

SHORT TITLE: *LEADER MULTIPLE IDENTITY PROTOTYPICALITY (LMIP)*

**One of us ... and us ... and us:**

**Evidence that Leaders' Multiple Identity Prototypicality (LMIP) is related to their  
Perceived Effectiveness**

**Niklas K. Steffens<sup>1,\*</sup>, Kim Peters<sup>1</sup>, S. Alexander Haslam<sup>1</sup>, Michael J. Platow<sup>2</sup>**

<sup>1</sup> School of Psychology, The University of Queensland, Brisbane, Australia

<sup>2</sup> Research School of Psychology, Australian National University, Canberra, Australia

\* Correspondence concerning this article should be addressed to Niklas K. Steffens, School of Psychology, University of Queensland, St. Lucia QLD 4072, Australia; E-mail: n.steffens@uq.edu.au; Tel.: +61 (0)7 3346 9555.

#### **Author Note**

This work was supported by grants (D180100676; FL110100199) from the Australian Research Council awarded to the first and third author.

**Abstract**

The social identity approach to leadership has focused on examining how leaders' (single) group prototypicality (i.e., the extent to which a leader is seen to embody what it means to be 'one of us') affects various follower and organizational outcomes. The current registered report research advances this approach by introducing the idea of leader multiple identity prototypicality (prototypicality of multiple group memberships that are shared between leaders and followers). Examination of a large sample of employees ( $N=611$ ) supported the core hypothesis that leaders' multiple identity prototypicality is associated with followers' stronger personal identification with leaders, as well as greater perceived leader effectiveness and charisma. Furthermore, as anticipated, there was evidence of an indirect effect such that leader multiple identity prototypicality was positively associated with followers' identification with their leader and, through this, with perceptions of the leader's effectiveness and charisma. The present findings have implications for the social identity approach to leadership, as well as research on intergroup leadership and leadership of diverse groups.

The pre-registration can be found on the Open Science Framework Registries (<https://osf.io/tf3qs>). All materials including survey questions, data, and analysis code are openly accessible on the Open Science Framework: <https://osf.io/ceapq/>.

## Introduction

The social identity approach to leadership asserts that the capacity of leaders to mobilize followers arises from their ability to manage shared social identity (Haslam, Reicher, & Platow, 2011; Steffens et al., 2014). In this regard, scholars have suggested that a core component of identity leadership is leaders' degree of (social) identity prototypicality, such that leaders are effective to the extent that they are seen by followers to embody key attributes of the group that they lead (i.e., the group's values, ideals, and norms; Turner & Haslam, 2001; Hogg, 2001; for reviews, see Hogg, Rast, & van Knippenberg, 2012; van Knippenberg, 2011). Members (including would-be leaders) of a given group vary in the extent which they are seen as embodying the attributes of a shared group membership — with some seen as more prototypical and others as less prototypical of the group. People look up towards the most prototypical members of a group because they are particularly informative about what it means to be a member of the group by defining what a member of the group does and is expected to do. As a result, highly prototypical members should also be particularly well suited to act as leaders (i.e., to be able to exert influence on other members). In line with this proposition, growing evidence indicates that, amongst other things, the more leaders are perceived to be prototypical of a shared group membership, the more followers (a) have trust in them (Giessner & van Knippenberg, 2008), (b) support them (Platow & van Knippenberg, 2001; Ullrich, Christ, & van Dick, 2009), and (c) see them as charismatic (Platow, van Knippenberg, Haslam, van Knippenberg, & Spears, 2006; Steffens, Haslam, & Reicher, 2014).

Previous research in this theoretical framework has been limited by its focus on single identities. That is, it shows that followers respond more positively to leaders who are prototypical of a single shared group membership in the workplace (e.g., a team or an organization; van Knippenberg, 2011). However, most followers see themselves as members

of not just one but *many* groups (e.g., a workgroup, a project team, an interest group, a department, the organisation as a whole; Ramajaran, 2014). This begs the question of whether leaders may be better able to mobilise followers the more they are in fact prototypical of the *multiple* subjective groups that are important to followers' sense of self at work (i.e., their multiple organisational identities). There are a range of reasons why we believe that this is, indeed, likely to be the case. First, for a target person who is a member of multiple groups, processes and outcomes that affect *any* of these groups are relevant to this person's sense of self. That is, any events that affect Group A have self-referential implications, but so too do any events that affect Group B, any events that affect Group C and so on. Accordingly, any potential leader who embodies aspects of one's multiple groups is particularly *informative* about one's self by virtue of this potential leader's *embodiment of these shared group memberships*.

By way of example, consider Bill from the Purchasing team and Max from the Marketing team in an organization that is led by the CEO Maria. Both Bill and Max see Maria as representing well the values, beliefs, and goals of the organization as a whole (e.g., rating her representativeness as 7 on a scale from 0 to 10). At the same, Bill believes that Maria is not very representative of his Purchasing team, and also not very representative of the group of people coming from the 'old organisation' that was taken over in a recent merger (e.g., rating her representativeness of both as 2). Max, however, has a very different view of Maria. Max regards her as highly representative of the Marketing profession (Maria has a Marketing background) but also as highly representative of the 'acquiring organisation' that took over the old organisation in the recent merger (e.g., rating Maria's representativeness of both as 8). As a result, a social identity analysis of leadership leads us to propose that when Maria outlines a new code of conduct for the company, proposes a new way to restructure the finance system in the company, or announces the launch of a new

product, Max is much more likely than Bill to respond enthusiastically to Maria's initiatives and to be willing to put effort into trying to make these a success.

As a corollary, our analysis of leader multiple identity prototypicality introduces one important idea concerning leaders' capacity to *compensate* for the lack of prototypicality of a given shared group membership. Specifically, if leaders' prototypicality of multiple identities has a role to play in shaping their capacity to influence followers, then this also means that a leader who is seen to be not particularly prototypical of a given identity may still be able to influence followers by virtue of his or her prototypicality of other shared group memberships. Similarly, this means that Bill may respond as enthusiastically to Maria (seeing her as highly representative of the organization but not of his team) as to another leader who, compared to Maria, is somewhat less representative of the organization but more representative of his team.

As things stand, a lot is known about the impact of leader prototypicality of a single identity on follower responses, but at present we have little (if any) empirical evidence of the degree to which follower responses are related to leader prototypicality of followers' multiple identities. A better understanding of how leader prototypicality of multiple identities is associated with follower responses is important for both theoretical and practical reasons. First, this understanding may explain some of the observed variability in the strength of the link between leaders' prototypicality of a single identity and those leaders' relative effectiveness — that is, it may explain why leader prototypicality of a single identity is sometimes strongly related (e.g.,  $r = .69$ , Ullrich, van Dick, & Christ; Study 2:  $r = .71$ ), and sometimes weakly related or unrelated (e.g.,  $r = .11$ /Cohen's  $d = 0.20$ , Giessner & van Knippenberg; Study 1), to followers' perceptions of leader effectiveness. Second, it broadens our conceptual understanding of the basis of follower responses and suggests additional, alternative paths to leader effectiveness. Indeed, as suggested above, one important

implication of these ideas is that being *non-prototypical* of a single identity (e.g., as a seemingly marginal or minority leader may be) may *not* necessarily be a recipe for failure if leaders are able to compensate for this by embodying other identities that are important to followers' sense of self.

In the present research, we aim to provide the first empirical test of this question by investigating how leader multiple identity prototypicality is related to leader effectiveness. We will do this by examining the impact of leader prototypicality with respect to followers' multiple organisational identities on two key indicators of leader effectiveness — followers' endorsement of a leader and their perceptions of a leader's charisma (Antonakis, Bastardo, Jacquart, & Shamir, 2016; Banks et al., 2017).

Furthermore, building on research that shows that leader prototypicality indirectly affects perceived leader charisma through followers' personal identification with leaders (Steffens, Schuh, Haslam, Perez, & van Dick, 2015), we will also examine the extent to which leader multiple identity is associated with follower's endorsement of leaders and perceived charisma through enhancing followers' personal identification with leaders. Followers' personal identification with a leader can be defined as a feeling of oneness with a leader by means of incorporating the leader as one part of who one is (for a review, see Ashforth, Schinoff, & Rogers, 2016). Scholars have argued that effective leaders often exert their impact on followers through the sense of personal connection that they create among followers (Kark, Waismel-Manor, & Shamir, 2012; Wang & Howell, 2012). Furthermore, this notion of followers' identification with their leader has also been argued to be a key ingredient in perceptions of a leader's charisma (Rees, 2012). Building on this research, we anticipate an indirect effect of leader prototypicality of followers' multiple organisational identities on leader endorsement and charisma through followers' personal identification with leaders. More formally, we propose the following hypotheses:

**H1.** The more followers perceive a leader to be prototypical of their multiple identities, the more followers will (a) identify with the leader, (b) endorse the leader, and (c) regard the leader as charismatic.

**H2.** Leader multiple identity prototypicality will be indirectly associated with followers' (a) endorsement of a leader and (b) perceptions of a leader's charisma through their personal identification with the leader.

## Method

**Participants and Design.** We will recruit a total of 866 US participants via Prolific Academic for the present study. The study advertisement will say that participants are eligible to participate in the study if they are in full-time or part-time work, currently have a workplace supervisor or line manager (a more senior person at work who they formally report to), and are members of at least three (formal or informal) groups in the workplace (this set of criteria will serve as exclusion criteria). We also assess these variables in the study and exclude participants if they participate despite not fulfilling these criteria. There are four additional exclusion criteria: failure (1) to provide informed consent to participate in the present research, (2) to complete all questions, (3) to identify more strongly with the groups that they are members of than with alternative comparative groups that they are not members of, and (4) to respond to either of the control questions as instructed (“This is a control question—please select 1” / 2”). Allowing for the loss of 10% of the sample on the basis of these exclusion criteria, we will end up with at least with 779 participants, which provide 80% power in order to detect a correlation of a size of  $r = .10$  or larger. This choice is based on a review of effect sizes reported in the organizational behavior/human resources literatures where  $r = .10$  is at the lower conservative end of expected effect sizes based on the fact that it is larger than 20% of effect sizes reported in the field (Paterson, Harms, Steel, & Credé, 2016).

**Procedure.** We will conduct a correlational field study in which participants will identify three (formal or informal) groups that are important to them in the workplace (the full materials are attached to the submission and the link to the survey can be found here: <https://osf.io/ceapq/>).<sup>2</sup> To facilitate this, participants will be provided with the following instructions (adapted from Cruwys et al., 2016):

Think about *three groups at work that you belong to and that are important to your day-to-day life at work*. This includes any groups that reflect how you see yourself at work and that are important to how you engage with other people in your workplace. These groups can be formal (e.g., a work team) or informal (e.g., a group of people who work in the same corridor or who have lunch together). They can take *any* form. For example, a group could be:

- a work group (e.g., sales team, a particular department);
- a role or responsibility (e.g., secretaries, admin staff, interns, managers);
- a group endorsing a particular set of activities or values (e.g., people in the runners' club, environmentalists);
- a group that captures some shared demographic characteristics (e.g., gender, age, tenure);
- a professional group (e.g., accountants, an occupation, an association);
- any other group that is meaningful to you.

*Leader prototypicality of multiple identities (Global LMIP)*. In light of evidence indicating that people readily form global impressions of their fit with their organization (Kristof, 1996) and possession of multiple group memberships (Jetten et al., 2015), we use a measure that assesses global impressions of leader multiple group prototypicality. After identifying and describing the three groups, participants will be asked to indicate on scales ranging from 1 (*not at all*) to 7 (*completely*) the extent to which their current supervisor is



prototypical of the groups they identified. They will be provided with the following instructions “The items in the section are about your supervisor’s relationship with the three groups that you identified above [the names that participants generated will be presented]. When responding to these items, think about how your supervisor relates to all three groups as a whole”. They will then be provided with four items from the Identity Leadership Inventory (Steffens et al., 2014): “My supervisor embodies what these groups stand for”; “My supervisor is representative of these groups; “My supervisor is a model member of these groups”; “My supervisor exemplifies what it means to be a member of these groups”. The mean score of these items will serve as our indicator of leader multiple identity prototypicality.

***Leader prototypicality of multiple outgroup identities (Global LMIP-outgroups).*** If the hypothesized effects are due to shared self-categorization, one can expect that leader multiple identity prototypicality will be associated with leader effectiveness when followers are members of the multiple groups in question, but not when followers are not members of those multiple groups (i.e., of multiple outgroup identities). That is, we do not expect that leaders will be more effective when they are prototypical of *any* multiple groups but only when leaders are prototypical of the multiple groups that they share with their followers. To address this possibility, we will also ask participants to indicate three additional (formal or informal) (out)groups that the leader belongs to, but that they are *not* members of.

Think about *three other groups*. Think about groups that your supervisor is a member of but that you are *NOT* a member of. These groups can be formal (e.g., a management group) or informal (e.g., a group of people who work in the same corridor or who have lunch together). They can take *any* form. For example, a group could be:

- a work group (e.g., a management group, a particular department);
- a role or responsibility (e.g., heads of department, managers);

- a group endorsing a particular set of activities or values (e.g., people in the runners' club, environmentalists);
- a group that captures some shared demographic characteristics (e.g., gender, age, tenure);
- a professional group (e.g., accountants, an occupation, an association);
- any other group.

Afterwards, participants will be asked to indicate the leader's prototypicality of these multiple outgroup identities (using the same four items as above from the Identity Leadership Inventory; Steffens et al., 2014: e.g., "My supervisor embodies what these groups stand for") as our indicator of leader prototypicality of multiple outgroup identities.

**Secondary Leader Multiple Identity Prototypicality Indices.** In order to cross-validate our focal global measure of multiple identity prototypicality, we use a second measure that captures the variation in a leader's prototypicality of each of the identified groups. To do this, we will also ask participants to reflect on each group that they identified in turn (including the three groups that participants belong to and the three groups that leaders belong to but participants do not). They will be asked to indicate the extent to which they perceive their supervisor to be prototypical of each group using the (single) item from the Identity Leadership Inventory–Short Form (Steffens et al., 2014): "My supervisor embodies what [this group] stands for"). They will also be asked to indicate how much they identify with each group (using the Single-Item Social Identification scale; Postmes, Haslam, & Jans, 2013; "I identify with [this group]").

We will calculate four sets of indices on the basis of these group-specific prototypicality ratings to examine their relationship with our global measure of leader multiple identity prototypicality. For the first index, we will use the mean level of leader prototypicality across the three ingroups as an index of leader multiple identity

prototypicality (LMIP Index) where reduced prototypicality in one group can be compensated for by higher prototypicality in another group (allowing us to assess the compensatory role of leader prototypicality). Second, we will create an index of leader multiple identity prototypicality weighted by participants' social identification with the group. To do this, for each ingroup we will first multiply the leader's prototypicality of the group by participants' identification with that group. We will then use the mean level of that product across the three groups as an index of weighted leader multiple identity prototypicality (weighted LMIP Index). Third, we will extend the original idea of the meta-contrast ratio (Turner, 1985; see also Haslam & Turner, 1992; McGarty & Penny, 1998; Mummendey, Otten, Berger, & Kessler, 1999) that is based on a single ingroup-outgroup comparison and that captures the extent to which a person is similar to ingroup members (intragroup similarity), while being different from outgroup members (intergroup distinction) to our analysis of *multiple* identities. For this purpose, we will first calculate the mean level of leader prototypicality across the three participant groups (the LMIP Index) and the mean level of leader prototypicality across the three outgroups (the LMIP-Outgroup Index). We will then calculate the ratio of the mean level of leader prototypicality of multiple ingroup identities over the mean level of leader prototypicality of multiple outgroup identities identity to create an index of relative leader multiple identity prototypicality (the Relative LMIP Index). Finally, we will create a relative LMIP index weighted by participants' identification by first calculating, for each group, the product of the leader's prototypicality of the group by participants' identification with that group. We will then calculate the ratio of the mean across the leader prototypicality X identification product for the multiple ingroups over the mean across the leader prototypicality X identification product for the multiple outgroups (to obtain the Weighted Relative LMIP Index).

A positive correlation between our global measure of leader multiple identity prototypicality and these individual group-based indices would provide additional evidence of the measure's construct validity. Given the novelty of the present construct and the absence of previous research that provides guidance concerning its operationalization, we will refrain from making predictions about the extent to which each index is likely to be associated with our global measure and with the remaining other indices and instead examine the correlation between these in exploratory analyses.

**Dependent Measures.** Participants will respond to dependent variables by indicating on scales ranging from 1 (*not at all*) to 7 (*completely*) the extent to which (a) they identify with their supervisor (using the 3-item measure from Steffens et al., 2014: "I identify with my supervisor"; "I feel strong ties to my supervisor"; "I am pleased with my supervisor"), (b) they endorse their supervisor's leadership (using 4 items adapted from the scale by Ullrich et al., 2009 and van Knippenberg & van Knippenberg, 2005: "My supervisor is the right person to be a supervisor"; "My supervisor is effective as a leader"; "It is legitimate for my supervisor to be a leader"; "My supervisor is a good leader"), and (c) they regard their supervisor as charismatic (using the 5 articulating a vision items of the Transformational Leadership Behavior Scale by Podsakoff, MacKenzie, & Bommer, 1996, that that maps onto the recent definition of charisma outlined by Antonakis et al., 2016): "My supervisor is always seeking new opportunities for our group"; "My supervisor paints an interesting picture of the future for our group"; "My supervisor has a clear understanding of where we are going"; "My supervisor inspires others with his/her plans for the future"; "My supervisor is able to get others committed to his/her dream of the future").

**Additional Sensitivity Measures.** First, in order to address potential common-method-variance that may enhance the strength of the association between variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we will also assess participants' belief in

shared (vs. vertical) leadership, which conceptually we do *not* expect to be influenced by leaders' multiple identity prototypicality ("The group of people that my supervisor has responsibility for rely on him/her alone for leadership" [reversed] adapted from Carson, Tesluk, & Marrone, 2007). We will examine the relationship between leader multiple identity prototypicality and belief in shared leadership and then compare the strength of this association with the strength of the associations between leaders' multiple identity prototypicality and dependent variables. If the associations between leaders' multiple identity prototypicality and dependent variables are significantly stronger than the association between leaders' multiple identity prototypicality and shared leadership, then results cannot fully be explained by common-method variance.

To provide additional sensitivity analyses, we will also assess participants' social identification with the three identified groups that they and their leader belong to, as well as the perceived overlap between these three groups in order to assess the extent to which they moderate the focal relationships. First, the literature on leader prototypicality of single identities has suggested and shown that leader (single) identity prototypicality has stronger impact on leader effectiveness as followers' identification with the group increases (Platow & van Knippenberg, 2001; van Knippenberg & Hogg, 2003; van Dijke & De Cremer, 2008). By the same token, we can extend this reasoning and also expect that the relationship between leader *multiple* identity prototypicality will have stronger impact on leader effectiveness as followers' identification with those *multiple* groups increases. That is, it is specifically when followers see the groups as an important (rather than a negligible) part of who they are, that the degree to which a leader embodies their group memberships becomes relevant to self and thus a determinant of their responses to that leader. In addition, it is plausible that the perceived overlap in the goals of the groups may moderate the relationship between leaders' multiple identity prototypicality and their effectiveness by reflecting on the notion of

compensation in leader prototypicality. That is, to the extent that groups are independent of each other, then the additional influence that comes with a leader's prototypicality of each additional group is likely to add to the leader's overall effectiveness. However, to the extent that groups are completely overlapping, then leader prototypicality of any additional group should not provide additional information and therefore should have less additional influence on the leader's effectiveness.

In order to assess these variables, we will ask followers to indicate their level of social identification with the three identified (in)groups that they and their leader belong to using a global measure of social identification (using three items from Postmes et al., 2013 and from Doosje, Ellemers, & Spears, 1995; Instructions: "Below, indicate your general perceptions of the three groups that you identified above that you are a member of and that are important to your day-to-day life at work: "I identify with these groups"; "I feel committed to these groups"; "I see myself as a member of these groups") and with the three (out)groups that the leader belongs to but that they do not (using the same three; Instructions: "Below, indicate your general perceptions of the three groups that you identified above that your supervisor is a member of but that you are NOT a member of": "I identify with these groups"; "I feel committed to these groups"; "I see myself as a member of these groups"). We will then also ask them to indicate the extent to which they perceive overlap in the goals of both sets of groups ("There is overlap in the goals of these groups"; "These groups have similar goals and values"; "These groups aim to achieve similar objectives"). We will conduct exploratory analyses to examine whether social identification with the multiple ingroup identities and goal overlap moderate (by enhancing and attenuating, respectively) the relationship between leaders' multiple identity prototypicality and their effectiveness.

As a comprehension check, we will also test whether participants identify, as expected, more strongly with the multiple (in)groups (the groups participants belong to) than

with the multiple (out)groups (the groups the leader belongs to but participants do not).

Participants who fail to identify more strongly with their ingroups than with outgroups will be excluded. Finally, we will also collect demographic data concerning both the leader and the participant (e.g., age, gender, tenure) as a means of describing the sample before debriefing participants upon completion of the study.

### **Pre-Registered Analysis**

#### **Main Analyses**

We will examine H1 by means of a series of hierarchical linear regressions. We will conduct three regression analyses to examine the nature of the association between leader prototypicality of multiple (ingroup) identities and followers' (a) identification with the leader, (b) endorsement of the leader, and (c) perceived leader charisma. In each regression analysis, in Step 1 we will enter leader prototypicality of multiple (ingroup) identities (global LMIP) as a predictor of the dependent variable. In Step 2, we will add leader prototypicality of multiple (leader group) identities (global LMIP-outgroups) as an additional variable to assess the extent to which leader prototypicality of multiple *ingroup* identities predicts the dependent variables over and above leader prototypicality of multiple *outgroup* identities that the leader is part of (but followers are not).

In addition, to examine the extent to which the association between leader prototypicality of multiple *ingroup* identities and dependent variables is stronger than the association between leader prototypicality of multiple leader *(out)group* identities and dependent variables, we will conduct Steiger's (1980) *Z*-test for correlated correlations within a population to examine whether the correlations between each set of multiple identities and a given dependent variable differ in strength. Steiger's *Z*-test is appropriate when there are several correlations within the same sample that involve a common variable (Hoerger, 2013). This test involves converting each correlation coefficient into a *Z*-score using Fisher's *r*-to-*z*

transformation before comparing the scores statistically (Lee & Preacher, 2013).  $Z_{\text{differences}}$  scores outside the value of -1.96 and +1.96 correspond with statistical significance (at the level of  $p = .05$ ) suggesting that the null hypothesis that correlations are equal in size can be rejected (Lee & Preacher, 2013).

To test H2, we will run bootstrapping indirect effects analysis with 5,000 resamples using PROCESS (Model 4; Hayes, 2013) to examine the extent to which the effect of leader prototypicality of the multiple identities (global LMIP) on (a) endorsement and (b) charisma is mediated by followers' personal identification with the leader. We will report effect sizes (and confidence intervals) for each predictor as well as the explained variance for each model.

Finally, in order to inspect the *secondary* indices of leader multiple identity prototypicality (i.e., those calculated by combining participants' perceptions of the leader's prototypicality of each group in turn), we will conduct exploratory correlation analyses to examine the extent to which each index is associated with our focal measure of leader prototypicality, the remaining other leader multiple identity prototypicality indices, and the dependent measures.

### **Sensitivity Analyses**

We will conduct several sensitivity analyses to assess the robustness of the proposed relationships. First, we will conduct Steiger's (1980) Z-test for correlated correlations to examine whether the correlations between leaders' multiple identity prototypicality (global LMIP) and the *dependent variables* are indeed stronger than the correlation between leaders' multiple identity prototypicality and *belief in shared leadership*.

Furthermore, we will examine the extent to which the relationships (as proposed in H1) are moderated by followers' social identification with multiple identities and goal overlap between multiple identities. To minimize the impact of multicollinearity between



variables and to maximize comparability of effects, all variables will be Z-standardized prior to computing the interaction terms. In the regression analysis for each dependent variable, in Step 1 we will enter leader prototypicality of multiple (ingroup) identities (global LMIP) as well as (global measures of) followers' identification with multiple identities and goal overlap between multiple identities as predictors. In Step 2, we will add the interaction terms between leader multiple identity prototypicality and (a) followers' identification with the multiple identities and (b) goal overlap between multiple identities.

### **Timeline**

We will preregister the study on OSF, obtain ethics approval for the study from the first author's institution, collect the data, conduct the analyses, write up the full report, and resubmit the full paper following in principle agreement for the proposed research.

## **Results**

### **Analysis of Sample**

A total sample of 611 participants fulfilled all above specified inclusion criteria (a larger number than expected did not fulfil the specified criteria but the final sample is large and provides sufficient statistical power for the present analyses) and entered the final analyses. The average age of participants was 32.70 years ( $SD = 10.45$ ), 47.8% of participants were female (50.7% male; 1.5% other), 74.9% had completed a Bachelor's, Master's, Professional, or Doctorate degree. Participants had on average 11.28 years of work experience ( $SD = 9.87$ ), they had worked for 3.42 years with their current supervisor ( $SD = 3.88$ ), and the vast majority of participants (90.2%) described their own seniority as intermediate or (very) junior.

### **Pre-registered Main Analyses of Hypotheses**

Bivariate correlations between variables are presented in Table 1. These correlations are consistent with our expectations, as perceptions of leader prototypicality of multiple

ingroup identities (global LMIP as well as indices constructed from individual ingroup perceptions) have strong positive associations with perceptions of leader identification, endorsement, and charisma. Additionally, perceptions of leader prototypicality of multiple *outgroup* identities (global perceptions as well as indices constructed from individual leader group perceptions) generally have weaker (albeit still significant) positive associations with these leader measures. We now proceed with the planned analysis that provides a formal test of our hypotheses.

We examined H1 by means of a series of hierarchical linear regressions. In these, we entered global perceptions of leader prototypicality of multiple ingroup identities (global LMIP) as a predictor of the dependent variable at Step 1, and global perceptions of leader prototypicality of multiple outgroup identities (global LMIP-outgroups) as an additional predictor at Step 2. These analyses assessed the extent to which leaders who were prototypical of multiple *ingroup* identities (versus groups in general) elicited higher identification, endorsement, and perceptions of leader charisma. Results are displayed in Table 2. Results provided support for H1 by showing that participants who perceived their leader to be more prototypical of their three selected ingroups (at a global level) (a) identified more strongly with the leader ( $\beta = .58, p < .001, b = .59, 95\%CIs [.53, .66], SE = .03$ ), and perceived the leader (b) to be more effective ( $\beta = .47, p < .001, b = .51, 95\%CIs [.45, .57], SE = .03$ ), and (c) to have more charisma ( $\beta = .54, p < .001, b = .55, 95\%CIs [.49, .61], SE = .03$ ). Importantly, these relationships were obtained after controlling for participants' global perceptions that their leader was prototypical of the three groups that they indicated their leader belonged to but they did not.

To examine whether global perceptions of the leader's multiple ingroup prototypicality (global LMIP) was a stronger predictor of the dependent variables than global perceptions of the leader's multiple outgroup prototypicality (global LMIP-outgroups), we

conducted Steiger's Z-test (Lee & Preacher, 2013). This analysis indicated that being prototypical of multiple *ingroups* was more important than being prototypical of multiple *outgroups* for personal identification ( $z = 5.67, p < .001$ ), and perceived charisma ( $z = 3.91, p < .001$ ). In contrast, there was no evidence that one or the other (being prototypical of either multiple *ingroups* or multiple *outgroups*) was more important than the respective other for perceived leader effectiveness ( $z = 0.61, p = .543$ ). Thus, it appears that when followers perceive that their leaders are prototypical of groups more generally, they regard them as more effective leaders. However, when it comes to personal identification and charisma, perceptions of ingroup (rather outgroup) prototypicality matter most.

To examine H2, which hypothesized an indirect association of leader's multiple ingroup identity prototypicality on endorsement and charisma via personal identification, we conducted bootstrapping indirect effect analysis with 5,000 resamples using PROCESS (Model 4; Hayes, 2013). Results are presented in Figure 1. Supporting H2a, analysis revealed indirect effects of global perceptions of leader multiple ingroup identity prototypicality (global LMIP) through greater follower personal identification with the leader to (a) perceived leader effectiveness ( $\gamma_1 = .57, SE = .04, 95\%CIs [.49, .65]$ ), and (b) perceived leader charisma ( $\gamma_2 = .45, SE = .03, 95\%CIs [.39, .51]$ ). Therefore, these results are consistent with the idea that perceiving a leader to be prototypical of one's *ingroups* leads to greater endorsement of the leader and charisma attributions, in part because it increases personal identification with the leader.

### **Pre-Registered Sensitivity Analyses**

We conducted a number of sensitivity analyses to assess the robustness of the relationships described in the main analyses. By doing this, we aimed to assess the extent to which (1) leader multiple *ingroup* identity prototypicality affects theoretically distinct leader perceptions, (2) the impact of leader multiple *ingroup* identity prototypicality is moderated by

ingroup identification and (3) the impact of leader multiple *ingroup* identity prototypicality is moderated by goal overlap between ingroup identities. We will discuss each analysis in turn.

First, to examine whether the correlations between leaders' multiple identity prototypicality (global LMIP) and the dependent variables are stronger than the correlation between leaders' multiple identity prototypicality and belief in shared leadership (see Table 1), we used Steiger's (1980) Z-test for correlated correlations. Results provided evidence that this was indeed the case for each dependent variable: (a) personal identification with the leader ( $z = 23.38, p < .001$ ), (b) perceived leader effectiveness ( $z = 23.46, p < .001$ ), and (c) perceived leader charisma ( $z = 24.01, p < .001$ ). The fact that the associations are stronger for the theoretically relevant (versus less relevant) leadership measures are consistent with the idea that the findings cannot be accounted for by common method variance factors.

Second, to examine the degree to which the hypothesized relationships were moderated by followers' social identification, we conducted multiple hierarchical regression analysis. Analysis of the role of followers' social identification revealed that global perceptions of leader multiple (ingroup) identity prototypicality (global LMIP) and, independently, their (global) identification with multiple ingroups were both unique significant predictors at Step 1. The interaction term between these two variables was not a significant predictor of any of the dependent variables at Step 2: (a) personal identification with the leader (global LMIP:  $\beta = .67, p < .001$ ; global identification with multiple identities:  $\beta = .18, p < .001$ ; interaction:  $\beta = .01, p = .739; \Delta R^2 = .00, R^2_{\text{Model}} = .53$ ), (b) perceived leader effectiveness (global LMIP:  $\beta = .65, p < .001$ ; global identification with multiple identities:  $\beta = .11, p < .001$ ; interaction:  $\beta = -.03, p = .305; \Delta R^2 = .00, R^2_{\text{Model}} = .47$ ), and (c) perceived leader charisma (global LMIP:  $\beta = .67, p < .001$ ; global identification with multiple identities:  $\beta = .11, p < .001$ ; interaction:  $\beta = -.02, p = .457; \Delta R^2 = .00, R^2_{\text{Model}} = .50$ ). These results indicate that followers respond more positively to leaders to the extent that they

identify with their groups. This finding is consistent with previous research based on single identities showing that employees' identification with their organization enhances the extent to which employees see each other as a source of leadership (Chrobot-Mason, Gerbasi, & Cullen-Lester, 2016). Furthermore, the results show that followers respond more positively to leaders who they perceive to be prototypical of their multiple identities, but this beneficial impact of leader multiple identity prototypicality does not vary with followers' identification with the groups in question (we will revert to discussing this finding in the Discussion).

Finally, to examine the degree to which the hypothesized relationships were moderated by goal overlap between multiple identities we conducted a multiple hierarchical regression analysis. This revealed that only global perceptions of leader multiple ingroup identity prototypicality (global LMIP) was a significant predictor, while the main effect of global perceptions of identity overlap and the interaction were not significant predictors of any of the dependent variables: (a) personal identification with the leader (global LMIP:  $\beta = .71, p < .001$ ; goal overlap:  $\beta = -.01, p = .739$ ; interaction:  $\beta = .05, p = .082$ ;  $\Delta R^2 = .00, R^2_{\text{Model}} = .50$ ), (b) perceived leader effectiveness (global LMIP:  $\beta = .68, p < .001$ ; goal overlap:  $\beta = -.04, p = .224$ ; interaction:  $\beta = .05, p = .106$ ;  $\Delta R^2 = .00, R^2_{\text{Model}} = .46$ ), and (c) perceived leader charisma (global LMIP:  $\beta = .69, p < .001$ ; goal overlap:  $\beta = .04, p = .201$ ; interaction:  $\beta = .05, p = .100$ ;  $\Delta R^2 = .00, R^2_{\text{Model}} = .49$ ). In sum, then, followers respond more positively to leaders to the degree that they perceive their leader to be prototypical of their multiple identities, independently of their perceptions goal overlap between multiple ingroups.

### **Exploratory Analyses Comparing Different Indices**

As pre-registered, we conducted a series of exploratory correlation analyses to gain some insight into how people form perceptions of leader multiple identity prototypicality. To do this, we first examined the associations between *global* perceptions of leader multiple

*ingroup* identity prototypicality (global LMIP) and the two indices that we constructed on the basis of the individual ingroup perceptions: the LMIP index (which averaged the prototypicality perceptions for each of the three nominated ingroups) and the weighted LMIP index (which averaged the product of the prototypicality perceptions and identification with each group for each of the three nominated ingroups). This revealed strong positive associations between global perceptions of leader multiple ingroup identity prototypicality (global LMIP) and the LMIP ingroup index ( $r = .85, p < .001$ ) and the weighted LMIP ingroup index ( $r = .78, p < .001$ ). These results support the construct validity of the global measure by indicating that the global measure and separate (group-by-group) indices broadly tap into the same underlying construct.

To examine the extent to which the findings of the tests of H1 and H2 using the indices based on individual group perceptions (in place of the global perceptions) are similar, we conducted an additional set of regression analyses using the indices based on individual group perceptions. This revealed that the LMIP index and the weighted LMIP index were both positively associated with personal identification with the leader ( $r = .70, p < .001$  and  $r = .70, p < .001$ , respectively), perceived leader effectiveness ( $r = .63, p < .001$  and  $r = .61, p < .001$ , respectively), and perceived leader charisma ( $r = .64, p < .001$  and  $r = .61, p < .001$ , respectively). Additionally, regression analyses revealed that the LMIP index was positively associated with each dependent variable even after the LMIP-outgroup index was included in the regression: personal identification with the leader ( $\beta = .59, p < .001, b = .60, 95\%CIs [.54, .66], SE = .03; R^2_{Model} = .55$ ), perceived leader effectiveness ( $\beta = .47, p < .001, b = .50, 95\%CIs [.44, .56], SE = .03; R^2_{Model} = .53$ ), and perceived leader charisma ( $\beta = .51, p < .001, b = .51, 95\%CIs [.45, .58], SE = .03; R^2_{Model} = .49$ ). This was also true for the weighted LMIP index after controlling for the weighted LMIP-outgroups index: personal identification with the leader ( $\beta = .62, p < .001, b = .09, 95\%CIs [.08, .10], SE = .01; R^2_{Model} = .52$ ), perceived

leader effectiveness ( $\beta = .57, p < .001, b = .09, 95\%CIs [.08, .10], SE = .01; R^2_{Model} = .37$ ), and perceived leader charisma ( $\beta = .56, p < .001, b = .08, 95\%CIs [.07, .09], SE = .01; R^2_{Model} = .39$ ). These findings are consistent with the pattern revealed by the focal analyses.

Table 1 shows that the associations between the *global* perceptions of leader multiple identity prototypicality (global LMIP) and the dependent variables (leader identification, endorsement, and charisma) are descriptively at least as strong, or stronger, than the associations of each of the indices based on individual group perceptions and the dependent variables. In light of this, and the consistency of the findings across both kinds of measures, it appears that soliciting global perceptions of leader multiple ingroup identity prototypicality is likely to be at least as useful for understanding how followers respond to leaders as soliciting perceptions for each group and then computing indices on this basis.

We conducted additional exploratory correlation analysis for perceptions of leader prototypicality of multiple *outgroup* identities using the group-based indices. This revealed a strong positive association between the global LMIP-outgroups and the LMIP-outgroup Index,  $r = .77, p < .001$ . However, the correlation between the global LMIP-outgroups and the Weighted LMIP-outgroups Index was only moderately strong,  $r = .31, p < .001$ . Perhaps unsurprisingly, this suggests that followers' perceptions that a leader is prototypical of outgroups is somewhat independent of followers' identification with those groups. In other words, followers may not identify with the leader's groups but nonetheless perceive the leader to be prototypical of them. Table 1 reveals that the associations between global perceptions of the leader's prototypicality of multiple *outgroup* identities (global LMIP-outgroups) and dependent measures (leader identification, endorsement, and charisma) are descriptively stronger than the associations between the group-based indices (LMIP-outgroups Index and the Weighted LMIP-outgroups index) and dependent variables. This suggests that global perceptions are likely to be at least as useful as any other (if not more

useful) when understanding how followers respond to leaders on the basis of their prototypicality of multiple outgroups.

We conducted one additional exploratory analysis which we had not anticipated at the time of pre-registration but which we believe could be informative, which involved comparing leader multiple identity prototypicality and leader single identity prototypicality. In these, we compared the association between global perceptions of leader multiple identity prototypicality (global LMIP) and dependent variables and the association between leader (single) identity prototypicality (based on follower perceptions of the leader's prototypicality of the first shared group membership that they indicated) and dependent variables using Steiger's (1980) Z-test for correlated correlations. Results indicated that leader multiple identity prototypicality and leader single identity prototypicality were both positively associated with all dependent variables. Furthermore, results indicated that leader multiple identity prototypicality had stronger associations than leader single identity prototypicality with all dependent variables: (a) personal identification with the leader ( $r = .71$  and  $r = .58$  for global LMIP and leader single identity prototypicality, respectively;  $z = 5.69, p < .001$ ), (b) perceived leader effectiveness ( $r = .67$  and  $r = .54$  for global LMIP and leader single identity prototypicality, respectively;  $z = 5.49, p < .001$ ), and (c) perceived leader charisma ( $r = .70$  and  $r = .55$  for global LMIP and leader single identity prototypicality, respectively;  $z = 6.12, p < .001$ ).

Similarly, regression analysis with multiple identity prototypicality and single identity prototypicality as simultaneous predictors revealed that leader multiple identity prototypicality was a significant predictor (even when controlling for leader single identity prototypicality) of dependent variables: (a) personal identification with the leader (global LMIP:  $\beta = .59, p < .001$ ; leader single identity prototypicality:  $\beta = .18, p < .001$ ;  $R^2_{\text{Model}} = .52$ ), (b) perceived leader effectiveness (global LMIP:  $\beta = .57, p < .001$ ; leader single identity



prototypicality:  $\beta = .15, p < .001; R^2_{\text{Model}} = .46$ ), and (c) perceived leader charisma (global LMIP:  $\beta = .60, p < .001$ ; leader single identity prototypicality:  $\beta = .15, p < .001; R^2_{\text{Model}} = .50$ ). These results suggest that there is likely to be added benefit of leaders being seen to be prototypical of not just one but of multiple identities.

### Discussion

In the present research, we introduced the idea of leaders' multiple identity prototypicality. A schematic representation of leader multiple identity prototypicality (LMIP) is presented in Figure 2. We hypothesized that the extent to which a leader is seen as prototypical of multiple identities that are shared between leader and follower will be associated with greater leader effectiveness. Supporting H1, the degree to which followers regarded their leader as prototypical of their multiple identities was positively associated with the extent to which they (a) identified with the leader, as well as perceived the leader (b) to be effective, and (c) to have charisma. Furthermore, supporting H2, results provided evidence of an indirect effect whereby leader multiple identity prototypicality was positively associated with the extent to which followers identified with the leader and, through this, with perceptions of the leaders' (a) effectiveness and (b) charisma. These core hypotheses were examined using a novel (global) measure of leader multiple identity prototypicality (LMIP), which was found to have internal consistency and construct validity, as indicated by a strong positive association with an alternative group-by-group index of leader multiple identity prototypicality (where leader prototypicality was assessed for each group separately before being averaged across the groups). Additional analyses using the alternative leader multiple identity prototypicality index as predictor yielded virtually identical patterns of results.

Substantiating these findings, results showed that the positive association between leaders' multiple identity prototypicality (of shared ingroups) and followers' identification with the leader and perceived leader charisma was stronger than the association between

leaders' prototypicality of their own groups (that leaders are part of but followers are not) and these outcomes. However, there was no evidence that these two forms of leader multiple identity prototypicality differed in strength in their relation to perceived leader effectiveness. This suggests that followers may make the inference that because a leader is effective in their group, he or she will be effective in other groups too. There could be multiple reason for this pattern, but seems plausible that it reflects some combination of over-generalization (e.g., on the basis of leader stereotypes; Lord, Foti & De Vader, 1984), ingroup projection (Wenzel, Mummendey & Waldzus, 2008), or false consensus (Ross, Greene, & House, 1977).

Finally, exploratory analyses revealed no evidence that the relationship between leader multiple identity prototypicality and outcomes was moderated by followers' social identification with multiple identities or by goal overlap between multiple identities. The first set of findings is noteworthy in light of abundant evidence that the effect of leaders' (single) identity prototypicality on outcomes is enhanced to the extent that followers identify with the group in question (for a review, see van Knippenberg, 2011). It is possible that strength of identification with multiple groups does enhance the impact of leader prototypicality of those groups. However, we believe it may be too early to reject entirely the idea of an amplifying function of followers' identification with multiple groups. A potential factor could have been that the instructions asked participants to reflect on three groups that they see as 'somewhat important to their day-to-day work', which could have restricted the variance in this variable (indeed identification with multiple ingroups had the highest sample mean of all variables, almost 6 on the 7-point scale, and the lowest standard deviation of all variables, of less than 1). In any case, we believe that we are not able to provide firm answers to this issue and that this remains an important question for future work to address. The lack of evidence of the moderating role of goal overlap also raises some similar questions that future research needs to interrogate further. In this case, though, there was no evidence of range restriction and so it

appears that goal overlap between identities may not be an important factor that influences the focal relationships.

### **Theoretical and Practical Implications**

The present study's demonstration of the association between leaders' multiple identity prototypicality and their leadership has a number of important implications. First, it advances our understanding of the importance of individuals' multiple group memberships and associated identities. In this it expands upon a growing body of research that has recognized the important implications of multiple identities for individuals' psychology including their health and psychological well-being (Haslam, Jetten, Cruwys, Dingle, & Haslam, 2018; Thoits, 1983), their ability to adjust to change (Haslam et al., 2008; Iyer et al., 2009), and their creativity (Leung, Maddux, Galinsky, & Chiu, 2008; Steffens, Gocłowska, Cruwys, & Galinsky, 2016). Furthermore, previous theoretical (but hitherto empirically untested) work in organizations suggests that multiple identities are also likely to contribute to individuals' (and teams') learning and productivity (O'Leary, Mortensen, & Woolley, 2011), to provide workers with access to knowledge and social capital (Creary, Caza, & Roberts, 2015), and to affect individuals' work-life balance depending on whether work and non-work identities are aligned (Ramarajan, & Reid, 2013; for reviews of multiple identities in organizations, see Alcover, 2018; Ramajaran, 2014). The present study advances this literature by providing evidence that multiple identities are also important for processes of leadership and followership — thereby suggesting that leaders' embodiment of followers' multiple identities may be an important way to foster positive follower outcomes.

Second, research informed by the social identity approach to leadership has highlighted and examined extensively the importance of leaders' (single) group prototypicality (for recent reviews, see Barreto & Hogg, 2017; Platow et al., 2015). The present work advances the social identity approach by going beyond single group

perspectives that have dominated research in the field to date and introducing the idea of leader multiple identity prototypicality. Results indicate that leaders' identity work around not just one, but around multiple groups is likely to be a determinant of followers' identification with them and of those followers' perceptions of the leader's effectiveness and charisma. In this regard, it is noteworthy that in terms of effect size, the focal relationship between leader multiple identity prototypicality is stronger ( $r = .63-.67$  for the group-by-group index and the global measure) than the relationship revealed by meta-analysis between leader (single) group prototypicality and effectiveness ( $r = .43$ ; Barreto & Hogg, 2017). At the same time, previous studies have shown significant variation in the magnitude of the association between leader (single) group prototypicality and effectiveness (the relationship tends to be positive but in some studies it is weak while in others it is strong), and future work needs to determine to what extent leaders' multiple identity prototypicality may account for some additional variance between leader (single) group prototypicality and effectiveness.

Third, the present research expands upon a vast body of research on diversity and intergroup leadership by contributing to our understanding of leadership in situations in which there are barriers to a leader's prototypicality of a given (single) group. Research on boundary-spanning and intergroup leadership (Hogg, van Knippenberg, & Rast, 2012; Pittinsky, 2009; Pittinsky, & Simon, 2007) has addressed the question of how leaders can break the boundaries of a single group by leading across different groups. In this regard, scholars have suggested that in order for leaders to be able to influence members of other groups in addition to members of their own (single) group (e.g., their team, their demographic group, their nation), those leaders might (a) develop positive attitudes (allophilia) to another (out)group (Pittinsky, Rosenthal, & Montoya, 2011), (b) promote and be prototypical of a relational identity between distinct subgroups (Rast, Hogg, & van Knippenberg, 2017), or (c) be prototypical of a shared, superordinate group (Platow, Reicher,

& Haslam, 2009; Pitinsky, 2010). Furthermore, research on diversity leadership and leadership multi-team systems suggests that leaders can be effective and contribute to positive follower and organizational outcomes (a) by enabling coordination between different teams (DeChruch & Marks, 2006), (b) by forming accurate mental models of the team (e.g., of the members, the task, the team's external environment; Murase, Carter, DeChurch, & Marks, 2014), and (c) by facilitating shared (distributed) leadership across members of various teams (Bienefeld, & Grote, 2014). The present work suggests that an additional pathway to leadership 'across the aisle' arises from the process of managing multiple (formal, informal) groups.

Practical implications are that leaders might want to work with followers' membership in multiple groups by reflecting on what identities are important to followers before then representing and taking forward some of these identities (as suggested by Haslam et al., 2017, in the case of single identities). Clearly, leaders are unlikely to be able to be, and be seen, as representative of all of the groups of their potential followers. However, it is likely that there are always at least some (formal or informal) group memberships that leaders and potential followers share and that leaders can engage with. Nevertheless, if there are hardly any groups that followers and leaders perceive themselves to share membership in, then leaders might increase their effectiveness as leaders by acting as *multiple identity entrepreneurs* and creating *new* groups that have the capacity to connect them to potential followers (Reicher & Hopkins, 2001).

### **Limitations and Future Research**

The present research has several limitations that future work needs to improve upon. First, this study focused on examining the relationship between multiple identity prototypicality and the outcomes followers' personal identification with their leader and perceptions of the leader's effectiveness and charisma. Even though these matter (e.g.,

Ashforth et al., 2016), it would be worthwhile expanding the suite of outcomes by examining other important outcomes such as followers' effort, performance, and well-being at work. Second, the current study used a cross-sectional design and so it is unable to shed light on causality. It is possible that when followers identify with their leader and see the leader as effective and charismatic, this also reinforces their perception that the leader is prototypical of the groups that are important to them. This is an interesting and important possibility that future research needs to address through experimental as well as appropriate longitudinal (panel) studies. Third, in the present study we examined the present relationships in a sample from a US (corporate) work context, and with this in mind, it would be worthwhile replicating and extending the analysis in other (e.g., non-traditional work, sport, political) contexts as well as other societies that vary in their cultural orientation to leadership (e.g., as revealed by House, Hanges, Javidan, Dorfman, & Gupta, 2004).

Fourth, the current study focused on a leader's *prototypicality* of multiple identities. In measuring this construct, leader multiple identity prototypicality was restricted to three shared identities but it would be valuable in future research to broaden and examine other forms (operationalizations) of this construct. Furthermore, leaders' prototypicality is only one of many potential ways in which they can engage with and manage identities and hence in future work it would be worthwhile extending the multiple identity perspective on other aspects of leaders' identity work to include their creation, advancement, and embedding of multiple identities (Haslam et al., 2011; Steffens et al., 2014; van Dick et al., 2018). In this regard too, it would also be worthwhile examining how a leader's ability to contribute to positive follower and organizational outcomes by being seen as prototypical of multiple identities is conditioned by other important factors such as the compatibility between a network of multiple (in- and out-) groups. For instance, followers might be less open to a leader who is highly prototypical of multiple (ingroup) identities when that leader is also

highly prototypical of other (out)groups that they see as misaligned and incompatible with their own groups. Similarly, it is possible that members of high status groups might find fewer shared group memberships with members of low status groups, whereas members of low status groups *who aspire to higher status* might find more shared group memberships with members of high status groups, a discrepancy that might have important implications for their willingness to follow different leaders.

### **Conclusion**

The current registered report provides the first empirical examination of the importance of Leaders' Multiple Identity Prototypicality (LMIP) for their leadership. For this purpose, we reported a large study which showed that the degree to which followers perceive their leader to embody multiple identities at work is positively associated with their identification with those leaders (an effect of moderate to large magnitude). Furthermore, indirect effects indicated that, through enhancing identification with the leader, LMIP was linked to followers' perceptions of leaders' effectiveness and charisma. In this way, the study not only extends our understanding of leadership in complex, multiple group situations but also provides important signposts for future work and practice.

**Footnote**

1. Consistent with previous research, we distinguish between psychological subjective group memberships (formal or informal groups or social categories that people indicate as an important part of their self-concept) and sociological objective group memberships (formal groups or social categories that people are notionally members of but that they do not regard as an important part of their self-concept; for a discussion, see Cruwys et al., 2016; Platow, Haslam, Reicher, & Steffens, 2015), and use the term groups and identities as referring consistently to subjective group memberships.
2. We made some minor changes to the wording of some of the instructions (we did not change the wording of any items) and these additional changes were approved by the editor (Shaul Shalvi) on 9 November 2017. The updated version is posted on OSF.



### References

- Antonakis, J., Bastardo, N., Jacquart, P., & Shamir, B. (2016). Charisma: An ill-defined and ill-measured gift. *Annual Review of Organizational Psychology and Organizational Behavior*, 3, 293–319.
- Alcover, C. M. (2018). Who are ‘I’? Who are ‘we’? A state-of-the-art review of multiple identities at work. *Psychologist Papers*, 39, 200-207.
- Ashforth, B. E., Schinoff, B. S., & Rogers, K. M. (2016). “I identify with her”, “I identify with him”: Unpacking the dynamics of personal identification in organizations. *Academy of Management Review*, 41, 28–60.
- Banks, G. C., Engemann, K. N., Williams, C. E., Gooty, J., McCauley, K. D., & Medaugh, M. R. (2017). A meta-analytic review and future research agenda of charismatic leadership. *The Leadership Quarterly*, 28, 508-529.
- 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.
- Bienefeld, N., & Grote, G. (2014). Shared leadership in multiteam systems: How cockpit and cabin crews lead each other to safety. *Human Factors*, 56, 270-286.
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, 50, 1217–1234.
- Chrobot-Mason, D., Gerbasi, A., & Cullen-Lester, K. L. (2016). Predicting leadership relationships: The importance of collective identity. *The Leadership Quarterly*, 27, 298-311.

- Conger, J. A., & Kanungo, R. N. (1994). Charismatic leadership in organizations: Perceived behavioral attributes and their measurement. *Journal of Organizational Behavior, 15*, 439–452.
- Creary, S. J., Caza, B. B., & Roberts, L. M. (2015). Out of the box? How managing a subordinate's multiple identities affects the quality of a manager-subordinate relationship. *Academy of Management Review, 40*, 538-562.
- Cruwys, T., Steffens, N. K., Haslam, S. A., Haslam, C., Jetten, J., & Dingle, G. A. (2016). Social Identity Mapping: A procedure for visual representation and assessment of subjective multiple group memberships. *British Journal of Social Psychology, 55*, 613–642.
- DeChurch, L. A., & Marks, M. A. (2006). Leadership in multiteam systems. *Journal of Applied Psychology, 91*, 311-329.
- Giessner, S. R., & van Knippenberg, D. (2008). “License to Fail”: Goal definition, leader group prototypicality, and perceptions of leadership effectiveness after leader failure. *Organizational Behavior and Human Decision Processes, 105*, 14–35.
- Haslam, C., Holme, A., Haslam, S. A., Iyer, A., Jetten, J., & Williams, W. H. (2008). Maintaining group memberships: Social identity continuity predicts well-being after stroke. *Neuropsychological Rehabilitation, 18*, 671-691.
- Haslam, C., Jetten, J., Cruwys, T., Dingle, G., & Haslam, A. (2018). *The new psychology of health: Unlocking the social cure*. Routledge.
- Haslam, S. A., Reicher, S. D., & Platow, M. J. (2011). *The new psychology of leadership: Identity, influence and power*. London & New York: Psychology Press.
- Haslam, S. A., Steffens, N. K., Peters, K., Boyce, R. A., Mallett, C. J., & Fransen, K. (2017). A social identity approach to leadership development. *Journal of Personnel Psychology, 16*, 113-124.

- Haslam, S. A., & Turner, J. C. (1992). Context-dependent variation in social stereotyping 2: The relationship between frame of reference, self-categorization and accentuation. *European Journal of social Psychology, 22*, 251–277.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. London & New York: Guilford Press.
- Hoerger, M. (2013). Z<sup>H</sup>: An updated version of Steiger's Z and web-based calculator for testing the statistical significance of the difference between dependent correlations. Retrieved 1 June 2017 from [http://www.psychmike.com/dependent\\_correlations.php](http://www.psychmike.com/dependent_correlations.php)
- Hogg, M. A., & Terry, D. J. (Eds.) (2001). *Social identity processes in organizational contexts*. Philadelphia, Hove & PA US: Psychology Press.
- Hogg, M. A., van Knippenberg, D., & Rast III, D. E. (2012). Intergroup leadership in organizations: Leading across group and organizational boundaries. *Academy of Management Review, 37*, 232-255.
- Hogg, M. A., van Knippenberg, D., & Rast III, D. E. (2012). The social identity theory of leadership: Theoretical origins, research findings, and conceptual developments. *European Review of Social Psychology, 23*, 258–304.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage: Thousand Oaks & London.
- Iyer, A., Jetten, J., Tsivrikos, D., Postmes, T., & Haslam, S. A. (2009). The more (and the more compatible) the merrier: Multiple group memberships and identity compatibility as predictors of adjustment after life transitions. *British Journal of Social Psychology, 48*, 707-733.

- Jetten, J., Branscombe, N. R., Haslam, S. A., Haslam, C., Cruwys, T., Jones, J. M., ... & Thai, A. (2015). Having a lot of a good thing: Multiple important group memberships as a source of self-esteem. *PloS One*, *10*, e0124609.
- Kark, R., Waismel-Manor, R., & Shamir, B. (2012). Does valuing androgyny and femininity lead to a female advantage? The relationship between gender-role, transformational leadership and identification. *The Leadership Quarterly*, *23*, 620–640.
- Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, *49*, 1–49.
- Lee, I. A., & Preacher, K. J. (2013). Calculation for the test of the difference between two dependent correlations with one variable in common [Computer software]. Retrieved 20 February 2019 from <http://quantpsy.org>
- Leung, A. K.-Y., Maddux, W. W., Galinsky, A. D., & Chiu, C.-Y. (2008). Multicultural experience enhances creativity: The when and how. *American Psychologist*, *63*, 169–181.
- Lord, R. G., Foti, R. J., & De Vader, C. L. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior and Human Performance*, *34*, 343-378.
- McGarty, C., & Penny, R. E. C. (1988). Categorization, accentuation and social judgement. *British Journal of Social Psychology*, *27*, 147–157.
- Mummendey, A., Otten, S., Berger, U., & Kessler, T. (2000). Positive-negative asymmetry in social discrimination: Valence of evaluation and salience of categorization. *Personality and Social Psychology Bulletin*, *26*, 1258–1270.
- Murase, T., Carter, D. R., DeChurch, L. A., & Marks, M. A. (2014). Mind the gap: The role of leadership in multiteam system collective cognition. *The Leadership Quarterly*, *25*, 972-986.

- O'Leary, M. B., Mortensen, M., & Woolley, A. W. (2011). Multiple team membership: A theoretical model of its effects on productivity and learning for individuals and teams. *Academy of Management Review*, *36*, 461-478.
- Pittinsky, T. L. (2009). *Crossing the divide: Intergroup leadership in a world of difference*. Harvard Business Press. Boston MA: US.
- Pittinsky, T. L. (2010). A two-dimensional model of intergroup leadership: The case of national diversity. *American Psychologist*, *65*, 194-200.
- Pittinsky, T. L., & Simon, S. (2007). Intergroup leadership. *The Leadership Quarterly*, *18*, 586-605.
- Pittinsky, T. L., Rosenthal, S. A., & Montoya, R. M. (2011). Measuring positive attitudes toward outgroups: Development and validation of the Allophilia Scale. In L. R. Tropp & R. K. Mallett (Eds.), *Moving beyond prejudice reduction: Pathways to positive intergroup relations* (pp. 41-60). Washington, DC, US: American Psychological Association.
- Platow, M. J., Haslam, S. A., Reicher, S. D., & Steffens, N. K. (2015). There is no leadership if no one follows: Why leadership is necessarily a group process. *International Coaching Psychology Review*, *10*, 20-37.
- Platow, M., Reicher, S. D., & Haslam, S. A. (2009). On the social psychology of intergroup leadership: The importance of social identity and self-categorization processes. In P. Pittinsky (ed.), *Crossing the divide: Intergroup leadership in a world of difference*. Harvard Business Press. Boston MA: US.
- Platow, M. J., & van Knippenberg, D. (2001). A social identity analysis of leadership endorsement: The effects of leader ingroup prototypicality and distributive intergroup fairness. *Personality and Social Psychology Bulletin*, *27*, 1508-1519.

- Platow, M. J., van Knippenberg, D., Haslam, S. A., van Knippenberg, B., & Spears, R. (2006). A special gift we bestow on you for being representative of us: Considering leader charisma from a self-categorization perspective. *British Journal of Social Psychology, 45*, 303–320.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management, 22*, 259–298.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903.
- Postmes, T., Haslam, S. A., & Jans, L. (2013). A single-item measure of social identification: Reliability, validity, and utility. *British Journal of Social Psychology, 52*, 597–617.
- Ramarajan, L. (2014). Past, present and future research on multiple identities: Toward an intrapersonal network approach. *Academy of Management Annals, 8*, 589–659.
- Ramarajan, L., & Reid, E. (2013). Shattering the myth of separate worlds: Negotiating nonwork identities at work. *Academy of Management Review, 38*, 621–644.
- Rast III, D. E., Hogg, M. A., & van Knippenberg, D. (2018). Intergroup leadership across distinct subgroups and identities. *Personality and Social Psychology Bulletin, 44*, 1090–1103.
- Rees, L. (2012). *The dark charisma of Adolf Hitler*. London: Ebury Press.
- Ross, L., Greene, D., & House, P. (1977). The “false consensus effect”: An egocentric bias in social perception and attribution processes. *Journal of Experimental Social Psychology, 13*, 279–301.

- Steiger, J. H. (1980). Tests for comparing elements of a correlation matrix. *Psychological Bulletin*, 87, 245–251.
- Steffens, N. K., Gocłowska, M. A., Cruwys, T., & Galinsky, A. D. (2016). How multiple social identities are related to creativity. *Personality and Social Psychology Bulletin*, 42, 188-203.
- Steffens, N. K., Haslam, S. A., & Reicher, S. D. (2014). Up close and personal: Evidence that shared social identity is a basis for the ‘special’ relationship that binds followers to leaders. *The Leadership Quarterly*, 25, 296–313.
- Steffens, N. K., Haslam, S. A., Reicher, S. D., Platow, M. J., Fransen, K., Yang, J., ... & Boen, F. (2014). Leadership as social identity management: Introducing the Identity Leadership Inventory (ILI) to assess and validate a four-dimensional model. *The Leadership Quarterly*, 25(5), 1001–1024.
- Steffens, N. K., Schuh, S. C., Haslam, S. A., Perez, A., & van Dick, R. (2015). ‘Of the group’ and ‘for the group’: How followership is shaped by leaders' prototypicality and group identification. *European Journal of Social Psychology*, 45, 180–190.
- Thoits, P. A. (1983). Multiple identities and psychological well-being: A reformulation and test of the social isolation hypothesis. *American Sociological Review*, 48, 174-187.
- Turner, J. C., & Haslam, S. A. (2001). Social identity, organizations, and leadership. In M. E. Turner (Ed.), *Groups at work: Theory and research* (pp. 25–65). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers. [1] [SEP]
- Ullrich, J., Christ, O., & van Dick, R. (2009). Substitutes for procedural fairness: Prototypical leaders are endorsed whether they are fair or not. *Journal of Applied Psychology*, 94, 235–244.
- van Dick, R., Lemoine, J. E., Steffens, N. K., Kerschreiter, R., Akfirat, S. A., ... & Haslam, S. A. (2018). Identity leadership going global: Validation of the Identity Leadership

- Inventory (ILI) across 20 countries. *Journal of Occupational and Organisational Psychology*, 91, 697-728.
- van Dijke, M., & De Cremer, D. (2008). How leader prototypicality affects followers' status: The role of procedural fairness. *European Journal of Work and Organizational Psychology*, 17, 226–250.
- van Knippenberg, B., & van Knippenberg, D. (2005). Leader self-sacrifice and leadership effectiveness: The moderating role of leader prototypicality. *Journal of Applied Psychology*, 90, 25–37.
- van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. *Research in Organizational Behavior*, 25, 243–295.
- van Knippenberg, D. (2011). Embodying who we are: Leader group prototypicality and leadership effectiveness. *The Leadership Quarterly*, 22, 1078–1091.
- Wang, X. H., & Howell, J. M. (2012). A multilevel study of transformational leadership, identification, and follower outcomes. *The Leadership Quarterly*, 23, 775–790.
- Wenzel, M., Mummendey, A., & Waldzus, S. (2008). Superordinate identities and intergroup conflict: The ingroup projection model. *European Review of Social Psychology*, 18, 331-372.



## Tables and Figures

**Table 1.** Means, standard deviations, and bivariate correlations between variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Global LMIP	4.65	1.61	–															
2. LMIP Index	4.55	1.63	.85	–														
3. Weighted LMIP Index	26.29	11.20	.78	.92	–													
4. Identification with Multiple Ingroups	5.88	.94	.22	.21	.42	–												
5. Goal Overlap between Multiple Ingroups	5.48	1.20	.26	.20	.25	.32	–											
6. Personal Identification with Leader	4.68	1.65	.71	.70	.70	.33	.16	–										
7. Leader Effectiveness	5.23	1.74	.67	.63	.61	.26	.13	.85	–									
8. Leader Charisma	4.84	1.64	.70	.64	.61	.27	.21	.80	.86	–								
9. Global LMIP-Outgroups	5.66	1.21	.46	.43	.44	.24	.08	.54	.66	.58	–							
10. LMIP-Outgroups Index	5.62	1.17	.40	.41	.44	.30	.08	.51	.59	.53	.77	–						
11. Weighted LMIP-Outgroups Index	16.89	9.71	.37	.42	.46	.30	.18	.46	.34	.38	.31	.36	–					
12. Relative LMIP Index	0.83	0.35	.50	.61	.51	-.04	.11	.30	.23	.27	-.12	-.30	.10	–				
13. Weighted Relative LMIP Index	2.05	1.69	.20	.25	.26	.00	.04	.02	.09	.08	-.07	-.13	-.51	.58	–			
14. Identification with Multiple Outgroups	2.96	1.51	.32	.34	.35	.29	.22	.38	.23	.29	.11	.10	.77	.18	-.41	–		
15. Goal Overlap between Multiple Outgroups	4.82	1.41	.16	.16	.18	.23	.36	.12	.14	.14	.20	.23	.23	-.06	-.10	.30	–	
16. Belief in Shared Leadership	3.55	1.79	-.53	-.49	-.47	-.23	-.17	-.58	-.63	-.62	-.41	-.37	-.33	-.20	-.03	-.26	-.12	–

Note.  $N = 611$ . Ratings on Likert-scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). LMIP = Leader Multiple Identity Prototypicality,  $rs \geq .08 | = p < .05$ ,  $rs \geq .14 | = p < .001$ .

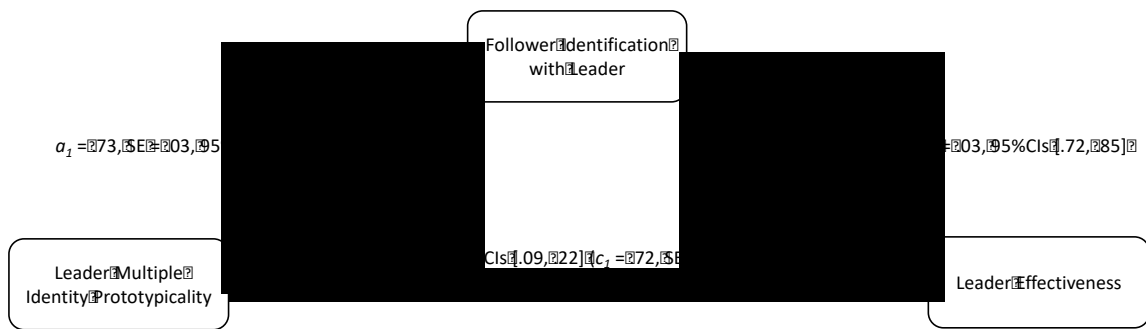
**Table 2.** Hierarchical Regression Analyses Assessing the Impact of Leader Multiple Identity Prototypicality on Follower Personal Identification with Leader, Perceived Leader Effectiveness, and Perceived Leader Charisma.

	Step 1					Step 2				
	<i>b</i>	<i>SE</i>	95% <i>CI</i> s	$\beta$	<i>t</i>	<i>b</i>	<i>SE</i>	95% <i>CI</i> s	$\beta$	<i>t</i>
<i>Personal Identification with Leader</i>										
LMIP Ingroups	.72	.03	[.67, .78]	.71	24.73**	.59	.03	[.53, .66]	.58	19.21**
LMIP Leader Groups						.37	.04	[.29, .45]	.27	9.03**
$\Delta R^2$					.50**					.06**
$R^2$					.50**					.56**
<i>Leader Effectiveness</i>										
LMIP Ingroups	.72	.03	[.66, .79]	.67	22.41**	.51	.03	[.45, .57]	.47	16.36**
LMIP Leader Groups						.63	.04	[.55, .71]	.44	15.26**
$\Delta R^2$					.45**					.15**
$R^2$					.45**					.60**
<i>Leader Charisma</i>										
LMIP Ingroups	.71	.03	[.65, .77]	.70	23.97**	.55	.03	[.49, .61]	.54	18.21**
LMIP Leader Groups						.45	.04	[.37, .53]	.33	11.18**
$\Delta R^2$					.49**					.08**
$R^2$					.49**					.57**

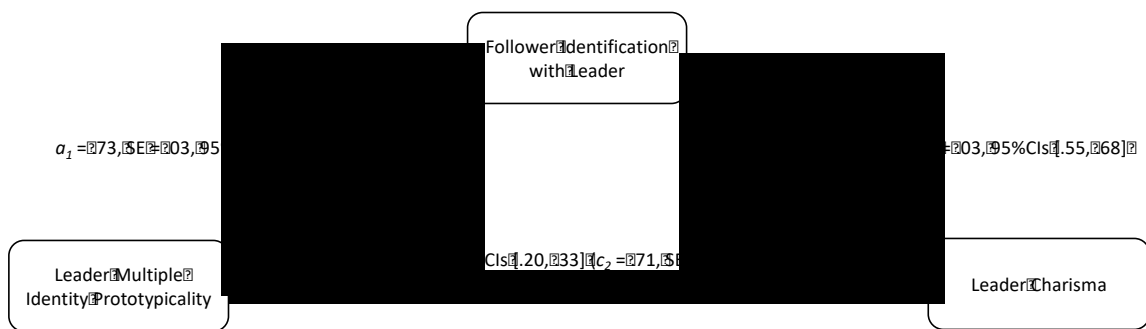
Note. LMIP = Leader Multiple Identity Prototypicality.

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ .

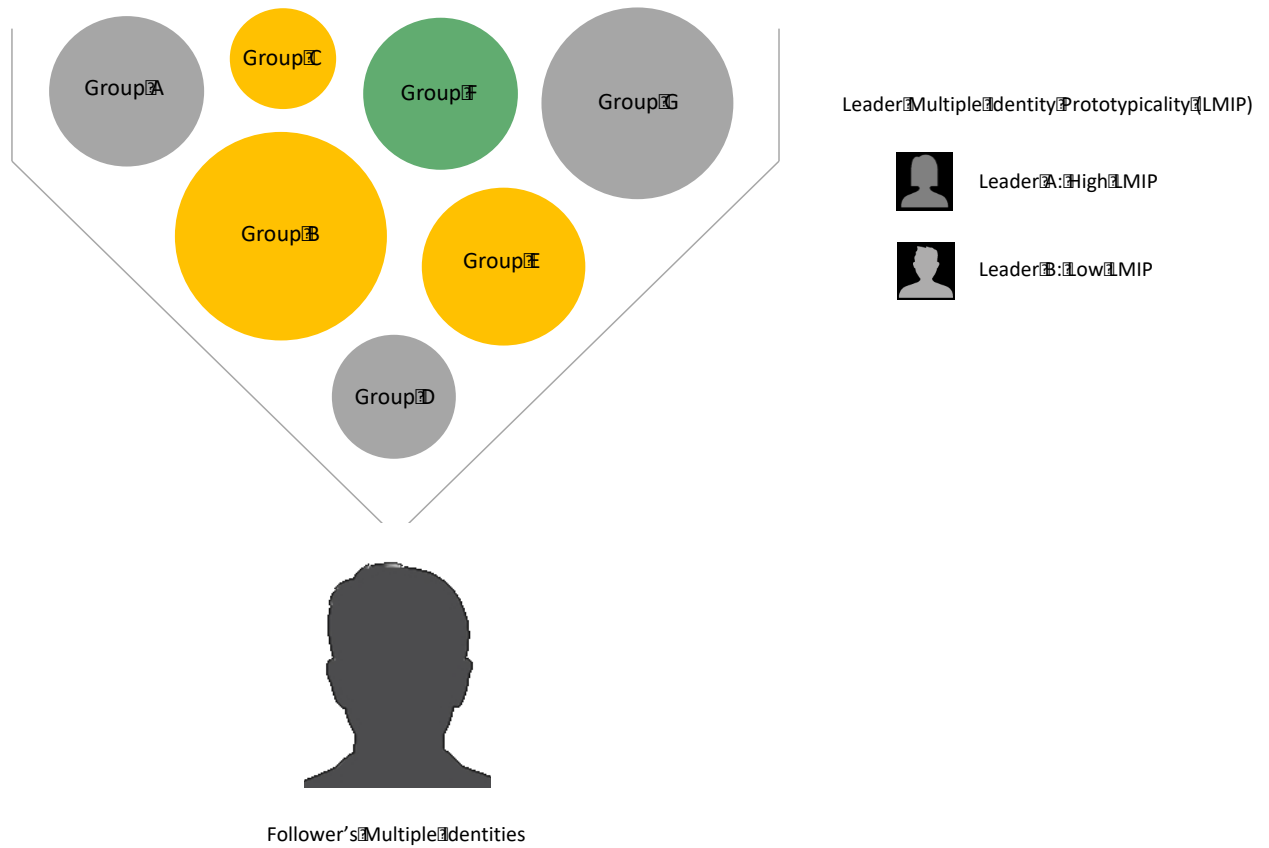
(a)



(b)



**Figure 1.** Model displaying standardized path coefficients for paths from leader multiple identity prototypicality through followers’ personal identification with leaders to **(a)** perceived leader effectiveness and **(b)** perceived leader charisma.



**Figure 2.** A schematic visual representation of leader multiple identity prototypicality (LMIP). [Note: The follower portrayed in the figure has multiple identities (Groups A-G). S/he perceives Leader A to be prototypical of Groups B, C, and E (high LMIP) and Leader B to be prototypical of Group F (low LMIP).]