Following the Best of Us to Help Them:

Group Member Prototypicality and Collective Action

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Conflict of Interest

All authors declare that there are no conflicts of interest.

Abstract

While considering the role of group-level factors as predictors of collective action, research has overlooked the role of group prototypes in determining willingness to engage in collective action. To begin to investigate this area, we conducted two correlational studies (*n*s = 141 and 98) in high-schools examining the association between prototypical ingroup members' desire to engage in collective action and participants' collective action on behalf of a disadvantaged group (immigrants). Results showed a positive association between these two variables. We also investigated boundaries of this effect, finding that the association emerged when participants lacked personal experiences with the disadvantaged group (cross-group friendships; Study 1) or identified more with their ingroup, an effect also found when including a behavioral measure of collective action (Study 2). Intentions to follow the prototypical ingroup member emerged as the mediator (Study 2). It is worth noting that our methodology allowed us to assess prototypicality in a naturalistic context by calculating a meta-contrast ratio for each group member, in line with self-categorization theory's conceptualization of prototypicality. We discuss the theoretical and practical implications, with reference to the role of prototypicality as a means of social influence and developing social norms in the context of collective action.

Keywords: collective action, ingroup prototype, meta-contrast, leadership, self-categorization theory

Research on collective action has largely focused on group-level factors related to the appraisal of intergroup relationships, such as perceived injustice or illegitimacy of status relations (Tajfel & Turner, 1979). Some studies have examined the influence that specific group members – like, group leaders – can have in mobilizing their group toward seeking social equality, focusing mostly on leaders of disadvantaged groups (Hardacre & Subašić, 2019; Selvanathan, Khoo, & Lickel, 2020; Subašić et al., 2018; Taylor, Moghaddam, Gamble, & Zellerer, 1987). In the current article, we draw on self-categorization theory (SCT; J. C. Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) to study the impact that *emerging* forms of leadership, in the shape of *prototypical* group members of *advantaged* groups, exert on collective action. We present the results of two correlational studies that were conducted with high-school students. Both studies examine whether prototypical members of an advantaged group can mobilize fellow ingroup members in supporting a disadvantaged group. Importantly, consistent with SCT, we assessed prototypicality in a naturalistic context by calculating a meta-contrast ratio for each group member. To achieve a more in-depth understanding, we also evaluated the boundary conditions of this putative association, focusing on the role of previous personal experiences (intergroup contact; Study 1), and ingroup identification (Study 2). In Study 2, we also tested whether conformity to the prototype acted as a mediator, and we included a behavioral measure of collective action.

Predictors of Collective Action and the Role of Leaders

There is a long tradition in social psychology examining factors that promote collective action in the pursuit of social change. In this article, we are interested in the factors leading the advantaged group to engage in action to support the disadvantaged group. Therefore, throughout the article we use the term ‘collective action’ to refer to

solidarity-based collective action by members of advantaged groups on behalf of disadvantaged groups. According to social identity theory (SIT; Tajfel & Turner, 1979), appraisals of the intergroup context as illegitimate, unstable and characterized by impermeable boundaries can lead disadvantaged group members to engage in collective action to restore social equality (Ellemers, Wilke, & Van Knippenberg, 1993). Building on SIT, Van Zomeren, Postmes, and Spears (2008, 2012) proposed the social identity model of collective action (SIMCA), which identifies three key mobilizing factors: (1) relative deprivation (see Runciman, 1966), which can fuel the desire to engage in collective action through emotional responses like anger against injustice (Selvanathan, Techakesari, Tropp, & Barlow, 2018) or moral outrage (Thomas & McGarty, 2009); (2) collective efficacy, referring to perceptions of being able to improve the group position with a common effort (van Zomeren, Spears, Fischer, & Leach, 2004); and (3) identification with the disadvantaged group. This latter factor relates to the importance of the group for the individual (Tajfel & Turner, 1979) and to the importance of social identity for the emergence of collective action (Drury & Reicher, 2000; see also Simon & Klandermans, 2001, and Stürmer & Simon, 2004). Ingroup identification has in fact been found to be related to different forms of (normative and non-normative) action (Becker & Tausch, 2015; Stathi, Vezzali, Waldzus, & Hantzi, 2019). The present studies are specifically driven by research that highlights the relevance of social identity in mobilizing collective action.

A further relevant but overlooked group factor that can motivate collective action relates to leaders as influential persons in a group (Chemers, 2001). The idea that leaders can mobilize individuals is not new, although research is scarce. Selvanathan et al. (2020) interviewed the leadership team of an electoral reform movement in

Malaysia. Using thematic analyses, they demonstrated that leaders seek support from other groups and try to be representative of the larger movement group. Taylor et al. (1987) found that disadvantaged individuals who are more privileged on some characteristics and who may gain entrance in the advantaged group are more likely to act as leaders to promote collective action on behalf of the disadvantaged group.

Portice and Reicher (2018) examined leaders of an advantaged group. They evaluated speeches by four UK party political leaders before the 2015 elections, finding that attention was placed on using intergroup topics (fostering antagonism toward immigrants) to affect ingroup dynamics and specifically to be perceived as leaders who serve the ingroup interests. Although the authors focused on how leaders from the advantaged group try to mobilize individuals for collective action *against* the disadvantaged group, this study supports the idea that leaders derive their influence from references to both ingroup and outgroup dynamics.

More relevant to the present work, Subašić and collaborators examined the role of the leader in mobilizing advantaged group members in support of the disadvantaged group in the context of gender inequality. Subašić et al. (2018, Study 3) found that a message framing gender inequality as a common issue rather than as an exclusively women's issue was more effective in mobilizing men toward supporting gender equality. Importantly, this effect emerged especially when the message was delivered by a male rather than by a female leader, underscoring the importance of harnessing the advantaged group for maximum mobilization. Similarly, Hardacre and Subašić (2019, Study 2) found that male leaders were more effective in mobilizing men, this time independently from how the mobilizing message was framed. Interestingly, Hardacre and Subašić's Study 1 found that male leaders were perceived as more influential and

prototypical of the gender equality movement when they promoted gender equality as a common cause. Although the authors did not test whether participants were acting in term of the gender equality movement categorization, this finding shows prototypicality as a marker of leadership and points towards the importance of taking group prototypicality into account.

Research presented above leads us to conclude that leaders may be more effective in mobilizing advantaged group members in the pursuit of group equality by virtue of their perceived prototypicality. In the present article we want to capitalize on this idea, by (a) examining the mobilizing qualities of group prototypicality, as a key property making specific individuals especially influential, (b) and testing when this role of group prototypicality is more likely to emerge and the underlying processes.

Rather than considering the influence of formal leaders, we tested in the immediate participants' school context the perceived prototypicality of classmates, that could vary for each participant. As the most prototypical person for one participant might be different from the most prototypical person for another participant, this operationalization makes the type of leadership examined here fluid and strictly depending on the comparative context (Hogg, 2001; J. C. Turner et al., 1987). In other words, these studies are concerned with *emerging*, rather than formal, *leadersh*ip and when this can be more effective (Turner, 1991).

The Role of the Ingroup Prototype

We consider the role that prototypical members of the advantaged group can have in mobilizing collective actions to promote social equality. Our hypotheses are based on self-categorization theory, which places importance on prototypicality as an emergent property of the comparative context defined by both the ingroup and the

outgroup and which goes on to determining social influence (J. C. Turner et al., 1987). According to SCT, individuals are attracted to and try to conform to the ingroup prototype, which is defined by similarities and differences with both the ingroup and the outgroup.

When a social identity is salient, individuals' perception is depersonalized, that is they self-stereotype in terms of the category and perceive ingroup members (and the self) as interchangeable. Group members define their group identity in a comparative group context. Prototypicality is based on the meta-contrast principle: in a given context, the formation and salience of group categories depends on the extent to which the differences between some stimuli are smaller (intragroup similarity) than differences between those stimuli and other stimuli (intergroup differences). Similarly, the degree of prototypicality of a given group member depends on the extent to which differences between this person and outgroup members (intergroup distance) are larger than the differences between him/her and other ingroup members (intragroup similarity).

The ingroup prototype represents a relevant source of information that indicates what individuals should think, how they should feel, and how they should behave (Hogg & Gaffney, 2014). In other words, ingroup prototypes help to determine what is and what is not normative (Hogg & Turner, 1987). According to J. C. Turner (1987),

> the direction of effective influence within the group (who successfully influences whom) is a function of the relative persuasiveness of the members, which is based on the degree to which their response (their arguments, position, attributes, experience, role, etc.) is perceived as prototypical of the initial distribution of responses of the group as a whole, i.e., the degree of relative consensual support for a member (p. 74).

Group members who are identified with their group would therefore be attracted to prototypical ingroup members because, in the intergroup context, prototypical members are those who better help to define their group – and therefore their (group) identity – in comparison to other groups (Hogg, 1993; J. C. Turner, 1991; J. C. Turner et al., 1987). They are also the group members who are more likely to influence other ingroup members (Jetten et al., 2017). Our expectation on the role that prototypical group members may have in mobilizing their group for collective action is also consistent with considerations by Reicher, Haslam, and Hopkins (2005), who stated that "social identities provide the parameters of mass mobilization" and the "prototypes of the category will determine who will be in a position to direct the mobilization" (p. 556).

These considerations are also consistent with the social identity theory of leadership (Barreto & Hogg, 2017; Hogg, 2001; Hogg & Van Knippenberg, 2003; Hogg, Van Knippenberg, & Rast, 2012). According to this theory, leaders help to define individuals' group identities, they are trusted and contribute to determining social norms. In other words, they are the most influential people in groups, and they can indicate what is the appropriate behavior in a given situation. The influential role of the leader (that we expect being associated with perceptions of ingroup prototypicality) should be especially strong among those who subjectively value the group more or, in other words, among those more strongly identified with the ingroup (Abrams & Hogg, 1990; Hogg & Turner, 1987; J. C. Turner et al., 1987).

Leaders can also have a transformative role, which allows them to introduce normative innovation in groups' identities (Abrams, Randsley De Moura, Marques, & Hutchison, 2008). In the case of the present studies, we argue that prototypical members

may influence their group in supporting action toward social change on behalf of the disadvantaged group, therefore setting an innovative social equality norm.

Overview of the Present Research

The aim of the present research was to investigate whether the ingroup prototype can influence advantaged group members' choice to engage in collective action in support of a disadvantaged group. A secondary aim was to investigate the boundary conditions of this effect, as well as a potential mediator. In order to fulfill these aims, we conducted two studies with high-school students. This context is particularly relevant because adolescents should be particularly sensitive to social norms and the influence of peers (Brown & Larson, 2009). We opted for a correlational design in order to evaluate a meta-contrast ratio for each group member in an existing group and use it to test whether participants' collective action was associated with that of the most prototypical person according to their evaluation (see below). In other words, the correlational design allowed us to evaluate meta-contrast in a naturalistic setting for all group members. This approach would not have been possible with an experimental approach in which perceived prototypicality is manipulated. We are not aware of other studies using a similar methodology.

In both studies, the predictor variable was participants' perceived intention of the prototypical group member to engage in collective action on behalf of a disadvantaged group (immigrants). In both studies, we referred to participants' immediate social context at school, that is their class. Specifically, we calculated the meta-contrast of each class member according to each participant, together with the perception that each class member would engage in collective action. Then, for each participant we selected the perception that the most prototypical member (for that

specific participant) would engage in collective action, and used it as a predictor. This operationalization of group members' prototypicality represents an important advancement compared with previous research. Generally, studies merely asked participants the extent to which a given group member was perceived as prototypical or representative of a group, therefore focusing the assessment more on perception of a group in isolation, rather than in a specific intergroup context (e.g., Hardacre & Subašić, 2019). In contrast this operationalization, in line with the meta-contrast principle posited by SCT (Turner et al., 1987), allows us to take into account the comparative nature of the intergroup context, where prototypicality emerges by considering perceptions of difference of a given member both from the ingroup and the outgroup.

In order to generalize our findings, we used two different relevant social categorizations. In the first study, we focused on the Italian-immigrant intergroup relationship, calculating the most prototypical person of the Italian group within the members of the class. This way, we were able to assess whether the association between group prototypicality and collective action emerges when the social categorization is *directly associated* with the intergroup hierarchy affected by the collective action. In the second study, building on the first study, we aimed to replicate but also generalize our findings, testing the effects of group prototypicality in terms of a social categorization *un*related to the intergroup hierarchy affected by the collective action. Specifically, we focused on the class as the ingroup of reference, contrasting it with other school classes; we therefore selected the most prototypical member of the class in terms of the relation between the specific class and other school classes.

To test the boundary conditions of the hypothesized association, in Study 1 we tested the role of personal experiences, and specifically of intergroup contact. Contact

represents a relevant personal experience generally associated with advantaged group members' intentions to engage in collective action on behalf of the disadvantaged group (Di Bernardo et al., 2021; Dixon, Durrheim, & Tredoux, 2007; Reimer et al., 2017; Selvanathan et al., 2018; for a review, see Saguy, Shchory-Eyal, Hasan-Aslih, Sobol, & Dovidio, 2017). We decided to focus on an especially strong form of intergroup contact, that is cross-group friendships (Davies, Tropp, Aron, Pettigrew, & Wright, 2011; R. N. Turner, Hewstone, Voci, Paolini, & Christ, 2007). Attitudes that are formed based on personal experiences are generally stronger and more resistant to change, and individuals primarily rely on their personal experiences to drive their attitudes (Fazio, Powell, & Herr, 1983). Therefore, intentions to engage in collective action, which imply positive outgroup attitudes, should be primarily determined by a relevant personal experience like intergroup contact. This is especially true for a powerful form like cross-group friendships (for additional evidence on the primary role of intergroup contact compared to other determinants like indirect experiences, see Christ et al., 2010; Dhont & Van Hiel, 2009; Jasinskaja-Lahti, Mähönen, & Liebkind, 2011; Paolini, Hewstone, & Cairns, 2007). In other words, in line with past research, we expect that when contact as a personal experience is available, individuals will rely mostly on it; in contrast, when personal experiences (i.e., contact) are lacking, individuals will rely on others, and in the specific case of this study on the group prototype (Ayyub, 2001; Festinger, 1950).

As further moderators, in Study 2 we tested ingroup identification. To the extent that ingroup identification increases conformity to group norms and prototypes (Abrams & Hogg, 1990; Barreto & Hogg, 2018; Hogg & Turner, 1987), we predicted that prototypical members will be more influential when individuals identify more strongly with their group.

As a mediator, we investigated conformity to the prototype. We reasoned that, if individuals are subject to the social influence of the ingroup prototype, perceiving that they would like to engage in collective action should be associated with the willingness to engage in turn in collective action. Finding a mediating effect for conformity to the ingroup prototype (that we assessed as the intention to conform to the prototype's actions in case the prototype asks to do so) would constitute direct evidence for the persuasive role of the most prototypical member of the ingroup.

Concerning outcome variables, in line with collective action research we assessed intentions to engage in collective action. In an effort to establish convergent validity, in Study 2 we also included a behavioral measure. Participants were informed of real initiatives by a local non-profit organization aimed at improving perceptions of immigrants in the larger population, and they were asked to indicate their willingness to sign up for these initiatives.

To sum up, we tested the following hypotheses:

- H1: Perceptions of the ingroup prototype's desire to engage in collective action should be associated with participants' intentions to engage in collective action in support of the outgroup when personal experiences with the outgroup are more scarce, that is for lower levels of cross-group friendships (Study 1)
- H2: Perceptions of the ingroup prototype's desire to engage in collective action should be associated with participants' intentions to engage in collective action and collective action behavior when identification with the ingroup category is higher (Study 2)

- H3: Conformity to the prototype should act as the mediator of the relationship between perceptions and collective action (Study 2).

Study 1

Method

Participants and Procedure

The dataset included 141 Italian high school students (52 female; M_{age} = 16.17 years, *SD* = 1.57, two missing data). Participants were recruited in different high schools located in the Northern part of Italy.

We calculated an a priori sample size of at least 130 participants in order to achieve a power of .80 for detecting a small to medium effect size (f^2 = .09) for a multiple regression with three predictors. It should be noted that the final sample size depended on school availability.

Participants completed a personalized online questionnaire during class hours; in particular, each questionnaire was prepared according to class members, so that each student could rate the ingroup prototypicality of their classmates according to the Italian vs. immigrant group. In particular, participants were provided with the actual names of each of their classmates in order to rate their prototypicality.

Measures

Cross-group friendships. The number of friends within the outgroup was assessed using a single item adapted from previous contact research (see Lolliot et al., 2015): "How many of your friends are immigrants?" Responses were anchored on a 5-step scale: 1 = *no immigrant friends*; 2 = *one to two*; 3 = *three to four*; 4 = *five to six*; 5 = *more than six*.

Ingroup prototypicality. First, participants were presented with two items for each classmate irrespective of whether he or she was an ingroup or an outgroup member. The first item evaluated ingroup similarity: "Is [classmate name] similar to Italians of the same age?" The second item evaluated outgroup similarity: "Is [classmate name] similar to immigrants of the same age?" Participants were provided with the actual names of each of their classmates, and they responded using a 5-step scale, 1 = *not at all* and 5 = *very much*.

Classmates' collective action. Along with the two similarity items, a third item measured how much participants believed that each classmate would undertake social change actions promoting equality between Italians and immigrants. Responses ranged from 1 = *not at all* to 5 = *very much*.

Collective action intentions. Participants' willingness to undertake collective action was measured with seven items adapted from general research on collective action in support of the disadvantaged group (e.g., Becker, Wright, Lubensky, & Zhou, 2013; Glasford & Calcagno, 2012; Reimer et al., 2017; Saguy, Dovidio, & Pratto, 2008; Selvanathan et al., 2017). Example items are: "I would sign a petition to stop violence against immigrants"; "I would participate in a demonstration on behalf of immigrants." A 5-point response scale was used: 1 = *not at all* and 5 = *very much* (alpha = .93).

Results and Discussion

Data Preparation

Before running the main analyses, an index of ingroup prototypes' collective action tendencies was calculated in order to assess prototypicality perceptions. First, for each classmate's similarity measure, a metacontrast index was computed. Specifically, the ingroup similarity score was divided by the outgroup similarity score, so that higher

scores indicated higher ingroup prototypicality (an operation which basically weights intragroup similarity and intergroup differences, J. C. Turner et al., 1987). Then, metacontrast indexes were sorted according to participants. For each participant, an individual rank was created with the first position taken by the most prototypical ingroup classmate within the class; the last position was occupied by the least prototypical ingroup classmate. A pairwise comparison on the prototypicality index indicated a significant difference between the most (M = 4.14, SD = 1.32) and the least (M = 0.60, SD = 0.55) prototypical exemplar, $t(140) = 29.03$, $p < .001$, Cohen's d = 2.43. Finally, we ordered classmates' collective action on the basis of the prototypicality rank. For the analyses, for each participant, the most prototypical classmates' collective action scores were used.

Main Analyses

Means, standard deviations and correlations can be found in Table 1. In order to test the hypotheses, a moderation analysis was run using the PROCESS macro for SPSS (Model 1; Hayes, 2013). In the first model, the (perceived) prototype's collective action was the independent variable, cross-group friendships were the moderator, and participants' collective action intentions were the dependent variable. Independent variables were mean-centered. Results are presented in Table 2. Findings revealed a positive main effect of cross-group friendships, namely the latter were associated with increased collective action intentions. A moderating effect also emerged. Simple slope analysis (Figure 1) indicated that the prototype's collective action was positively associated with participants' collective action intentions for lower levels of cross-group friendships (B = 0.34 (.12), β = 0.35, $p < .01$, 95% CI [0.116, 0.580]), while this relationship was nonsignificant for high levels of cross-group friendships (B = -0.10

(.11), β = -0.10, p = .37, 95% CI [-0.314, 0.119]). In other words, consistent with our hypotheses, individuals followed the ingroup prototype only in absence of personal intergroup experiences (cross-group friendships).

A post-hoc power analysis was run with G*Power (Faul, Erdfelder, Lang, & Buchner 2007). This analysis found that a multiple regression analysis with three predictors, an achieved sample size of N = 141, and an alpha level of .05 (two-tailed), had an achieved power of .98 to detect a medium effect size of ρ^2 = .19, which is the average effect size in the psychological literature (Gignac & Szodorai, 2016, r = .19).

In line with H1, we found an association between perceptions that the prototype would engage in collective action and intentions to engage in collective action, but only among individuals lacking personal experiences (that is, with lower levels of close intergroup contact).

Study 2

In Study 1, we found support for our hypotheses of an association between perceptions of prototype's collective intentions and intentions to engage in collective action on the behalf of the disadvantaged group for participants with low prior intergroup contact. In Study 2, we extend these results, by (a) using a social categorization unrelated to the intergroup hierarchy affected by the collective action, (b) testing ingroup identification as a moderator, (c) investigating conformity to the prototype as the mediating variable, (d) including a self-reported behavioral variable of collective action, in addition to collective action intentions.

Method

Participants and Procedure

The sample consisted of 98 students (55 female, 43 male; M_{age} = 17.19, *SD* = 1.11) attending different high schools located in Northern Italy. Questionnaires were administered online during class hours.

Based on the Study 1 where a medium effect size (f^2 = .16) emerged, we calculated that we would require a sample of about 100 participants to obtain a power of .80 to detect a small to medium effect size (f^2 = .12) for a regression model with four independent variables. Again, we note that the sample size was constrained by school availability.

Measures

Group identification. Identification with the class was measured by using the 8 items from the identification scale developed by Cameron (2004) (8 items, e.g., "I often think about the fact I am a member of this class"; "I have a lot in common with the other classmates"), and 4 items adapted by Rubin, Milanov, and Paolini (2016)'s scale of self-stereotyping, assessing the degree to which participants perceived themselves as being similar to their classmates (e.g., "I think I am quite similar to the other students of the class"). Participants responded using a 5-point scale anchored to *completely disagree* (1) and *completely agree* (5); alpha = .86.

Ingroup prototype. Group similarity was assessed using two items for each participant's classmate. The items evaluated ingroup or outgroup similarity by asking how much the classmate was perceived to be similar to the other students of the class or to other students from different classes of the school. Participants responded using a 5-point scale ranging from 1 = *he or she has almost nothing in common* to 5 = *he or she has almost everything in common*.

Classmates' collective action. One item similar to that used in Study 1 was used.

Conformity to the prototype. One item asked participants how likely they would be to take part in collective action if the prototypical classmate asked them to do so ("Let's say he or she takes part in actions aimed at supporting the equality between Italians and immigrants, and asks to you to do the same. Would you do it?"). Participants responded using a 5-point scale anchored *not at all* (1) and *very much* (5).

Collective action intentions. We used the same items as in Study 1 (alpha = .94).

Collective action behavior. Along with the self-report measure of collective action intentions, a behavioral measure of actual collective action was implemented. Approximately one week after administering the questionnaire, one person from a non-profit organization and one research collaborator met the participants in each class, for activities ostensibly unrelated to the research. Participants were asked to be involved in equality-oriented activities promoted by this local non-profit organization dealing with hospitality and assistance to immigrants. Three activities were proposed: one activity concerned joining an organization of a musical event within the international refugee day (e.g., promoting the event, manage the information desk during the event, making a photo reportage). The second activity was set up during the European Neighbors' Day and it dealt with a multiethnic dinner in which volunteers were asked to help in the implementation of the event (e.g., serving the dinner, arranging the tables, washing and cleaning). Finally, since the first two activities took place in two specific days, the third volunteering option offered participants the possibility to indicate their availability for future events organized by the organization. Participants were free to choose between none and all three activities.

Activities were first presented to participants, who were asked to record their choices on a note; participants were told that the notes with students' choices would be

later read aloud to the whole class. Once the availabilities were collected, students' availabilities were presented to make the public context and the inclinations of participants' peers salient (Hogg & Smith, 2007). Finally, students were asked to confirm or change their decision on a second note. Availabilities expressed in the second note were considered in the analyses; those from the first note were not retained. Responses ranged from 0 (no activity subscribed) to 3 (all activities subscribed).

Results and Discussion

Data Preparation

Before conducting the main analyses, an index of classmate prototype's collective action was computed in order to assess ingroup prototypicality. We followed the procedure used in Study 1, first by computing for each participant the metacontrast of classmates, then sorting them for each participant from most to least prototypical[1]. A pairwise comparison on the index of group prototypicality indicated a significant difference between the most (M = 1.78, SD = 0.84) and the least (M = 0.66, SD = 0.25) prototypical exemplar, $t(96) = 11.90$, $p < .001$, Cohen's d = 1.21. Finally, classmates' collective action tendencies were ordered following the prototypicality rank established in the latter step, and, for the analyses, the most prototypical classmate's collective action scores were selected for each participant.

Main Analyses

Means, standard deviations and correlations can be found in Table 3.

In order to test the hypotheses, a moderated mediation analysis was conducted using PROCESS macro for SPSS (Model 8; Hayes, 2013). Specifically, we ran two moderated mediation models, considering the two dependent variables (collective action intentions, collective action behavior). In all models, the prototype's collective action

was the independent variable, conformity to the stereotype was the mediator, group identification was the moderator; in Model 1, the dependent variable was collective action intentions and, in Model 2, collective action behavior. Variables were centered to the mean.

As can be seen in Table 4 (see also Figure 2), a significant moderation effect emerged in the path from the independent variable to the mediator. Specifically, supporting H2, the prototype's collective action was positively associated with conformity to the prototype only among respondents reporting high class identification (B = 0.82 (.18), β = 0.66, p < .001, 95% CI [0.471, 1.178]). This relation was nonsignificant for participants who were low in class identification (B = 0.09 (.16), β = 0.08, p = .55, 95% CI [-0.216, 0.403]). Moreover, in both Models 1 and 2, conformity to the prototype was positively associated with the outcome variable.

In line with H3, the indirect effect when the outcome measure was collective action intentions was significant for high levels (95% CI, [0.111, 0.458], conditional indirect effect = 0.27, SE = 0.09), but not for low levels of the moderator (95% CI, [-0.098, 0.199], conditional indirect effect = 0.03, SE = 0.07, see Figure 2). Similarly, the indirect effect on collective action behavior was significant only for high (95% CI [0.033, 0.214], conditional indirect effect = 0.11, SE = 0.04) but not for low levels of class identification (95% CI, [-0.035, 0.101], conditional indirect effect = 0.01, SE = 0.03).

As in Study 1, a post-hoc power analysis has been conducted with G*Power (Faul et al., 2007). Specifically, for a multiple regression with three predictors, a sample size of N = 98, and an alpha level of .05 (two-tailed), results found an achieved power of .96 to detect a medium effect size of ρ^2 = .19, considering collective action

intentions. Regarding collective action behavior, we also have an achieved power of .68 to detect a small to medium effect size ($\rho^2 = .10$)

In sum, the moderated mediation result supports the hypotheses. Specifically, the ingroup prototypes' collective action was indirectly associated with collective action intentions and behavior via conformity to the prototype when identification with the class was high.

General Discussion

We conducted two field studies with high-school students, aiming to investigate whether, when, and why perceptions regarding an advantaged group's ingroup prototype would be associated with greater collective action on behalf of a disadvantaged group. Results were consistent with our predictions: the more participants believed the ingroup prototype desired to engage in collective action, the more participants also intended to do so (both studies) or actually engaged in collective action (Study 2). These findings emerged among individuals with low personal experiences with the outgroup (Study 1) and when they identified with the class to a greater extent (Study 2). In addition, we found direct evidence that the associations were explained by increased conformity to the prototype (Study 2). Note that, in both studies, we detected medium effect sizes, providing further confidence in our hypotheses.

From a methodological point of view, we calculated a meta-contrast ratio for each group member from the perspective of each participant, which provided a window on intragroup dynamics that is consistent with SCT's perspective. Note that we did not use this meta-contrast ratio score per se. Instead, based on it, we selected the perceived attitudes toward collective action of the classmate comparatively perceived as more prototypical in that given context by each participant. This represented a naturalistic

approach to the understanding of the direction of influence from the subjective perspective of each group member.

We believe the choice to focus on two distinct social categorizations to define the ingroup prototype helps provide validity to our findings, and allows different conceptual conclusions. In the first study, we calculated the ingroup prototype by referring to the relationship between advantaged and disadvantaged group as the relevant social categorization. In this case, participants defined the ingroup prototype on the basis of their distance from the disadvantaged group, in order to decide whether to engage in actions benefitting the disadvantaged group. This result clearly highlights the importance of the ingroup prototype and the strength of its influence. Results were conceptually similar in the second study, where the disadvantaged group was unrelated to the social categorization activated. In this case, participants referred to their school class that included both advantaged and disadvantaged group members. What seems important therefore, at least in some cases, is the process of depersonalization and the consequential conformity to the ingroup prototype, rather than the specific categorization activated.

Implications of the Ingroup Prototype-Collective Action Link

The studies we presented tested the predictive role of ingroup prototypes rather than formal leaders. However, we believe they provide indications of the influence of emerging leadership, as participants referred to persons perceived as more representative of their ingroup. From this vantage point, it is easy to appreciate that our results are consistent with the social identity theory of leadership (Hogg, 2001).

We acknowledge that, in SIT/SCT, group prototypes and group norms are not fully overlapping, with the first depending on individuals' cognitive appraisal of what

the norm is, and the second being the resulting shared representation of members of a group, which may differ from individuals' own representations (Hogg & Smith, 2007; Hogg et al., 2012). However, we can assume that, for an individual, the ingroup prototype represents the norm (and this is what we measured, since we relied on the ingroup prototype according to each individual participant). We argue that in this research, individuals followed the prototype because they equated it with the norm; discrepancies in action can be attributed to different individual perceptions of the stance of the prototype, and therefore of what represents the norm.

These findings expand the scarce literature on the role of leaders in mobilizing groups for collective action (Hogg, 2001). Specifically, they complement studies by Subašić and collaborators (Hardacre & Subašić, 2019; Subašić et al., 2018), showing that members of advantaged groups are mobilized in support of social equality by group members perceived as prototypical (a key feature of leadership). Importantly, our findings sensibly extend these studies, considering the specific role of ingroup prototypicality as a driver of more collective action to promote social equality.

Despite the large and rapidly increasing research on collective action, we are not aware of other studies examining the role of ingroup prototypicality in the pathway to social change. To the extent that collective action is by definition a group phenomenon, and that individuals conform to the social norms of their groups, which are (also) determined by the ingroup prototype, we believe ingroup prototypicality is an important factor that collective action researchers should consider.

In our two studies, ingroup prototypicality was calculated by assessing distance from the outgroup and similarity to the ingroup *in general*, without reference to specific topics such as norms related to the intergroup relationship under examination. If ingroup

members perceive that the group's identity has been subverted they may leave the group (Ditrich, Scholl, & Sassenberg, 2017). Alternatively, when group norms toward the disadvantaged group are highly hostile and perceived as critical for the definition of the group, individuals expressing support for the disadvantaged group may lose in prototypicality and therefore in social influence (Jetten & Hornsey, 2014). Although leaders are followed also when they deviate from group norms and set new directions for the group (Abrams et al., 2008; van Knippenberg, van Knippenberg, & Bobbio, 2008), they may lose their influence when individuals perceive that they do not protect the group's identity anymore, and therefore stop providing a positive identity to fellow ingroup members (Rast, Hackett, Alabastro, & Hogg, 2015). In the case of the present studies, we argue that, although relations between Italians and immigrants are quite hostile (Pew Research Center, 2007), a clear and firm norm is not defined. Prototypical members in this case may have shaped the norm, shifting it toward equality and against societal injustice.

Prototypical group members can play an active role in shaping group norms and the resulting course of actions can also involve mobilizing group members to act for a more equal society. As stated by Reicher et al. (2005), these prototypical persons can seek to mobilize individuals in an inclusive category – they refer to them as 'leaders entrepreneurs of identity'. We also believe that prototypical persons can act as leaders and contribute to create new norms, also mobilizing group members. Furthermore, acting in terms of an overarching identity including those with similar values may be beneficial for collective mobilization, as it can favor an alliance in terms of political solidarity between advantaged and disadvantaged groups (Vezzali & Stathi, 2021).

These considerations are consistent with the political solidarity model of social change by Subašić, Reynolds, and Turner (2008). This model specifically focuses on the advantaged group, and highlights the importance of a superordinate categorization that does not erase group distinctions, but provides a comparative context in which group differences can emerge in the pursuit of social equality. What is important is the content of this superordinate identity, and specifically the shared set of norms that characterize it.

The nature of social identity, and therefore of the prototype, is contextual. In our study, for instance, the prototype was based on relative intergroup and intragroup differences between advantaged and disadvantaged groups. To the extent that a new (superordinate) identity is formed, the direction of prototypicality can change. Using our first study as an example, a new identity based on values for social equality may be likely extended to disadvantaged group members, but it can break the advantaged group into subgroups, therefore restructuring the comparative context as well as the direction of prototypicality. A careful consideration of whether adopting a new identity based on common values between groups, or maintaining the original (advantaged, in our example) identity striving for equality is in our opinion an important prerequisite for action.

Moderators of the Ingroup Prototype-Collective Action Link

The results of Study 1 revealed that the ingroup prototype was influential in fostering collective action only when individuals lacked personal experiences with the outgroup. In particular, the ingroup prototype was associated with participants' collective action intentions only when their cross-group experiences were scarce. In other words, in absence of direct and significant experiences with the outgroup, such as

those provided by cross-group friendships, individuals relied on the ingroup prototype to determine a relevant, appropriate response. In contrast, when contact was high, participants displayed high intentions to engage in collective action irrespective of the position of the prototype (Figure 1). Visintin, Green, Falomir-Pichastor, and Berent (2020) found in five studies that intolerant group norms were offset by intergroup contact experiences. Our results are consistent with these findings, and they suggest that the stance of the prototype acts as the social norm from the point of view of the individual (see below). Since we did not directly assess the social norm, but the (perceived) stance of the prototype, our results extend prior research, suggesting that individuals align to the normative position, that is the position expressed by the most prototypical person of the ingroup.

Consistent with the larger literature on group prototypes, the results of Study 2 revealed that prototypical members were considered as a reliable source when individuals were highly identified with the ingroup. In other words, the ingroup prototype helped participants define their identity as group members and take the appropriate action.

Conformity to the prototype emerged as the mediator of the relationship between the stance of the prototype and collective action (Study 2). The inclusion of this variable allows us to provide direct evidence that the process underlying the effects of the ingroup prototype is that of conformity. Such conformity is related to the power of social influence and guidance provided by prototypical members (J. C. Turner, 1991).

Concluding Remarks

We argue that this research has various strengths. First, it draws on established theories of group phenomena and social influence (Hogg, 2001; J. C. Turner, 1991; J. C.

Turner et al., 1987) to examine collective action. Second, departing from previous research on the role of leadership in collective action (e.g., Hardacre & Subašić, 2019), it uses an actual measure of meta-contrast to assess prototypicality in a real group context. Third, it includes a behavioral measure of collective action, diverging from collective action research that tends to focus solely on intentions.

However, we also acknowledge some limitations. First, data are correlational. This suggests that, despite the theory-driven paths that we tested, we cannot establish causality among the variables. Consider however that, as we have argued, an experimental design in which perceived prototypicality was manipulated would not have allowed the use of a measure of prototypicality in a naturalistic setting, as was the case in the current study. Such a methodology in fact allowed us to conduct a naturalistic test of the prototypicality gradient in a real-world setting, capturing the direction of influence within naturalistic groups.

One further limitation concerns the collective action behavior measure we used in Study 2. The measure was self-reported, however we argue that it is behavioral since participants provided their availability to join activities organized by the non-profit organizations. In fact, they were later contacted to take part in the activities, although we have no information on actual participation. Future studies should however, whenever possible, include observational behavioral measures.

In conclusion, ingroup prototypes can have a key role in mobilizing advantaged group members in the pursuit of a more equal society. Their role is important to the point that even if, by definition, the ingroup prototype depends on differences from the outgroup (and similarities with the ingroup), it may still drive actions to reduce such intergroup differences. Integrating collective action and categorization perspectives can

provide fruitful theoretical and applied research directions. This will allow us to further delve into understanding and promoting social change in the pursuit of equality.

Footnote

1. Regarding the metacontrast measure, all participants rated all classmates from their class. Thus, the number varied according to the number of students in participants' classes. In the analyses in both studies we considered only the most and the least prototypical classmate: for each participant, for each of the two, two single scores (similarity to ingroup and difference from outgroup) were considered, in order to calculate their ratio. Consequently, this ratio is not dependent on class size (the distribution of students within classes across Studies 1 and 2 was quite homogeneous, $M = 24.31$, $SD = 5.16$).

References

Abrams, D., & Hogg, M. A. (1990). Social identification, self-categorization, and social influence. *European Review of Social Psychology, 1*, 195-228. https://doi.org/10.1080/14792779108401862

Abrams, D., Randsley De Moura, G., Marques, J. M., & Hutchison, P. (2008). Innovation credit: When can leaders oppose their group's norms? *Journal of Personality and Social Psychology*, *95*, 662-678. https://doi.org/10.1037/0022-3514.95.3.662

Barreto, N. B., & Hogg, M. A. (2017). Evaluation of and support for group prototypical leaders: a meta-analysis of twenty years of empirical research. *Social Influence*, *12*, 41-55. https://doi.org/10.1080/15534510.2017.1316771

Barreto, N. B., & Hogg, M. A. (2018). Influence and leadership in small groups: Impact of group prototypicality, social status, and task competence. *Journal of Theoretical Social Psychology*, *2*, 26-33. https://doi.org/10.1002/jts5.16

Becker, J. C., Wright, S. C., Lubensky, M. E., & Zhou, S. (2013). Friend or ally: Whether cross-group contact undermines collective action depends on what advantaged group members say (or don't say). *Personality and Social Psychology Bulletin*, *39*, 442-455. https://doi.org/10.1177/0146167213477155

Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Contextual influences on adolescent development* (p. 74-103). New York, NY: Wiley.

Cameron, J. E. (2004). A three-factor model of social identity. *Self and identity*, *3*(3), 239-262. https://doi.org/10.1080/13576500444000047

Chemers, M. M. (2001). Leadership effectiveness: An integrative review. In M. A. Hogg & R. S. Tindale (Eds.), *Blackwell handbook of social psychology: Group processes* (pp. 376-399). Oxford, UK: Blackwell.

Christ, O., Hewstone, M., Tausch, N., Wagner, U., Voci, A., Hughes, J., & Cairns, E. (2010). Direct contact as a moderator of extended contact effects: Cross-sectional and longitudinal impact on outgroup attitudes, behavioral intentions, and attitude certainty. *Personality and Social Psychology Bulletin*, *36*, 1662-1674. https://doi.org/10.1177/0146167210386969

Davies, K., Tropp, L. R., Aron, A., Pettigrew, T. F., & Wright, S. C. (2011). Cross-group friendships and intergroup attitudes: A meta-analytic review. *Personality and Social Psychology Review*, *15*, 332-351. https://doi.org/10.1177/1088868311411103

Dhont, K., & Van Hiel, A. (2009). We must not be enemies: Interracial contact and the reduction of prejudice among authoritarians. *Personality and Individual Differences*, *46*, 172-177. https://doi.org/10.1016/j.paid.2008.09.022

Di Bernardo, G. A., Vezzali, L., Stathi, S., McKeown, S., Cocco, V. M., & Saguy, T., Dixon, J. (2021). Fostering social change among advantaged and disadvantaged group members: Integrating intergroup contact and social identity perspectives on collective action. *Group Processes and Intergroup Relations*, *24*, 26-47. https://doi.org/10.1177/1368430219889134

Ditrich, R., Scholl, A., & Sassenberg, K. (2017). Time to go! Leaving the group in response to norm-deviations. *Journal of Experimental Social Psychology*, *73*, 259-267. https://doi.org/10.1016/j.jesp.2017.07.005

Dixon, J., Durrheim, K., & Tredoux, C. (2007). Intergroup contact and attitudes toward the principle and practice of racial equality. *Psychological Science*, *18*, 867-872. https://doi.org/10.1111/j.1467-9280.2007.01993.x

Drury, J., & Reicher, S. D. (2000). Collective action and psychological change: The emergence of new social identities. *British Journal of Social Psychology*, *39*, 579-604. https://doi.org/10.1348/014466600164642

Ellemers, N., Wilke, H., & Van Knippenberg, A. (1993). Effects of the legitimacy of low group or individual status on individual and collective status-enhancement strategies. *Journal of Personality and Social Psychology*, *64*, 766-778. https://doi.org/10.1037/0022-3514.64.5.766

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*(2), 175–191. https://doi.org/10.3758/BF03193146

Fazio, R. H., Powell, M. C., & Herr, P. M. (1983). Toward a process model of the attitude-behavior relation: Accessing one's attitude upon mere observation of the attitude object. *Journal of Personality and Social Psychology*, *44*, 723-735. https://doi.org/10.1037/0022-3514.44.4.723

Gaffney, A. M., Rast III, D. E., & Hogg, M. A. (2018). Uncertainty and influence: The advantages (and disadvantages) of being atypical. *Journal of Social Psychology*, *74*, 20-35. https://doi.org/10.1111/josi.12254

Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences, 102,* 74-78. https://doi.org/10.1016/j.paid.2016.06.069

Glasford, D. E., & Calcagno, J. (2012). The conflict of harmony: Intergroup contact, commonality and political solidarity between minority groups. *Journal of Experimental Social Psychology*, *48*, 323-328. https://doi.org/10.1016/j.jesp.2011.10.001

Hardacre, S. L., & Subašić, E. (2019). Whose issue is it anyway? The effects of leader gender and equality message framing on men's and women's mobilization toward workplace gender equality. *Frontiers in Psychology*, *11*, 2497. https://doi.org/10.3389/fpsyg.2018.02497

Haslam, S. A., Oakes, P. J., McGarty, C., Turner, J. C., & Onorato, S. (1995). Contextual changes in the prototypicality of extreme and moderate outgroup members. *European Journal of Social Psychology*, *25*, 509-530. https://doi.org/10.1002/ejsp.2420250504

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.

Hogg, M. A. (1993). Group cohesiveness: A critical review and some new directions. *European Review of Social Psychology*, *4*, 85-111. https://doi.org/10.1080/14792779343000031

Hogg, M. (2001). A social identity theory of leadership. *Personality and Social Psychology Review, 5*, 184-200. https://doi.org/10.1207/S15327957PSPR0503

Hogg, M. A., & Gaffney, A. (2014). Prototype-based social comparisons within groups: Constructing social identity to reduce self-uncertainty. In Z. Krizan & F. X. Gibbons (Eds.), *Communal functions of social comparison* (pp. 145-174). New York, NY: Cambridge University Press.

Hogg, M. A., & Smith, J. R. (2007). Attitudes in social context: A social identity perspective. *European Review of Social Psychology*, *18*, 89-131. https://doi.org/10.1080/10463280701592070

Hogg, M. A., & Turner, J. C. (1987). Social identity and conformity: A theory of referent information influence. In W. Doise & S. Moscovici (Eds.), *Current issues in European social psychology* (pp. 139-182). Cambridge, UK: Cambridge University Press.

Hogg, M., & Van Knippenberg, D. (2003). Social identity and leadership processes in groups. *Advances in Experimental Social Psychology*, *35*, 1-52. https://doi.org/10.1016/S0065-2601(03)01001-3

Hogg, M. A., Van Knippenberg, D., & Rast, D. E. (2012). The social identity theory of leadership: Theoretical origins, research findings, and conceptual developments. *European Review of Social Psychology*, *23*, 258-304. https://doi.org/10.1080/10463283.2012.741134

Jasinskaja-Lahti, I., Mähönen, T. A., & Liebkind, K. (2011). Ingroup norms, intergroup contact and intergroup anxiety as predictors of the outgroup attitudes of majority and minority youth. *International Journal of Intercultural Relations*, *35*, 346-355. https://doi.org/10.1016/j.ijintrel.2010.06.001

Jetten, J., Haslam, S. A., Cruwys, T., Greenaway, K. H., Haslam, C., & Steffens, N. K. (2017). Advancing the social identity approach to health and well-being: Progressing the social cure research agenda. *European Journal of Social Psychology*, *47*, 789-802. https://doi.org/10.1002/ejsp.2333

Jetten, J., & Hornsey, M. J. (2014). Deviance and dissent in groups. *Annual Review of Psychology*, *65*, 461-485. https://doi.org/10.1146/annurev-psych-010213-115151

Lolliot, S., Fell, B., Schmid, K., Woelfer, R., Swart, H., Voci, A., Christ, O., New, R., & Hewstone, M. (2015). Measures of intergroup contact. In G. Boyle, D. H. Saklofske, & G. Matthews (Eds.), *Measures of personality and social psychological constructs* (pp. 652-683). San Diego, CA: Academic Press.

Paolini, S., Hewstone, M., & Cairns, E. (2007). Direct and indirect intergroup friendship effects: Testing the moderating role of the affective-cognitive bases of prejudice. *Personality and Social Psychology Bulletin*, *33*, 1406-1420. https://doi.org/10.1177/0146167207304788

Pew Research Center. (2007). *World publics welcome global trade – But not immigration: 47-nation Pew Global Attitudes Survey*. Retrieved from http://www.pewglobal.org/2007/10/04/org/2007/10/04/

Portice, J., & Reicher, S. (2018). Arguments for European disintegration: A mobilization analysis of anti-immigration speeches by U.K. political leaders. *Political Psychology*, *39*, 1357-1372. https://doi.org/10.1111/pops.12551

Rast, D. E. III, Hackett, J. D., Alabastro, A., & Hogg, M. A. (2015). Revoking a leader's "license to fail": Downgrading evaluations of prototypical in-group leaders following an intergroup failure. *Journal of Applied Social Psychology*, *45*, 311-318. https://doi.org/10.1111/jasp.12297

Reicher, S., Haslam, S. A., & Hopkins, N. (2005). Social identity and the dynamics of leadership: Leaders and followers as collaborative agents in the transformation of social reality. *The Leadership Quarterly*, *16*, 547-568. https://doi.org/10.1016/j.leaqua.2005.06.007

Reimer, N. K., Becker, J. C., Benz, A., Christ, O., Dhont, K., Klocke, U., ... & Hewstone, M. (2017). Intergroup contact and social change: Implications of negative

and positive contact for collective action in advantaged and disadvantaged groups. *Personality and Social Psychology Bulletin, 43*, 121-136. https://doi.org/10.1177/0146167216676478

Rubin, M., Milanov, M., & Paolini, S. (2016). Uncovering the diverse cultural bases of social identity: Ingroup ties predict self-stereotyping among individualists but not among collectivists. *Asian Journal of Social Psychology, 19*, 225-234. https://doi.org/10.1111/ajsp.12137

Runciman, W. G. (1966). *Relative deprivation and social justice: A study of attitudes to social inequality in twentieth-century England*. Berkeley, CA: University of California Press.

Saguy, T., Dovidio, J. F., & Pratto, F. (2008). Beyond contact: Intergroup contact in the context of power relations. *Personality and Social Psychology Bulletin, 34*, 432-445. https://doi.org/10.1177/0146167207311200

Saguy, T., Shchory-Eyal, N., Hasan-Aslih, S., Sobol, D., & Dovidio, J. F. (2017). The irony of harmony: Past and new developments. In L. Vezzali & S. Stathi (Eds.), *Intergroup contact theory: Recent developments and future directions* (pp. 53-71). Abingdon, UK: Routledge.

Sechrist, G. B., & Stangor, C. (2007). When are intergroup attitudes based on perceived consensus information? The role of group familiarity. *Social Influence, 2*, 211-235. https://doi.org/10.1080/15534510701459068

Selvanathan, H. P., Khoo, Y. H., & Lickel, B. (2020). The role of movement leaders in building intergroup solidarity for social change: A case of the electoral reform movement in Malaysia. *European Journal of Social Psychology, 50*, 224-238. https://doi.org/10.1002/ejsp.2598

Selvanathan, H. P., Techakesari, P., Tropp, L. R., & Barlow, F. K. (2018). Whites for racial justice: How contact with Black Americans predicts support for collective action among White Americans. *Group Processes and Intergroup Relations*, *21*, 893-912 https://doi.org/10.1177/1368430217690908

Simon, B., & Klandermans, B. (2001). Politicized collective identity: A social psychological analysis. *American psychologist*, *56*, 319-331. https://doi.org/10.1037/0003-066X.56.4.319

Stathi, S., Vezzali, L., Waldzus, S., & Hantzi, A. (2019). The mobilizing and protective role of national identification in normative and non-normative collective action. *Journal of Applied Social Psychology*, *49*, 596-608. https://doi.org/10.1111/jasp.12619

Stürmer, S., & Simon, B. (2004). The role of collective identification in social movement participation: A panel study in the context of the German gay movement. *Personality and Social Psychology Bulletin*, *30*, 263-277. https://doi.org/10.1177/0146167203256690

Subašić, E., Hardacre, S., Elton, B., Branscombe, N. R., Ryan, M. K., & Reynolds, K. J. (2018). "We for she": Mobilising men and women to act in solidarity for gender equality. *Group Processes and Intergroup Relations*, *21*, 707-724. https://doi.org/10.1177/1368430218763272

Subašić, E., Reynolds, K. J., & Turner, J. C. (2008). The political solidarity model of social change: Dynamics of self-categorization in intergroup power relations. *Personality and Social Psychology Review*, *12*, 330-352. https://doi.org/10.1177/1088868308323223

Tajfel, H., & Turner, J. C. (1979). An Integrative Theory of Intergroup Conflicts. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33-47). Monterey, CA: Brooks-Cole.

Taylor, D. M., Moghaddam, F. M., Gamble, I., & Zellerer, E. (1987). Disadvantaged group responses to perceived inequality – from passive acceptance to collective action. *Journal of Social Psychology, 127*, 259-272. https://doi.org/10.1080/00224545.1987.9713692

Thomas, E. F., & McGarty, C. (2009). The role of efficacy and moral outrage norms in creating the potential for international development activism through group-based interaction. *British Journal of Social Psychology*, *48*, 115-134. https://doi.org/10.1348/014466608X313774

Turner, J. C. (1987). The analysis of social influence. In J. C. Turner, M. A. Hogg, P. J. Oakes, S. D. Reicher, & M. S. Wetherell (Eds.), *Rediscovering the social group: A self-categorization theory* (pp. 68-88). Oxford, UK: Blackwell.

Turner, J. C. (1991). *Social influence*. Milton Keynes: Open University Press.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.

Turner, R. N., Hewstone, M., Voci, A., Paolini, S., & Christ, O. (2007). Reducing prejudice via direct and extended cross-group friendship. *European Review of Social Psychology*, *18*, 212-255. https://doi.org/10.1080/10463280701680297

van Knippenberg, D., van Knippenberg, B., & Bobbio, A. (2008). Leaders as agents of continuity: Self continuity and resistance to collective change. In F. Sani (Ed.), *Self*

continuity: Individual and collective perspectives (pp. 175-186). New York, NY: Psychology Press.

van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: a quantitative research synthesis of three socio-psychological perspectives. *Psychological bulletin*, *134*, 504-535. https://doi.org/10.1037/0033-2909.134.4.504

Van Zomeren, M., Postmes, T., & Spears, R. (2012). On conviction's collective consequences: Integrating moral conviction with the Social Identity Model of Collective Action. *British Journal of Social Psychology*, *51*, 52-71. https://doi.org/10.1111/j.2044-8309.2010.02000.x

van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is! Explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology*, *87*, 649-664. https://doi.org/10.1037/0022-3514.87.5.649

Vezzali, L., & Stathi, S. (2021). *Using intergroup contact to fight prejudice and negative attitudes: Psychological perspectives*. European Monographs in Social Psychology Series. Abingdon, UK: Routledge.

Visintin, E. P., Green, E. G. T., Falomir-Pichastor, J. M., & Berent, J. (2020). Intergroup contact moderates the influence of social norms on prejudice. *Group Processes and Intergroup Relations*, *23*, 418-440. https://doi.org/10.1177/1368430219839485

Table 1. Means, standard deviations, and correlations between variables, Study 1 (N = 141).

	1	*2*	*3*
1. Cross-group friendships	-		
2. Prototype's collective action	.10	-	
3. Collective action intentions	.28***	.14†	-
M	2.95	2.63	2.81
SD	1.41	1.15	1.13

Note. For all measures, the response scale ranged from 1 to 5.

$^{\dagger}p \leq .10$. *$p < .05$. ***$p < .001$.

Table 2. Results of moderation analyses, Study 1 (N = 141). Unstandardized (standard errors in parentheses) and standardized regression coefficients are reported.

Predictors		Dependent Variable Collective action intentions		95% CI
		B	*β*	
Cross-group friendships	(a)	0.19 (.09)**	0.24**	[0.082, 0.400]
Prototype's collective action	(b)	0.12 (.19)	0.12	[-0.031, 0.285]
Interaction (a × b)		-.16 (.06)**	-.23**	[-0.389, -0.063]
R^2		.14		
f^2		.16		
F		7.24***		
df		(3,137)		

**p < .01. ***p < .001.

Table 3. Means, standard deviations, and correlations between variables, Study 2 (N = 98).

Variable	*1*	*2*	*3*	*4*	*5*
1. Identification with the class	-				
2. Prototype's collective action	.19†	-			
3. Conformity to the prototype	.18†	.36***	-		
4. Collective action intentions	.29**	.08	.36***	-	
5. Collective action behavior	.04	-.08	.23*	.13	-
M	2.75	2.84	2.80	3.06	0.30
SD	0.80	1.04	1.29	1.17	0.54

Note. For all measures, the response scale ranged from 1 to 5, with the exception of Collective action behavior, ranging from 0 to 3.

†$p < .08$. *$p < .05$. ***$p < .001$.

Table 4. Results of moderated mediation analyses, Study 2 (N = 98). Unstandardized (standard errors in parentheses) and standardized regression coefficients are reported.

Predictors	Dependent variable					
	Model 1 and 2: Conformity to the prototype					
	B			β	95% CI	
Prototype's collective action (a)	.46*** (.11)			.37***	[0.228, 0.690]	
Class identification (b)	.07 (.16)			.04	[-0.243, 0.376]	
Interaction (a × b)	.46** (.15)			.29**	[0.157, 0.754]	
R^2	.22					
f^2	.28					
F	8.70***					
df	(3,94)					
	Model 1: Collective action intentions			Model 2: Collective action behavior		
	B	β	95% CI	B	β	95% CI
Prototype's collective action (a)	-.11 (.12)	-.10	[-0.340, 0.120]	-.10 (.05)	-.20	[-0.216, 0.010]
Conformity to the prototype	.32*** (.09)	.36***	[0.134, 0.512]	.13** (.06)	.32**	[0.041, 0.227]
Class identification (b)	.36* (.14)	.25*	[0.071, 0.644]	.03 (.07)	.05	[-0.109, 0.172]
Interaction (a × b)	-.04 (.14)	-.03	[-0.325, 0.252]	-.08 (.07)	-.12	[-0.218, 0.065]
R^2		.19			.09	
f^2		.23			.10	
F		5.40***			2.41†	
df		(4,93)			(4,93)	

$^{\dagger}p < .08$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Figure 1. Collective action intentions as a function of prototype's collective action at high (+1 *SD*) versus low (-1 *SD*) levels of cross-group friendships, Study 1 (*N* = 141).

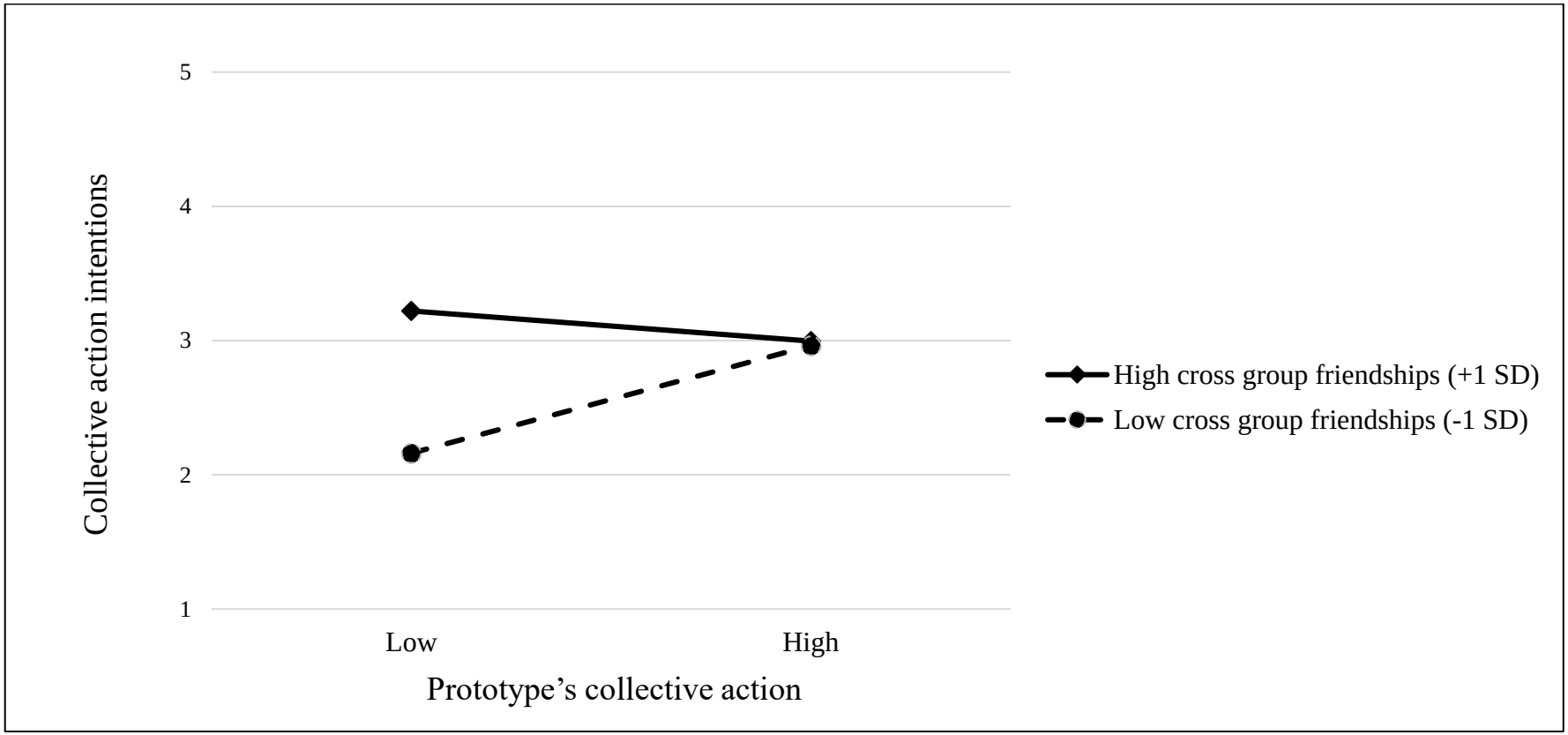

Figure 2. Effects of prototype's collective action on collective action intentions via conformity to the prototype, moderated by class identification, Study 2 (N = 98). Unstandardized regression coefficients are reported (standard errors in parentheses).

**p < .01. ***p < .001.