 uses a within-subjects design, its power exceeds 85%.

⁶ We considered data sufficient for analysis if a participant responded to all measures for at least one of the two pairs of groups, described subsequently.



Fig. 1. Indirect effect of entitativity through collective responsibility on individual license in pilot study. Note. ${}^{\dagger}p < .10$, ${}^{*}p < .05$, ${}^{**}p < .01$, ${}^{***}p < .01$. Results shown are for the analysis without covariates.

Table 1 Experiment 1's results for each measure and group type.

	National groups	ational groups			Religious groups				
Measure		High entitativity	Low entitativity	t	d_z	High entitativity	Low entitativity	t	d_z
Entitativity	M (SD) n	5.92 (0.85) 218	3.51 (1.01) 218	24.69***	1.67	6.28 (0.72) 220	3.28 (1.07) 220	34.43***	2.32
Collective responsibility	M (SD) n	3.34 (1.16) 217	2.04 (1.01) 217	11.93***	0.81	3.52 (1.05) 219	2.13 (0.91) 219	16.45***	1.11
License	M (SD) n	3.05 (1.18) 217	2.14 (0.96) 217	8.88***	0.60	2.87 (1.17) 220	2.36 (0.98) 220	6.00***	0.41

Notes. df for paired-sample ts range from 216 to 219 due to missing data. We calculated effect size d_z as per Cohen (1988). *** p < .0001.

how responsible outsiders hold a group for a member's prejudice, thereby increasing how socially acceptable people think their peers will find the member's prejudice.

4. Experiment 2

Experiment 2 sought to replicate Experiment 1's results and test whether the collective-responsibility mechanism is empirically distinct from a collective-interest mechanism. As in previous work, we expected membership in an entitative group to grant individuals greater license for prejudice in part because entitativity makes prejudice seem motivated by a desire to promote or defend the group's interests (Effron & Knowles, 2015). Above and beyond this mechanism, we also expected entitativity to have a licensing effect by increasing attributions of responsibility to the group (H1).

Experiment 2 also sought to distinguish judgments of collective and individual responsibility. Our theorizing predicts a licensing effect mediated by *collective* responsibility above and beyond *individual* responsibility but is agnostic about whether individual responsibility will play any role. On one hand, entitativity could shift responsibility from the individual to the group (Mynatt & Sherman, 1975), which predicts that the licensing effect will be independently mediated by judgments of both individual and collective responsibility. On the other hand, entitativity could increase collective responsibility without decreasing individual responsibility (as in Waytz & Young, 2012), meaning that individual responsibility would not mediate the licensing effect. In that case, the group's perceived role in causing the prejudice would make the individual's prejudice appear less unacceptable (i.e., more licensed) without diminishing how responsible the individual seems for it (Darley & Shultz, 1990; Shaw, Wild, & Colquitt, 2003; Tedeschi & Reiss, 1981). Thus, we did not formulate hypotheses about individual responsibility.

4.1. Method

4.1.1. Participants

Participants were American and Canadian users of Prolific Academic, an online research platform whose users are more diverse and naïve to research procedures than MTurk users (Peer, Brandimarte, Samat, & Acquisti, 2017). As in Experiment 1, we posted slots for 240 people. As previously noted, a sensitivity analysis indicates that the smallest mean difference that this sample size can detect at 80% power and $\alpha = 0.05$ is $d_z = 0.28$, and the power to detect our hypothesized indirect effect exceeds 85%. Of the 244 people who began the study, 30 met our a priori exclusion criteria: 4 who provided insufficient data for analysis (see Footnote 6), 14 who failed the comprehension check described in Experiment 1, and 12 who had IP addresses outside the US and Canada. There were no duplicate IP addresses or participant IDs. The final sample size was thus 214.

4.1.2. Materials and procedure

As in Experiment 1, participants read about a pair of religious groups that varied in entitativity (McConnell et al., 1997), completed the entitativity manipulation check ($\alpha > 0.83$ for each group), and rated how responsible each group should feel if a member displayed each of seven prejudiced preferences and behaviors ($\alpha > 0.95$). This time, they also rated how responsible the individual member should feel for displaying those preferences and behaviors ($\alpha > 0.95$). The order of the individual and collective responsibility measures was counterbalanced.

Next, participants completed a four-item measure of collective





Fig. 2. Indirect effect of entitativity through collective responsibility on individual license in Experiment 1. Top panel: national groups. Bottom panel: religious groups.

Note. $^{\dagger}p < .10, *p < .05, **p < .01, ***p < .001.$

interests (Effron & Knowles, 2015), indicating their agreement on a 7point scale with four reasons why the individual member might have felt and acted in the seven ways described earlier (e.g., he "thinks that other religious groups threaten his group's interests"; *Strongly disagree* coded 1, *Strongly agree* coded 7; α s > 0.82). Suggesting that collective interests and collective responsibility tapped different constructs, they were not highly correlated, *r*s < 0.26 for each group rated.

Finally, participants responded to the individual license measure (α s > 0.91) and comprehension check described in Experiment 1.⁷

4.2. Results

The manipulation check showed that people perceived the highentitativity group as more entitative than the low-entitativity group, p < .001 with a paired-samples *t*-test (see Table 2).

Our central prediction was that entitativity would indirectly increase license through collective responsibility (H1), even when accounting for any indirect effects through collective interests and individual responsibility. To test this prediction, we constructed the parallel-mediation model shown in Fig. 3 and tested it using a multilevel model with random intercepts for participant (see Pilot Study and Footnote 3). Supporting H1, there was a significantly positive indirect effect from entitativity to license via collective responsibility, b = 0.10 [0.02, 0.18], z = 2.43, p = .015. Replicating previous research, there

Table 2							
Experiment 2	's results	for	each	measure	and	group	type

Measure		High entitativity	Low entitativity	t	d_z
Entitativity ^a	М	6.21	3.44	31.90***	2.18
	(SD)	(0.66)	(1.11)		
	n	214	214		
Collective	М	3.14	2.15	12.77***	0.87
responsibility ^b	(SD)	(1.17)	(1.00)		
	n	214	214		
Collective interests ^a	Μ	4.94	3.92	9.21***	0.63
	(SD)	(1.35)	(1.38)		
	n	214	214		
Individual	Μ	3.82	3.77	0.82	0.06
responsibility ^b	(SD)	(1.10)	(1.16)		
	n	214	214		
Individual license ^b	Μ	2.34	2.11	3.82***	0.26
	(SD)	(1.04)	(0.90)		
	n	214	214		

Note. df for paired t-tests = 213. We calculated effect size d_z as per Cohen (1988).

*** p < .001.

^a 7-point scale.

^b 5-point scale.

was also a significant indirect effect from entitativity to license via collective interests, b = 0.13 [0.06, 0.19], z = 3.69, p < .001. The entitativity manipulation also had a significant total effect (i.e., without specifying a mediation pathway) on individual license p < .001 (see Table 2). Finally, an exploratory analysis revealed no evidence of an

⁷ We also included an exploratory measure of how socially acceptable the average participant would think it was for *all members* of each group to display each of the prejudiced preferences and behaviors. For narrative clarity, we detail this measure and its results in the General Discussion.



Fig. 3. Indirect effect of entitativity through collective responsibility, individual responsibility and collective interests on individual license in Experiment 2. Note. ${}^{\dagger}p < .10$, ${}^{*}p < .05$, ${}^{**}p < .01$, ${}^{***}p < .01$. Solid lines are significant paths. Values are unstandardized path coefficients.

indirect effect through individual responsibility, b = 0.003 [-0.006, 0.01], z = 0.70, p = .481.

4.3. Discussion

Experiment 2 finds evidence of two independent reasons why individuals in high-entitativity groups receive a license for prejudice: as in previous work, entitativity makes prejudice more attributable to a desire to defend or promote the group's interests (Effron & Knowles, 2015), and consistent with our hypothesis, entitativity increases how responsible the group is held for the individual's behavior.

Interestingly, entitativity did not significantly affect how responsible participants held the *individual* for prejudice. This finding is consistent with prior work showing that responsibility judgments are not always zero-sum (Tetlock, Self, & Singh, 2010; Waytz & Young, 2012), and clarifies why collective responsibility judgments drive the prejudice-licensing effect of entitativity. Earlier, we suggested two possibilities: Responsibility could "diffuse" from the prejudiced individual to other group members, lessening the individual's responsibility (Mynatt & Sherman, 1975), or collective responsibility could act as a justification that lessens the rebuke an individual is seen as deserving without diminishing how causally responsible she is for her own behavior (Tedeschi & Reiss, 1981). The null effect on the individual responsibility measure is more consistent with the second possibility.

A limitation of Experiments 1 and 2 is that the mediator and dependent variable's causal order is ambiguous (Thoemmes, 2015). Experiment 3 addresses this ambiguity by directly manipulating collective responsibility (Spencer, Zanna, & Fong, 2005). Experiment 3 also manipulated entitativity between subjects, providing a more conservative test than Experiment 1 and 2's within-subjects design.

5. Experiment 3

Participants received information that implicated a group in one of its member's prejudiced behaviors (high-collective-responsibility condition) or that exonerated the group (low-collective-responsibility condition), or they received no information about the group's responsibility (control condition). We expected people to judge the individual as more licensed in the high- versus low-responsibility condition, with the control condition falling in between.

Orthogonally to this manipulation, Experiment 3 also manipulated entitativity. This design—a 2 (entitativity: high vs. low) \times 3 (collective responsibility: high vs. low. vs. no information) factorial—provided an opportunity to replicate Experiment 1 and 2's findings with between-subjects manipulations and examine theoretically-derived boundary conditions. When no information about collective responsibility is provided, as in Experiments 1 and 2, we expected entitativity to increase collective responsibility attributions, which in turn would predict increased license—the indirect effect specified by H1. However,

when collective responsibility is unambiguously high or low, entitativity is no longer an informative cue to collective responsibility. We thus predicted that in the two conditions that provided collective-responsibility information, the effect of collective responsibility on collective license would be weaker or absent (which should reduce H1's indirect effect). Thus, the prejudice-licensing effect of entitativity via collective responsibility may only occur when collective responsibility is ambiguous.

The design also allowed us to test each link in the "causal-chain" approach to assessing mediation (Spencer et al., 2005). We tested whether manipulating the independent variable (entitativity) affects a measure of the proposed mediator (collective responsibility), and whether a manipulation of the mediator affects the dependent variable (individual license). Evidence for both possibilities would suggest collective responsibility plays a causal role in mediating an indirect effect of entitativity on license.

5.1. Method

We preregistered the hypotheses, methods, and analyses, including sample size and exclusion criteria (see https://aspredicted.org/ee9ub.pdf or Online Supplement's Appendix 9).

5.1.1. Participants

We requested 1000 complete responses from U.S.-based MTurk users, aiming for approximately 150 people in each of 6 cells in the final sample. A sensitivity analysis suggested the smallest effect size of the collective responsibility manipulation on license that this sample could detect with 80% power at $\alpha = 0.05$ is $f^2 = 0.008$ (two-tailed). An a priori power analysis using the method described in our previous studies (Schoemann et al., 2017) showed that the experiment had > 99% power to detect the hypothesized indirect effect with this sample size and $\alpha = 0.05$, assuming a modest correlation among variables (rs = 0.25; SDs = 1).

People were prevented from accessing the survey if they were on a mobile device, if they failed a reading comprehension question, or if they had participated in Experiment 2. After applying pre-registered exclusions (duplicate or non-US IP addresses, duplicate MTurk IDs, failed attention checks, insufficient data),⁸ 973 remained (584 women, 385 men, and 4 unknown gender; *M* age = 34.48, *SD* = 11.71). Data exclusions did not differ significantly between the two entitativity conditions, $\chi^2(1) = 0.01$, *p* = .76, or among the three responsibility conditions, $\chi^2(2) = 0.61$, *p* = .74.

⁸ We considered data insufficient if 25% of fewer scale items for any dependent measure (pre-registered).



Fig. 4. Indirect effect of entitativity through collective responsibility on individual license in Experiment 3. Top panel: no-information (control) condition. Middle panel: low-responsibility condition. Bottom panel: high-responsibility condition.

Note. $^{\dagger}p < .10$, $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$. Solid lines are significant paths. Values are unstandardized path coefficients.

5.1.2. Materials and procedure

Using one of Experiment 1's manipulations (Crump et al., 2010), we randomly assigned participants to read either a high- or a low-entitativity description of a fictional religious group ("the Ebbites"). Next, participants completed the *ent*itativity scale from Studies 1 and 2 as a manipulation check ($\alpha = 0.94$). The attention check then asked them to identify whether the Ebbites was a religious, ethnic, or national group, or none of the above. Next, they read about Ed, an Ebbite who displays the prejudiced feelings and behaviors from Experiments 1 and 2.

The collective responsibility manipulation closely followed a previous operationalization (Lickel et al., 2003; see also Pereira, Berent, Falomir-Pichastor, Staerklé, & Butera, 2015). Groups are collectively responsible for individual members' wrongdoing when they are believed to have directly or indirectly encouraged the member's behavior, and attributions of group encouragement rest on three fundamental elements: whether the group is aware of the wrongdoing, shares the wrongdoer's feelings, and feels glad about the wrongdoing (Lickel et al., 2003; Lickel & Onuki, 2015). Thus, participants randomly assigned to the high-collective-responsibility condition read:

The Ebbites who know Ed are completely aware of how he feels about members of other religious groups. In fact, they feel the same way about members of these groups. When they hear about how Ed acts towards members of these other groups, they feel glad. Indirectly or even directly, Ebbites encourage Ed to act in these ways.

Those in the low-responsibility condition instead read:

The Ebbites who know Ed are not at all aware of how he feels about members of other religious groups. In fact, the way they feel about members of these groups is the opposite of how Ed feels. If they heard about how Ed acts towards members of these other groups, they would feel appalled. Ebbites never encourage Ed to act in these ways, neither directly nor even indirectly.

Table 3

Descriptive statistics for collective responsibility measure in each condition of Experiment 3.

		Low responsibility	High responsibility	Control
Low entitativity	М	2.24	3.49	2.70
	SD	1.26	1.14	1.29
	n	161	168	154
High entitativity	Μ	2.40	3.67	3.40
	SD	1.19	1.13	1.11
	n	161	164	165

Note. Collective responsibility was measured on a 5-point scale.

Those randomly assigned to the control condition did not read either passage.

Participants then completed Experiment 2's collective responsibility and license measures (α s = 0.97 and 0.95, respectively). For the license measure, we clarified:

We are **not** interested in how acceptable **you personally** think it is to perform these behaviors. We are **not** interested in your judgments of how acceptable **Ebbites** think it is to perform these behaviors. Instead, we **are** interested in your judgments of how acceptable <u>the</u> **average participant in this study** thinks it is for a member of the Ebbites to perform these behaviors.

5.2. Results

We report all pre-registered analyses, and flag non-pre-registered tests as exploratory. For narrative clarity, we describe the results in a different order than in the pre-registration document. We pre-registered one-tailed tests, but report (more-conservative) two-tailed tests because they produced identical conclusions.

5.2.1. Manipulation checks

The entitativity manipulation increased entitativity perceptions $(M_{high-ent}=6.20,$ SD = 0.78; $M_{low-ent} = 3.46,$ SD = 1.07), (971) = 45.77, p < .001. People attributed greater responsibility to the group in the high-responsibility condition (M = 3.58, SD = 1.13) than in the low-responsibility condition (M = 2.32, SD = 1.23), with the control condition falling in between (M = 3.06, SD = 1.25). A linear contrast for the collective responsibility conditions (low = -1, control = 0, high = +1) in a regression controlling for entitativity condition (-1 = low, +1 = high) showed this pattern was significant, b = 0.63, t(970) = 13.50, p < .001. In further support of this linear pattern, an (exploratory) orthogonal contrast comparing the control (-2) to the other two conditions (each coded +1) was not significant when added to the model, b = -0.04, t(969) = 1.29, p = .198.

5.2.2. Effect of responsibility manipulation on license

Supporting our claim that collective responsibility has a causal effect on license, people perceived the group member as more licensed to express prejudice in the high-collective-responsibility condition (M = 2.37, SD = 1.23) than in the low-collective-responsibility condition (M = 2.01, SD = 0.93), with the control condition falling in between (M = 2.24, SD = 1.07). Regressing license on the linear contrasts described above shows this ordering of means was significant, b = 0.18, t(970) = 4.20, p < .001, $f^2 = 0.018$. Further supporting the linear pattern, an (exploratory) orthogonal contrast comparing the control condition to the other two conditions was not significant when added to the model, b = -0.02, t(969) = 0.64, p = .525.

5.2.3. Indirect effect of entitativity on license through collective responsibility

When participants received no information about collective responsibility (control condition), we replicated Experiment 1 and 2's effects in a between-subjects design, as predicted: The entitativity manipulation increased perceptions of collective responsibility, which in turn predicted greater perceptions of individual license (see Fig. 4, top panel)—a significant indirect effect, b = 0.08 [0.02, 0.18] for the 95% CI, bias-corrected and bootstrapped with 5000 resamples (Preacher & Hayes, 2008). This analysis dummy-coded entitativity (high = 1, low = 0) and mean-centered collective-responsibility perceptions.

By contrast, exploratory tests found no evidence that entitativity indirectly affected license when participants received unambiguous information about collective responsibility, bs = 0.02 [-0.003, 0.08]in the low-responsibility condition, and 0.02 [-0.006, 0.06] in the high-responsibility condition (see Fig. 4, middle and bottom panels). In fact, an exploratory moderated mediation analysis showed that the indirect effect of entitativity through collective responsibility on license was significantly smaller in these conditions than in the control condition (see Online Supplement, Appendix 1). This finding fits with our reasoning that entitativity would only be an informative cue for collective responsibility judgments in the absence of clear information about who was responsible.

In further support of this reasoning, and consistent with a pre-registered prediction, the entitativity manipulation increased collective responsibility perceptions to a larger extent when collective responsibility was ambiguous (control condition: Cohen's d = 0.58) than when it was unambiguously high (d = 0.16) or unambiguously low (d = 0.13; see Table 3 for Ms and SDs). A regression analysis confirmed this pattern with a significant, negative interaction between the entitativity manipulation (effect-coded) and a contrast comparing the high- and the low-responsibility conditions (each coded +1) to the control condition (coded -2), b = -0.09, t(967) = 3.24, p = .001. (The regression also included an orthogonal comparing the low- and high-responsibility conditions to each other, +1 vs. -1, plus its interaction with entitativity, but we had no predictions about these contrasts).⁹ These results suggest an important boundary condition for our effect: Entitativity only licenses prejudice by increasing collective responsibility perceptions when responsibility is ambiguous.

Neither the entitativity manipulation nor its interaction with the collective responsibility manipulation had a significant total effect on license, unexpectedly (see Online Supplement, Appendix 1). This result contrasts with Experiments 1 and 2, perhaps because the previous experiments' within-subjects designs (unlike Experiment 3's between-subjects design) could account for error variance due to individual differences (see Ellsworth, Aronson, Carlsmith, & Gonzales, 1990). Nonetheless, theoretically meaningful indirect effects can emerge even in the absence of statistically significant total effects (e.g., Rucker, Preacher, Tormala, & Petty, 2011; Zhao, Lynch, & Chen, 2010). Thus, the indirect effect observed in Experiment 3 provides strong support for our hypothesized process, that entitativity increases collective responsibility, which increases individual license.

5.3. Discussion

Experiment 3 confirms collective responsibility judgments as a causal mechanism linking entitativity perceptions and prejudice-licensing. Its fully between-subjects experimental design produced three key findings: (a) replicating Experiments 1 and 2, and supporting H1, entitative groups were held more responsible for a member's prejudice, which led participants to expect their own peers to judge the member's

⁹ Simple slopes analysis confirmed our prediction that the entitativity manipulation would significantly increase collective responsibility in the control condition, b = 0.35, t(967) = 5.24, p < .001. We had no predictions about whether the same effect would be significant in the high- and low-collective responsibility conditions. Exploratory analysis showed that when these conditions were averaged, entitativity increased collective responsibility perceptions to a marginally significant extent, b = 0.09, t(967) = 1.86, p = .063.

behavior as less unacceptable, (b) establishing a boundary condition, this effect only occurred when the group's responsibility was ambiguous, and (c) demonstrating a causal link from collective responsibility to license, a manipulation of how much the group influenced the member's prejudice affected how unacceptable participants thought their peers would find this prejudice.

6. Follow-up to Experiment 3

We conducted a follow-up study to test the robustness of the causal link from collective responsibility to license (N = 590 MTurk participants: see Online Supplement's Appendix 2 for full methods and results). As noted, Experiment 3's collective responsibility manipulation varied the three fundamental elements theorized to underlie the belief that a group has facilitated member wrongdoing (Lickel et al., 2003; Lickel & Onuki, 2015). The follow-up study instead adopted a different manipulation to directly affect collective responsibility without mentioning these three elements (Pereira et al., 2015, Study 4). Participants in the high (vs. low) responsibility condition were told that a neutral community leader held a religious group responsible (vs. not responsible) for a member's prejudiced behavior after learning they had (vs. had not) facilitated and encouraged it. The results showed that participants afforded the group member greater license in the high-responsibility condition than in the low-responsibility condition, thus providing additional evidence of the causal link between collective responsibility and individual license.

7. Experiment 4

Experiment 4 tested whether our central findings would be robust to a different measure of license. As noted, psychological license is defined as a judgment that a person can legitimately do or say something that would normally discredit them (Miller & Effron, 2010). As in Experiments 1–3, previous work on entitativity and prejudice assessed license by asking participants to rate how socially acceptable a target behavior is (Effron & Knowles, 2015). Other research focuses more specifically on the moral aspects of license by assessing the extent to which prejudiced actions and other questionable behaviors escape moral condemnation (Effron & Monin, 2010). Following this latter approach, Experiment 4's dependent measure was moral condemnation.

Experiment 4 also investigated whether entitativity affects the license afforded to the group as a whole for a member's prejudice. We predicted that when a member expresses prejudice, entitativity would increase collective responsibility (as in our previous experiments), which would lead to *increased* moral condemnation of the group (i.e., less collective license; H2), even while it leads to decreased moral condemnation of the individual (i.e., greater individual license; H1). This finding would support our general claim that when a group member transgresses, entitativity can harm the group while benefitting the individual.

7.1. Method

We preregistered the hypotheses, methods, and analyses, including sample size and exclusion criteria (see https://aspredicted.org/me8xi. pdf or Online Supplement's Appendix 10).

7.1.1. Participants

Experiment 4 had the same design as Experiments 1 and 2, so we posted slots for the same number of American and Canadian participants (240) on Prolific Academic (see Experiments 1 and 2 for sensitivity and power analyses). Of the 257 people who began the study, we dropped 2 for submitting data from a duplicate IP address, 7 for having an IP address outside the US or Canada, 13 who skipped at least 25% of the items for any dependent measure or mediator, and 15 who failed a comprehension check. There were no duplicate participant IDs. The Table 4

Experiment 4's results for each measure and group t	ype.
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Measure		High entitativity	Low entitativity	t	d_z
Entitativity ^a	Μ	6.24	3.40	35.90***	2.42
	(SD)	(0.64)	(0.95)		
Collective	Μ	3.27	2.10	16.32***	1.10
responsibility ^b	(SD)	(1.14)	(0.94)		
Individual	Μ	4.02	4.03	0.23	0.02
responsibility ^b	(SD)	(1.02)	(1.11)		
Collective	Μ	4.05	3.85	2.43*	0.16
condemnation ^a	(SD)	(1.15)	(0.92)		
Individual	Μ	4.81	4.83	0.27	0.02
condemnation ^a	(SD)	(1.30)	(1.25)		

Notes. df for paired t-tests = 219. We calculated effect size d_z as per Cohen (1988).

*** p < .001.

^a 7-point scale.

^b 5-point scale.

final sample size was 220 (110 men, 106 women, 4 nonbinary; M age = 35.63, SD = 12.88).

7.1.2. Materials and procedure

The procedure closely followed Experiment 2 and used the same entitativity manipulation. Participants read about two fictional religious groups-one high in entitativity, and one low in entitativity. After completing the entitativity manipulation check ($\alpha > 0.81$ for each group), they rated each group's collective responsibility for each of seven prejudiced preferences and behaviors by a group member (α s > 0.95; see Experiment 1), and completed nine moral condemnation items from previous research (Effron, Lucas, & O'Connor, 2015; Effron & Monin, 2010). Specifically, participants rated each group on the following semantic differentials, displayed in randomized order, and averaged with starred items reverse-coded so higher numbers indicate greater condemnation: cruel/kind*, nice/awful, cold/warm*, honest/dishonest, unfair/fair*, arrogant/humble*, good/bad, and likeable/dislikeable (α s > 0.95). Using the same measures, participants also provided responsibility and moral condemnation ratings for the prejudiced individual in each group ($\alpha s > 0.96$ and 0.95, respectively). The order in which participants rated the individual versus the group was randomized.

7.2. Results and discussion

The manipulation check confirmed that people viewed the highentitativity group as more entitative than the low-entitativity group, p < .001 in a paired-samples *t*-test (see Table 4).

We tested our predictions with multi-level mediation models that used latent variables to model random intercepts for participants (see Pilot Study and Footnote 3). First, we computed a model with the entitativity manipulation as the independent variable (IV), collective and individual responsibility as two parallel mediator variables (MVs), and individual moral condemnation as the dependent variable (DV; see Fig. 5, top panel).¹⁰ Consistent with the results of our previous experiments and H1, we found evidence that entitativity provided individuals a license for prejudice by increasing collective responsibility. That is, we observed a significant, negative indirect effect from entitativity to collective responsibility to individual condemnation, b = -0.13 [-0.25, -0.003], z = 2.02, p = .044. An exploratory

^{*} p < .05

¹⁰ We first modelled moral condemnation to the group and to the individual as dependent variables (DVs) in the same model, but the model did not converge after 100 iterations, so we followed our pre-registered contingency plan of computing separate models for each DV.



Fig. 5. Indirect effect of entitativity through collective responsibility and individual responsibility on individual (top panel) and collective condemnation (bottom panel) in Experiment 4.

Note. $^{\dagger}p < .10, ^{\circ}p < .05, ^{\circ\circ}p < .01, ^{\circ\circ\circ}p < .01$. Solid lines are significant paths. Values are unstandardized path coefficients.

analysis showed no evidence of an indirect effect through individual responsibility, as in Experiment 2, b = -0.003 [-0.03, 0.03], z = 0.22, p = .82. These findings suggest the results of our previous studies generalize to a different operationalization of license. A supplementary analysis (not pre-registered) showed no significant total effect of the entitativity manipulation on individual condemnation, p = .823 (see Table 4). Perhaps participants were reluctant to appear as though they were condoning prejudice by reducing their moral condemnation of the prejudiced individual.

Next, we ran the same model with collective moral condemnation as the DV (see Fig. 5, bottom panel). Going beyond our previous studies, and as H2 predicts, we found evidence that entitativity *deprived groups* of a license for a member's prejudice by increasing their apparent collective responsibility. That is, there was a significant *positive* indirect effect from entitativity to collective responsibility to collective moral condemnation, b = 0.17 [0.05, 0.30], z = 2.89, p = .004. Again, an exploratory analysis found no evidence of an indirect effect through individual responsibility, b = 0.0005 [-0.004, 0.005], z = 0.21, p = .830. A supplementary analysis (not pre-registered) showed a significant total effect of the entitativity manipulation on collective condemnation, p = .016 (see Table 4). These results show that, through increasing attributions of collective responsibility when an individual expresses prejudice, entitativity can be a benefit for the individual but a liability to the group.

8. General discussion

The present studies reveal that when an individual expresses prejudice, the entitativity of his or her group—the extent to which it is closely-knit—has divergent effects on how outside observers judge the individual versus the group. Mediational and experimental data from a pilot, four experiments, and a follow-up study (N = 2455) support two hypotheses: group entitativity increases how collectively responsible the group is held for the member's prejudice, which in turn *increases* the license observers afford to the individual (H1) but also predicts a *decrease* in the license they afford to the group for the individual's behavior (H2). The well-powered studies and pre-registered analyses afford considerable confidence in the robustness of these results.

8.1. Theoretical contributions

These results offer several theoretical contributions. First, they address a central issue in the literature on group perceptions: when and how the appearance of entitativity will benefit versus harm the public image of a group and its members (Castano et al., 2003; Dang et al., 2017; Dasgupta et al., 1999; Newheiser et al., 2012; Newheiser & Dovidio, 2015). Specifically, the results resolve a tension between work on collective responsibility, which suggests that entitativity is a liability when group members transgress (e.g., Lickel et al., 2001), and work on prejudice-licensing, which suggests entitativity is a benefit when group members express prejudice (Effron & Knowles, 2015). Our results integrate both perspectives in a single model. We find that when a member expresses prejudice, entitativity can be a liability for the group, in that it increases how responsible observers hold the group (Pilot Study, Experiments 1-4), which in turn attracts moral condemnation to the group (Experiment 4). However, entitativity's effect on collective responsibility benefits the prejudiced individual by leading people to perceive his or her behavior as less socially unacceptable to people outside the group (Pilot Study, Experiments 1-3), and by lowering the moral condemnation the individual attracts (Experiment 4). In this way, our studies show that entitativity can have divergent consequences on judgments of an individual versus his or her group.

Second, our results offer a novel mechanism explaining entitativity's prejudice-licensing effect. Previous work assumed that entitativity licenses prejudice by making it seem motivated by legitimate, rationalistic concerns about protecting ingroup interests (Effron & Knowles, 2015). In this view, observers construe the same prejudiced act less negatively when committed by a more-entitative group. By contrast, the present work reveals that entitativity can also license individual prejudice by making the group seem responsible for the individual's behavior. A potential implication of this view is that group entitativity could make individuals seem more licensed to enact prejudice without changing how negatively observers judge the prejudiced act itself. Though the collective-responsibility and collective-interest mechanisms are conceptually and empirically distinct, they may often work in tandem as they did in Experiment 2.

Finally, our results provide new evidence of how entitativity can exacerbate intergroup conflict. Whereas much work shows that viewing a group as entitative can stoke stereotyping and prejudice (Agadullina & Lovakov, in press; Brewer & Harasty, 1996; Er-rafiy & Brauer, 2013; Spencer-Rodgers, Hamilton, & Sherman, 2007), the present work shows it can license individual members of that group to express prejudice against others.

8.2. Limitations and future directions

Prior work distinguishes between collective responsibility by omission (e.g., the group did nothing to prevent an individual's wrongdoing) versus commission (e.g., the group encouraged the wrongdoing; see Lickel et al., 2003). Our collective responsibility manipulation in Experiment 3 and its follow-up focuses on responsibility by commission. Future work could investigate whether commission or omission is more relevant to entitativity's prejudice-licensing effect.

The license measure in Experiments 1–3 clearly asked participants to estimate how one of their *own peers* (the average person in the study) would judge an individual's prejudice. Participants and their peers were generally not members of this individual's group. Thus, our studies show that the appearance of entitativity can increase perceptions that the *broader community* outside the group finds a member's prejudice less unacceptable. However, it would be interesting to see whether these results generalize to judgments of ingroups. Our Pilot Study, in which some participants judged religious groups in which they held membership, found no evidence that the effect of entitativity depended on whether participants judged an ingroup or outgroup, but we urge caution in interpreting this null result because the sample of ingroup ratings was small.

Future work could also examine whether people are more likely to blame their own prejudices on the group when they perceive their groups as highly entitative. If so, it could explain why membership in an entitative group seems to make people more comfortable expressing prejudice (Effron & Knowles, 2015) or otherwise favoring their ingroup at outgroups' expense (Gaertner & Schopler, 1998; Insko, Wildschut, & Cohen, 2013). Finally, future research should examine whether entitativity can license wrongdoings other than the expression of prejudice. We suspect it would because entitativity increases perceptions of collective responsibility for a variety of wrongdoings (e.g., Denson et al., 2006).

8.3. Can entitativity license an entire group to express prejudice?

The purpose of our research was to explain how and why entitativity affects observers' judgments of (a) an individual who express prejudice and (b) a larger group to which he or she belongs. We did not formulate hypotheses about how participants would judge a group in which they observed *all* members expressing prejudice, because it is unclear how our collective responsibility mechanism would operate in this context. If the entire group enacts prejudice, the group may already be seen as unambiguously responsible for the prejudice, so entitativity may have little effect on collective responsibility, and thus on license. However, entitativity could still provide some license for prejudice in such contexts by making it seem motivated by collective interests.

A thorough investigation of this question is beyond the present research's scope, but Experiment 2 did include an exploratory measure of license for an entire group to express prejudice (see Footnote 7). Specifically, we asked participants to rate how socially acceptable it would be for all members of an entitative and non-entitative group to display each of the seven prejudiced preferences and behaviors from our other studies ($\alpha = 0.97$). The results revealed that participants thought prejudice was more socially acceptable for all the members of an entitative group to express (M = 2.18, SD = 1.02) than for all the members of a non-entitative group to express (M = 2.03, SD = 0.88). paired t(214) = 3.30, p = .001. Thus, entitativity increased the license afforded to all group members to commit prejudice, much like it increased the license afforded to one group member to commit prejudice. As noted, this finding seems better explained by the collective-interest mechanism (Experiment 2; also Effron & Knowles, 2015) than the collective-responsibility mechanism.

8.4. Implications and conclusion

We live in an era where an individual's expressions of prejudice, amplified by social media, often attract a great deal of public attention. As Rosanne Barr's experience illustrates, the fallout can extend beyond the individual who has actually expressed the prejudice to a group in which the individual holds membership. The present research reveals one psychological factor—entitativity—that affects who bears the brunt of this fallout. When outsiders perceive the group as highly entitative, they may be more inclined to let the individual off the hook for prejudice while condemning the group, in part because they hold the group collective responsible.

Open practices

Verbatim materials for all studies can be accessed in the Online Supplement. The pre-registration files for Experiments 3 and 4 are available at, respectively, https://aspredicted.org/ee9ub.pdf and https://aspredicted.org/me8xi.pdf.

Appendix A. Online supplement

Supplementary materials for this article can be found online at https://doi.org/10.1016/j.jesp.2018.08.002.

References

- Abelson, R. P., Dasgupta, N., Park, J., & Banaji, M. R. (1998). Perceptions of the collective other. Personality and Social Psychology Review, 2(4), 243–250.
- Abelson, R. P., Kinder, D. R., Peters, M. D., & Fiske, S. T. (1982). Affective and semantic components in political person perception. *Journal of Personality and Social Psychology*, 42(4), 619–630.
- Agadullina, E. R., & Lovakov, A. V. (2018). Are people more prejudiced towards groups that are perceived as coherent? A meta-analysis of the relationship between outgroup entitativity and prejudice. *British Journal of Social Psychology*. https://doi.org/ 10.1111/bjso.12256 (in press).
- Brewer, M. B., & Harasty, A. S. (1996). Seeing groups as entities: The role of perceiver motivation. In R. M. Sorrentino, & E. T. Higgins (Vol. Eds.), *The interpersonal context:* . *Vol. 3. Handbook of motivation and cognition* (pp. 347–370). New York: Guilford Press.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's mechanical Turk. Perspectives on Psychological Science, 6(1), 3–5. https://doi.org/10.1177/ 1745691610393980.
- Campbell, D. T. (1958). Common fate, similarity, and other indices of the status of aggregates of person as social entities. *Behavioral Science*, 3, 14–25.
- Castano, E., Sacchi, S., & Gries, P. H. (2003). The perception of the other in international relations: Evidence for the polarizing effect of entitativity. *Political Psychology*, 24(3), 449–468.
- Chow, A. R. (2018, May 29). Twitter users respond to Roseanne Barr's firing. The New York Times. (Retrieved from) https://www.nytimes.com/2018/05/29/arts/television/ reactions-roseanne-racist-tweet.html.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Hilsdale, NJ:

Earlbaum.

- Crump, S. A., Hamilton, D. L., Sherman, S. J., Lickel, B., & Thakkar, V. (2010). Group entitativity and similarity: Their differing patterns in perceptions of groups. *European Journal of Social Psychology*, 40(7), 1212–1230. https://doi.org/10.1002/ejsp.716.
- Dang, J., Liu, L., Ren, D., & Gu, Z. (2017). "Groupy" allies are more beneficial while "groupy" enemies are more harmful. Social Psychological and Personality Science. https://doi.org/10.1177/1948550617729409 (in press).
- Darley, J. M., & Latané, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. Journal of Personality and Social Psychology, 8(4), 377–383.
- Darley, J. M., & Shultz, T. R. (1990). Moral rules: Their content and acquisition. Annual Review of Psychology, 41(1), 525–556.
- Dasgupta, N., Banaji, M. R., & Abelson, R. P. (1999). Group entitativity and group perception: Associations between physical features and psychological judgment. Journal of Personality and Social Psychology, 77(5), 991–1003. https://doi.org/10.1037/0022-3514.77.5.991.
- Denson, T. F., Lickel, B., Curtis, M., Stenstrom, D. M., & Ames, D. R. (2006). The roles of entitativity and essentiality in judgments of collective responsibility. *Group Processes* & Intergroup Relations, 9(1), 43–61.
- Effron, D. A., & Knowles, E. D. (2015). Entitativity and intergroup bias: How belonging to a cohesive group allows people to express their prejudices. *Journal of Personality and Social Psychology*, 108(2), 234–253. https://doi.org/10.1037/pspa0000020.
- Effron, D. A., Lucas, B. J., & O'Connor, K. (2015). Hypocrisy by association: When organizational membership increases condemnation for wrongdoing. Organizational Behavior and Human Decision Processes, 130, 147–159. https://doi.org/10.1016/j. obhdp.2015.05.001.
- Effron, D. A., & Monin, B. (2010). Letting people off the hook: When do good deeds excuse transgressions? Personality and Social Psychology Bulletin, 36(12), 1618–1634. https:// doi.org/10.1177/0146167210385922.
- Ellsworth, P. C., Aronson, E., Carlsmith, J. M., & Gonzales, M. H. (1990). Methods of research in social psychology. McGraw-Hill Publishing Company.
- Er-rafiy, A., & Brauer, M. (2013). Modifying perceived variability: Four laboratory and field experiments show the effectiveness of a ready-to-be-used prejudice intervention. *Journal of Applied Social Psychology*, 43(4), 840–853.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191.
- Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In D. T. Gilbert, S. T. Fiske, & D. Lindzey (Vol. Eds.), Handbook of social psychology(4th ed.). Vol. 2. Handbook of social psychology (pp. 357–411). New York: McGraw-Hill.
- Flood, B. (2018). MSNBC star Chris Hayes says 'significant chunk' of Trump voters are racists like Roseanne Barr, Fox News (Retrieved from) http://www.foxnews.com/ entertainment/2018/05/30/msnbc-star-chris-hayes-says-significant-chunk-trumpvoters-are-racists-like-roseanne-barr.html.
- Gaertner, L., Iuzzini, J., & O'Mara, E. M. (2008). When rejection by one fosters aggression against many: Multiple-victim aggression as a consequence of social rejection and perceived groupness. *Journal of Experimental Social Psychology*, 44(4), 958–970.
- Gaertner, L., & Schopler, J. (1998). Perceived in group entitativity and intergroup bias: An interconnection of self and others. *European Journal of Social Psychology*, 28(6), 963–980. https://doi.org/10.1002/(SICI)1099-0992(1998110)28:6<963::AID-EJSP905>3.0.CO;2-S.
- Gawronski, B., & Bodenhausen, G. V. (2006). Associative and propositional processes in evaluation: An integrative review of implicit and explicit attitude change. *Psychological Bulletin*, 132(5), 692.
- Hamilton, D. L., & Sherman, S. J. (1996). Perceiving persons and groups. Psychological Review, 103(2), 336–355. https://doi.org/10.1037/0033-295x.103.2.336.
- Hornsey, M. J., Oppes, T., & Svensson, A. (2002). "It's ok if we say it, but you can't": Responses to intergroup and intragroup criticism. *European Journal of Social Psychology*, 32(3), 293–307.
- Insko, C. A., Wildschut, T., & Cohen, T. R. (2013). Interindividual-intergroup discontinuity in the prisoner's dilemma game: How common fate, proximity, and similarity affect intergroup competition. Organizational Behavior and Human Decision Processes, 120(2), 168–180. https://doi.org/10.1016/j.obhdp.2012.07.004.
- Lickel, B., Hamilton, D. L., & Sherman, S. J. (2001). Elements of a lay theory of groups: Types of groups, relational styles, and the perception of group entitativity. *Personality* and Social Psychology Review, 5(2), 129–140. https://doi.org/10.1207/ s15327957pspr0502_4.
- Lickel, B., Miller, N., Stenstrom, D. M., Denson, T. F., & Schmader, T. (2006). Vicarious retribution: The role of collective blame in intergroup aggression. *Personality and Social Psychology Review*, 10(4), 372–390. https://doi.org/10.1207/ s15327957pspr1004_6.
- Lickel, B., & Onuki, M. (2015). Generalization processes in collective responsibility and intergroup conflict. In S. J. Stroessner, & J. W. Sherman (Eds.). Social perception from individuals to groups (pp. 197–212). New York: Psychology Press.
- Lickel, B., Schmader, T., & Hamilton, D. L. (2003). A case of collective responsibility: Who else was to blame for the Columbine High School shootings? *Personality and Social Psychology Bulletin*, 29(2), 194–204. https://doi.org/10.1177/0146167202239045.

- Malle, B. F., Knobe, J., O'Laughlin, M. J., Pearce, G. E., & Nelson, S. E. (2000). Conceptual structure and social functions of behavior explanations: Beyond person—situation attributions. *Journal of Personality and Social Psychology*, 79(3), 309–326.
- McConnell, A. R., Sherman, S. J., & Hamilton, D. L. (1997). Target entitativity: Implications for information processing about individual and group targets. *Journal of Personality and Social Psychology*, 72(4), 750–762. https://doi.org/10.1037/0022-3514.72.4.750.
- Miller, D. T., & Effron, D. A. (2010). Psychological license: When it is needed and how it functions. In M. P. Zanna, & J. M. Olson (Vol. Eds.), Advances in experimental social psychology. Vol. 43 (pp. 117–158). San Diego, CA: Academic Press/Elsevier.
- Mynatt, C., & Sherman, S. J. (1975). Responsibility attribution in groups and individuals: A direct test of the diffusion of responsibility hypothesis. *Journal of Personality and Social Psychology*, 32(6), 1111–1118.
- Newheiser, A.-K., & Dovidio, J. F. (2015). High outgroup entitativity can inhibit intergroup retribution. British Journal of Social Psychology, 54(2), 341–358. https://doi. org/10.1111/bjso.12078.
- Newheiser, A.-K., Sawaoka, T., & Dovidio, J. F. (2012). Why do we punish groups? High entitativity promotes moral suspicion. *Journal of Experimental Social Psychology*, 48(4), 931–936.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45, 867–872.
- Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology*, 70, 153–163.
- Pereira, A., Berent, J., Falomir-Pichastor, J. M., Staerklé, C., & Butera, F. (2015). Collective punishment depends on collective responsibility and political organization of the target group. *Journal of Experimental Social Psychology*, 56, 4–17.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. Social and Personality Psychology Compass, 5(6), 359–371. https://doi.org/10.1111/j.1751-9004.2011.00355.x.
- Schoemann, A. M., Boulton, A. J., & Short, S. D. (2017). Determining power and sample size for simple and complex mediation models. *Social Psychological and Personality Science*, 8(4), 379–386.
- Shaver, K. G. (1985). The attribution of blame. New York: Springer-Verlag.
- Shaw, J. C., Wild, E., & Colquitt, J. A. (2003). To justify or excuse?: A meta-analytic review of the effects of explanations. *Journal of Applied Psychology*, 88(3), 444.Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2012). A 21 word solution. *Dialogue*, 26(2), 4–7
- Sjöstström, A., & Gollwitzer, M. (2015). Displaced revenge: Can revenge taste "sweet" if it aims at a different target? Journal of Experimental Social Psychology, 56(191–202).
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, 89(6), 845.
- Spencer-Rodgers, J., Hamilton, D. L., & Sherman, S. J. (2007). The central role of entitativity in stereotypes of social categories and task groups. *Journal of Personality and Social Psychology*, 92(3), 369–388. https://doi.org/10.1037/0022-3514.92.3.369
- Social Psychology, 92(3), 369–388. https://doi.org/10.1037/0022-3514.92.3.369. Stenstrom, D. M., Lickel, B., Denson, T. F., & Miller, N. (2008). The roles of ingroup identification and outgroup entitativity in intergroup retribution. *Personality and Social Psychology Bulletin, 34*(11), 1570–1582. https://doi.org/10.1177/ 0146167208322999.
- Tedeschi, J. T., & Reiss, M. (1981). Verbal strategies in impression management. In C. Antaki (Ed.). *The psychology of ordinary explanations of social behaviour*. London: Academic Press.
- Tetlock, P. E., Self, W. T., & Singh, R. (2010). The punitiveness paradox: When is external pressure exculpatory – And when a signal just to spread blame? *Journal of Experimental Social Psychology*, 46(2), 388–395. https://doi.org/10.1016/j.jesp.2009. 11.013.
- Thai, M., Hornsey, M. J., & Barlow, F. K. (2016). Friends with moral credentials: Minority friendships reduce attributions of racism for majority group members who make conceivably racist statements. *Social Psychological and Personality Science*, 7(3), 272–280.
- Thoemmes, F. (2015). Reversing arrows in mediation models does not distinguish plausible models. *Basic and Applied Social Psychology*, *37*(4), 226–234.
- Waytz, A., & Young, L. (2012). The group-member mind trade-off: Attributing mind to groups versus group members. *Psychological Science*, 24(10), 1089–1103. https://doi. org/10.1177/0956797611423546.
- Weiner, B. (1995). Judgments of responsibility: A foundation for a theory of social conduct. New York: Guilford.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206.