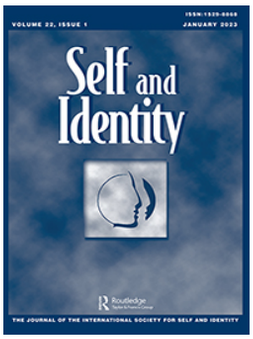

Routledge
Taylor & Francis Group

Self and Identity

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/psai20

A leadership looking glass: How reflected appraisals of leadership shape individuals' own perceived prototypicality and group identification

Christopher T. Begeny, Yuen J. Huo & Michelle K. Ryan

To cite this article: Christopher T. Begeny, Yuen J. Huo & Michelle K. Ryan (2023) A leadership looking glass: How reflected appraisals of leadership shape individuals' own perceived prototypicality and group identification, Self and Identity, 22:1, 129-154, DOI: 10.1080/15298868.2022.2057580

To link to this article: https://doi.org/10.1080/15298868.2022.2057580

SELF AND IDENTITY
2023, VOL. 22, NO. 1, 129–154
https://doi.org/10.1080/15298868.2022.2057580

Routledge
Taylor & Francis Group

A leadership looking glass: How reflected appraisals of leadership shape individuals' own perceived prototypicality and group identification

Christopher T. Begeny[a], Yuen J. Huo[b] and Michelle K. Ryan[a,c,d]

[a]University of Exeter, Department of Psychology, Exeter, UK; [b]University of California, Los Angeles, Department of Psychology, Los Angeles, California, United States; [c]Global Institute for Women's Leadership, the Australian National University, Canberra, Australia; [d]Faculty of Business and Economics, University of Groningen, Groningen, The Netherlands

ABSTRACT

Research on social identity and leadership rarely examines leadership processes from the perspective of leaders themselves. Three studies (experimental, longitudinal, cross-sectional) help fill this gap. Integrating social identity principles with a reflected appraisals perspective, we demonstrate that as individuals come to see themselves as (informal) leaders in a group, it positively affects their own sense of fit to the group prototype. Their own perceived prototypicality, in turn, yields a strengthened attachment to the group (identification). Importantly, we demonstrate this in racial and ethnic minority groups – an understudied context, yet where individuals develop meaningful conceptions of leadership and identification, with implications for their health and commitment to collective action. Altogether, this provides insights on social identity processes, and minority group leadership.

ARTICLE HISTORY
Received 13 September 2021
Accepted 18 March 2022

KEYWORDS
Social identity; leadership; prototypicality; group processes; race; ethnicity

Over the past few decades, research has abounded around the social identity theory of leadership (Haslam, 2004; Haslam et al., 2011; Hogg, 2001; Hogg & van Knippenberg, 2003), and findings have provided support for the theory's core tenets (see, Hogg et al., 2012). Most notably, this body of work provides insights into how individuals perceive, react to, and evaluate ingroup leaders, whether it be a prospective or current leader with formal or informal designation. A core idea underlying this work is that an individual's level of group prototypicality – the degree to which they are seen by other members as embodying qualities that are valued by and help define the group, thus reflecting an ideal group member (Steffens et al., 2014) – is key to understanding how members will react to that individual, including their willingness to regard, support and trust them as a leader, and perceive them as fair (Hogg et al., 2012; Steffens et al., 2020).

CONTACT Christopher T. Begeny C.Begeny@exeter.ac.uk Department of Psychology, University of Exeter Washington-Singer Laboratories, Perry Road, Exeter, Devon EX4 4QG United Kingdom
Supplemental data for this article can be accessed here

Importantly, however, because this work has focused on these processes from the *observers'* perspective (how others perceive and evaluate a fellow group member), there is still a dearth of research examining how the *target* – that member who is perceived by others as a leader – experiences and internalizes those perceptions, and thus, how they impact the target's own self-concept. Addressing this gap in the literature remains an important step for advancing knowledge on social identity and leadership (Epitropaki et al., 2017). Furthermore, doing so may help shed new light on the underpinnings of a group's functioning and the well-being of its members. This is because understanding leadership experiences from the target's own perspective could help explain how that individual becomes psychologically attached to the group (strong group identification). And as past research indicates, strong group identification promotes both the functioning of the group (e.g., by increasing an individual's willingness to engage in group-serving behavior; Blader & Tyler, 2009; Huo et al., 2010) and the health of the individual, by promoting their sense of connection to others and access to important forms of support (see work on the "social cure;" Greenaway et al., 2016, 2015; Haslam et al., 2009; Hoffmann et al., 2020; Jetten et al., 2017). Thus, addressing this gap will have several important theoretical and practical implications.

In the current research – three studies using experimental, longitudinal, and cross-sectional data – we help fill this gap in the literature. Drawing on core principles embedded in the social identity approach (Tajfel & Turner, 1979; J. C. Turner et al., 1987, 1994), we integrate a reflected appraisals perspective (Cooley, 1902; Mead, 1934) to explicate how individuals come to see themselves as leaders in a group, and the effect this has on their own perceptions of being prototypical. We further examine how, as an individual's own perceived prototypicality changes, this gives way to a strengthened attachment to the group; that is, stronger group identification (via an increased sense of person-group fit). Altogether, by examining individuals' reflected appraisals of leadership – the experience of seeing oneself, through the eyes of other group members, as a role model or leader in the group – we aim to shed light on an understudied aspect of leadership processes: how other members' perceptions become "reflected upon" an individual, and ultimately shape the individual's own self-concept (i.e., reflected appraisals of leadership → self-perceived prototypicality → group identification).

Leadership and Identity within Racial and Ethnic Minority Groups. We examine these processes in the context of broad social demographic groups (without many formally designated leaders) – racial and ethnic minority groups, specifically – as opposed to more formally structured groups (e.g., work organizations). This is both an understudied context in the literature on the social identity theory of leadership, and one where it may be particularly important to understand how individuals come to see themselves as informal leaders (i.e., among racial or ethnic minority ingroup members). In part, this is because these leadership- and identity-development processes can have implications for minority individuals' health (Begeny & Huo, 2018; Begeny et al., 2021).

These leadership- and identity-development processes are also important because they may help foster efforts to promote racial justice through collective action (e.g., efforts tied to the Black Lives Matter movement; Leach & Allen, 2017); that is, examining these processes may further our understanding of how racial and ethnic minorities'

*intra*group experiences can ultimately and unto themselves be a powerful source of motivation for engaging in collective action on behalf of the group (Begeny et al., 2022; Iyer & Achia, 2021; Van Zomeren et al., 2008).

Indeed, while minority individuals' intergroup experiences – witnessing and experiencing racial injustice – undoubtedly contribute to their motivation to engage in collective action, it is important to consider that the strength and sustained power of Black Lives Matter and other social justice movements may also be rooted in these *intra*group processes. This may be an important yet often-overlooked piece of what motivates and sustains racial justice efforts (among minority group members; the role of allies aside). These intragroup processes of leadership and identity development may, for example, be an important lens for understanding how Black Lives Matter has been able to bring renewed attention to injustices embedded within countries and cultures – a movement that is sustained in part by racial and ethnic minority leaders who are present at the international, national, regional and community levels, if not also within schools and universities, friendship groups, and online platforms – all playing important roles in mobilizing individuals toward action.

Individuals' Experiences of Being a Leader and Its Effect on Their Own Perceived Prototypicality Past work on social identity and leadership has often regarded an individual's level of prototypicality in a group (i.e., the extent to which they embody the qualities of an ideal group member; Hogg et al., 2004; Steffens et al., 2014) as a key predictor or starting point for understanding subsequent group processes. For instance, given an individual's level of prototypicality within a particular group and context (as perceived by other members), this can be used to predict how they will be evaluated (Hogg et al., 2012). This generally suggests an individual's level of group prototypicality is – as seen by others, or at least from a strict empirical point of view can be treated as – a "given feature" of the individual (in a particular group/context; i.e., person *i* has a level of prototypicality that is *x*), which is what makes an individual's level of prototypicality a reliable predictor of how they will be perceived and evaluated. To consider an individual's prototypicality as a given feature of the individual (for a specific group and context) is a reasonable approach in many ways, especially when studying other members' perceptions of that individual's prototypicality. And indeed, members of a group do differ in their level of prototypicality – holding different places along a group's "prototypicality gradient" (Hogg, 2001).[1]

Yet from the individual's own perspective, they may not be immediately or inherently aware of where they fall on that prototypicality gradient. It may not seem like a readily discernable or "given feature" of who they are. As described below, from a reflected appraisals perspective (Cooley, 1902; Mead, 1934), an individual's perceptions of their own prototypicality in a group may be experienced as a learned process – an eventual outcome, rather than a predictor, of their experiences with others.

Discerning One's Own Prototypicality in a Group. From a reflected appraisals perspective, an individual's understanding of who they are as an individual is guided by their perceptions of how *others* view them, such that others' perceptions and evaluations of them act as a mirror for seeing the self. Cumulatively, these perceptions and evaluations guide the individual's own internal sense of how they are seen by others *in general*, and thus how they are viewed in the eyes of the "generalized other" (Mead, 1934). In a similar vein, when applied to an intragroup context, an individual's understanding of their own

prototypicality in a group may be guided in part by experiences among other group members, which give them a sense of how other members view them. For instance, when an individual has experiences wherein others convey value and admiration for them as a member of that group – including when another member seeks them out for ideas or advice on a group-relevant topic – this may communicate to the individual that they are valued and admired if not seen as an outright role model or leader in the eyes of that group member (similarly, see, Begeny et al., 2021; Ellemers et al., 2013; Huo & Binning, 2008; Smith et al., 2003; Tyler & Blader, 2003). Over time and upon seeing various members convey this type of admiration and regard for them as a role model or leader, the individual is likely to develop a sense that this is how they are viewed by the group in general; not by a select few, but by the group's "generalized other." Thus, they are likely to develop an internal appraisal of the self as an informal leader within the group – an appraisal that has been "reflected upon them" through the culmination of their experiences with other members (note that other members' expressions of value and admiration for them as a leader represent *external* sources of social evaluative information; these are not reflected appraisals themselves, but part of the antecedent processes that cumulatively shape the individual's own *internal* reflected appraisal of leadership). Thus, a reflected appraisal of leadership is itself defined as an internalized, aggregated metaperception of the self as an ingroup leader – seeing oneself, through the eyes of others, as a leader. Notably, this is not a metaperception tied to any one specific experience (a perception of how one is viewed by other members in a given situation), but a more *generalized* metaperception of the self, reflecting the culmination of their intragroup experiences, subjectively internalized.

As individuals develop a more robust ("generalized") reflected appraisal – increasingly seeing oneself, through the eyes of other group members, as an informal leader in the group – we suggest that they will start to infer that they have been afforded this appraisal of the self as a leader because they have several qualities and attributes that are widely and collectively valued by the group (hence other members' tendency to reflect this appraisal on them). In other words, they will start to infer that they are a strong embodiment of the group's prototype – possessing some of the ideal qualities and characteristics for a member to have (again, prototypicality is conceptualized in terms of an ideal rather than "average" group member; Hogg et al., 2004; Steffens et al., 2014, 2020). Thus, the experience of seeing oneself through the eyes of other group members as an informal leader is likely to shape individuals' understanding of their own level of prototypicality within the group. In this way, the experience of being a leader in the eyes of the group's "generalized other" is likely to precede one's self-perceived prototypicality (i.e., reflected appraisals of leadership → self-perceived prototypicality).

A Strengthened Sense of Prototypicality Gives Way to Stronger Group Identification Additionally, we posit that as individuals' sense of being prototypical in a group increases, this will give way to stronger group identification. This likely occurs because when individuals perceive that they are a strong embodiment of that which defines the group (high prototypicality), it enables them to more naturally see that group as defining of who they are as individuals (also consistent with the idea that individuals with greater perceived prototypicality more strongly identify with the group; Hogg et al., 2004). In other words, when individuals perceive that they are highly representative of the group, the group can also become highly representative (defining)

of who they are as individuals. This is because there is a strong perceived fit between the qualities that characterize the group and those that characterize the individual, which may be regarded as a high level of *intragroup-based* person-group fit. Thus, as individuals' perceived fit to the group's prototype increases, they can more readily wear that group membership – making it a highly defining piece of who they are (similarly see, Wright et al., 2002).

Conceptualizing (Informal) Leadership It is worth noting that our conceptualization of leadership generally aligns with a social identity perspective, and is arguably fitting for the study of (informal) leadership processes in broad social groups (e.g., racial and ethnic minority groups). In essence, it parallels Hogg's (2001) description of leadership as encompassing "status-based differentiations" within the group, such that individuals' appraisals about the extent to which they are, in the eyes of the group's generalized other, an informal leader aligns to their sense of having a position amidst those status-based differentiations that is of high regard and admiration (if not also influence; see next paragraph). Thus, the experience of being a "leader" (vs. follower), "role model" (vs. aspirant), "mentor" (vs. mentee), or generally being "looked up to" by others in the group (vs. being looked down upon) all help to conceptually describe – and empirically capture – that sense of position, especially in large unstructured groups (i.e., they collectively help tap into a sense of position, amidst status-based differentiations, that is characterized by high regard and admiration in the group). As this implies, in our view, leadership spans across gradients of status and is not solely characteristic of those at the very "top" of status-based differentiations – just as leadership, both formal and informal, spans across levels of status in more structured organizations (e.g., CEOs, team managers, line managers, formal and informal mentors for new employees).

Such a position of high regard and admiration also likely affords one *influence* on other members and the trajectory of group goals. This could involve influencing other members' attention to, or willingness to act upon, group goals. This includes – in the context of racial minority groups – influencing members' willingness to engage in collective actions that serve the group's goal of establishing greater social equity. Yet while various forms of group-based influence are likely to flow from being an informal leader, we see notions of influence as less central to *defining* informal leadership itself. While some have tied notions of influence to the very definition of leadership, it may also be regarded as just one potential consequence of being in such a position (Blader & Chen, 2014; i.e., one can be leader and either have, or still not have, much real influence in the group).

Summary of Predictions Together, these lines of theory and research suggest that individuals' reflected appraisals of leadership will positively affect their perceptions of being prototypical within the group. Moreover, as their own perceived prototypicality increases, this should give way to a strengthened psychological attachment to the group (thus, reflected appraisals of leadership → self-perceived prototypicality → group identification; Figure 1).

The Current Research Across three studies we examine whether individuals' reflected appraisals of leadership positively affect their sense of being prototypical, and in turn the strength of their group identification (Figure 1). We test these processes in the context of broad social groups; specifically, racial and ethnic minority groups. This not only extends previous work on social identity and leadership, which has focused on more formally structured groups (e.g., work organizations), but also represents a particularly important

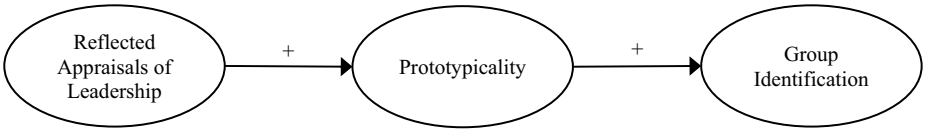

Figure 1. Hypothesized processes, whereby individuals' reflected appraisals of leadership positively affect their sense of being prototypical, and in turn the strength of their group identification.

context for examining these processes. This is in part because, as previously discussed, these leadership- and identity-development processes are vital to minority group functioning (e.g., for promoting collective action, minority individuals' health).

Study 1: Initial Test of Predictions

Study 1 aimed to provide initial evidence that when individuals experience reflected appraisals of leadership they are able to maintain a stronger sense of embodiment of the group's prototype, and with this greater alignment to the prototype more readily internalize that group as a meaningful part of who they are as individuals (group identification). This was tested in a sample of racial and ethnic minority group members, with roughly equal numbers of Asian American, Black American and Latinx individuals – representing the three largest US racial and ethnic groups. Hypotheses were tested using structural equation modeling (SEM), with multiple groups SEM to assess whether processes functioned similarly across all three groups.

Method

Participants & procedure

Participants were 244 US-born racial and ethnic minorities recruited via Amazon mTurk for an online survey (43% women, M_{age} = 31.26, SD = 10.24; n = 79 Asian American, 90 Black/African American, 75 Latinx/Hispanic). Recruitment advertisements did not describe the study's aims nor eligibility criteria (US-born adults identified with an aforementioned racial or ethnic group). Prospective participants were screened for eligibility; those who qualified were forwarded to the study. Standards for power analyses to test SEM models are less well-established, though the proportion of latent factors to manifest variables in the hypothesized model (3:8) and the minimum absolute effect detected among structural parameters (r = .51) suggested the study was generally well-powered (suggested sample size of 256 for detecting the minimum absolute effect, given model structure; α = .05, 1 – β = .80; Soper, 2020).

Measures

Constructs were measured on 7-point scales (1 *strongly disagree* – 7 *strongly agree*) and ordered in the survey to run counter to the hypothesized direction of processes. Where relevant, participants' race or ethnicity was piped into the text of items or they were generally reminded of their selected racial or ethnic group.

Reflected Appraisals of Leadership.

Four items measured individuals' reflected appraisals of informal leadership within their racial or ethnic group (adapted from Begeny & Huo, 2018). In line with a reflected appraisals perspective, it assessed individuals' perceptions of themselves through the eyes of other group members (i.e., metaperceptions tied to a "generalized [ingroup] other"). Items began with the stem, "Most of the time I feel that people in my racial/ethnic group . . . ": "see me as a leader in my racial/ethnic group," "see me as a role model for others in my racial/ethnic group," "hold me in high regard," "look up to me" (α = .94; see Introduction for more on our conceptualization of informal leadership).

It is important to note that self-reported appraisals are both theoretically appropriate for assessing reflected appraisals/metaperceptions, and generally accurate insofar as they parallel other group members' perceptions of one's standing in a group (Anderson et al., 2006). This indicates that individuals' reflected appraisals are indeed shaped by, hence their alignment to, others' actual perceptions/appraisals of them. This also fits with theory and research indicating that individuals strive for accurate estimations because they are *motivated* to know how others perceive them – especially ingroup members (Emler & Hopkins, 1990). Thus, while individuals' reflected appraisals are not purely objective representations of others' perceptions of them, they are also not simply a reflection of individuals' own preexisting self-views, uninfluenced and unreflective of others' perceptions of them (for a review on metaperception accuracy, see, Wallace & Tice, 2012). This means that individuals' responses to this measure are not an objective reflection of others' perceptions of them, but instead capture what they are intended to: an aggregated, reflected appraisal of those perceptions – that is, a metaperception of the "generalized [ingroup] other." Also see Study 3 for a systematic manipulation of this construct.

Prototypicality

Two items measured individuals' perceived prototypicality in the group (adapted from Steffens et al., 2014; Van Knippenberg & van Knippenberg, 2005; "In terms of my values, beliefs and personal character, I provide a positive and representative image of what it means to be [] in the U.S.;" "I think that I am a strong and positive representation of what my racial/ethnic group stands for;" r = .72). Consistent with past conceptualizations of prototypicality (e.g., Steffens et al., 2014), these items did not assess perceptions of being an "average" group member but one who embodies the group's *ideal* qualities. Consistent with its conceptual distinction from reflected appraisals of leadership, these items directly assess *self*-perceptions. By comparison, reflected appraisals of leadership are grounded in *others*' perceptions of the self (e.g., "people in my racial/ethnic group see me as . . . ").

Group identification

Group identification was measured with six items from Leach et al. (2008; e.g., "The fact that I am [] is an important part of my identity," "I often think about the fact that I am []," "I am glad to be [];" reflecting notions of centrality and satisfaction; α = .88).

Table 1. Study 1 means, standard deviations and bivariate correlations.

Variable	*Mean*	*SD*	1	2
1. Reflected Appraisals of Leadership	4.35	1.41	–	
2. Prototypicality	5.29	1.28	.55	–
3. Group Identification	5.26	1.16	.38	.66

Correlations significant, $p \leq .01$; Constructs measured on 1–7 scales.

Results

Table 1 provides summary statistics and bivariate correlations. Analyses were conducted using SEM in EQS (Bentler, 2006) with latent factors constructed to estimate each construct: reflected appraisals of leadership and prototypicality using the aforementioned items as indicators, group identification using two indicators representing subscale composites of centrality and satisfaction to enable unbiased structural parameter estimates without an overly-complex measurement model. All manifest indicators were significantly predicted by their latent factors. Using robust maximum likelihood estimation (Satorra & Bentler, 1990),[2] we tested whether individuals' reflected appraisals of being a leader among ingroup members predicted stronger perceived embodiment of the group's prototype, and in turn stronger group identification (Figure 1; reflected appraisals of leadership → prototypicality → group identification).

Before testing the hypothesized model we confirmed, as previous research and theory indicate, that these three constructs are related yet conceptually distinct. Results of a factor analysis with constructs specified as correlated factors showed that this structure fit the data well, SB χ^2 (17) = 24.64, p = .10, CFI = 0.99, RMSEA = .04 [.00, .08]. For thoroughness we also examined a unidimensional factor structure, testing the possibility that individuals' responses to all of these intragroup-based questions could be explained by some simpler unidimensional construct (e.g., responses to all questions were simply a reflection of some general positive affect). However, this structure did not fit the data well, SB χ^2 (20) = 177.84, $p < .001$, CFI = 0.82, RMSEA = .18 [.16, .21].

Preliminary analyses also tested whether the hypothesized model (Figure 1) fit equally well for each racial or ethnic group. Results of multiple groups analyses indicated that variables in the model conceptually reflected the same underlying constructs for each racial or ethnic group, and each was related to the others in the model in the same way for each group (see Supplementary Information, *SI*, for details).

Primary analyses demonstrated that the hypothesized model fit well, SB χ^2 (18) = 26.4, p = .09, CFI = 0.99, RMSEA = .04 [.00, .08]. As hypothesized, individuals' reflected appraisals of leadership predicted a stronger perceived embodiment of the group's prototype (B = .58, SE = .07, $p < .001$), which in turn predicted stronger group identification (B = .60, SE = .08, $p < .001$; indirect effect: B = .35, SE = .06, $p < .001$). See Study 3 for additional tests and experimental evidence supporting this model.

The importance of prototypicality

To further assess the importance of prototypicality as a key step in explaining how the experience of being regarded as a leader predicts the strength of individuals' identification, we tested a model where the "direct effect" of reflected appraisals of leadership on

identification was also specified. This allowed us to test whether reflected appraisals of leadership had any bearing on the strength of individuals' identification that was not fully explained by perceived prototypicality, as would be evinced by a significant direct effect. Results showed this was not the case (reflected appraisals of leadership → group identification: $B = -.08$, $SE = .06$, $p = .17$).

We also tested a model where prototypicality was wholly absent. This assessed how well we could understand the strength of individuals' group identification without considering the role of perceived prototypicality. Results demonstrated that while leadership appraisals offered some insight on identification (reflected appraisals of leadership → group identification: $B = .33$, $SE = .08$, $p < .001$), not accounting for the role of prototypicality (i.e., relying on reflected appraisals of leadership to explain the strength of individuals' identification, rather than [solely] utilizing prototypicality) rendered a weaker and more tenuous understanding of how leadership experiences bear on the strength of individuals' identification. In strict empirical terms: this alternative model, $R^2_{Identification} = .21$; hypothesized model, $R^2_{Identification} = .68$, $\Delta R^2 = .47$, local effect size, $f^2 = 1.46$ = large effect (Cohen, 1988). This further demonstrated that individuals' perceived prototypicality was critical for robustly detecting, and theoretically explaining, how leadership appraisals bear on the strength of their group identification.

Study 2: Longitudinal test of predictions

Study 1 provided initial evidence that when individuals experience being an informal leader in a group they are able to maintain a stronger sense of embodiment of the values and qualities that define the group (greater perceived prototypicality). With a greater sense of fit to the group's prototype, individuals more readily identify with the group, regarding it as a meaningful aspect of who they are. Study 1 also revealed that these processes function similarly in the three largest US racial and ethnic minority groups.

Study 2 built on this by examining these processes longitudinally. This enabled greater insight into how they function over time. This included testing, for instance, if taking on a more pronounced sense of leadership within the group produced a shift in individuals' perceived prototypicality over time.

These processes were examined in a sample of Asian American and Latinx individuals who participated in two waves of data collection. Hypotheses were tested using multilevel SEM. This enabled us to probe the individual-level variation in how individuals' reflected appraisals of leadership changed over time, and whether any increases (or decreases) in reflected appraisals corresponded to systematic change in, for example, self-perceived prototypicality. Equally important, these analyses probed whether those who showed very little change on reflected appraisals also had negligible change in prototypicality.

Method

Participants

Participants were 510 US-born racial and ethnic minority university students (Asian American, Latinx/Hispanic). Of those who responded at Time 1 (T1), 341 participated at Time 2 (T2). Twenty-two T2 participants were omitted because their self-identified race/

ethnicity differed at T1 and T2. As a result, they received different questions at each time point. Data from Black/African American students' were also collected but omitted, as sample size was likely inadequate for multiple groups analyses (at T2, $n = 28$). This yielded a final sample of 319 ($n = 140$ Asian/Asian American, 179 Latinx/Hispanic; 74.0% women). For primary analyses testing the specified multilevel SEM model, the proportion of latent factors to manifest variables (6:16, reflecting the partitioning into within- and between-participants models) and minimum absolute effect detected among structural parameters ($r = .32$) yielded a suggested sample size of 138 for detecting the minimum effect (256 with the specified model structure; $\alpha = .05$, $1 - \beta = .80$; Soper, 2020). A portion of the data were collected to examine how intragroup experiences are linked to discrimination and health (Begeny & Huo, 2017). Note that when comparing individuals who only participated at T1 to those who participated at both time points, there were no differences in mean levels of reflected appraisals of leadership, prototypicality, or group identification (at T1; t's ≤ 1.05, p's $\geq .29$, d's $\leq .10$).

Procedure

At T1, recruitment e-mails were sent by the university registrar's office to a randomly generated sample of students identified by the university as U.S.-born, age 18+, self-identified with an aforementioned racial or ethnic group. Recruitment materials did not describe the project's aims nor eligibility criteria. Individuals completed a brief online questionnaire to confirm eligibility, and then proceeded to the T1 survey. Approximately 12 months later, they were contacted via e-mail to complete the T2 survey.

Measures

Reflected appraisals of leadership, prototypicality, and group identification were measured as in Study 1. At each time point, $\alpha \geq .93$, $r \geq .67$, and $\alpha \geq .89$ for each measure, respectively. At both time points, measures were ordered in the survey to run counter to the hypothesized direction of processes.

Results

Table 2 provides summary statistics and bivariate correlations. Primary analyses tested predictions longitudinally using multilevel SEM (MSEM) in EQS (Bentler, 2006) using robust maximum likelihood estimation (Satorra & Bentler, 1990; Yuan & Bentler, 2003, 2007).[2] Latent factors were constructed to estimate constructs as in Study 1, and all manifest indicators were predicted by their latent factors.

Table 2. Study 2 means, standard deviations and bivariate correlations.

Variable	*Mean*	*SD*	1	2	3	*Mean*	*SD*
1. Reflected Appraisals of Leadership	4.69	1.29	.65	.48	.33	4.82	1.27
2. Prototypicality	5.44	1.22	.52	.58	.56	5.37	1.20
3. Group Identification	5.58	1.06	.37	.53	.74	5.62	1.05

Values below/above diagonal reflect T1/T2 data; Values on the diagonal reflect the correlation between the T1 and T2 measure of that construct; Correlations significant, $p \leq .01$; Constructs measured on 1–7 scales.

Table 3. Study 2 bivariate difference score correlations and percentage of participants showing reliable change over time (over the minimal important difference threshold; MID).

Change in _____ Over Time	*Mean* Δ	*SD*	1	2	3	Participants with change > MID[a]
1. Reflected Appraisals of Leadership	.13	1.08	–			39.81%
2. Prototypicality	−.07	1.11	.19	–		44.20%
3. Group Identification	.03	0.76	.19	.35	–	36.99%

Correlations significant, $p \leq .01$. [a] Minimal important difference (MID).

Preliminary analyses

We first assessed the general degree of change among participants from T1 to T2 on each construct, and how those changes were correlated (via difference scores; Table 3). The data showed that on each construct approximately 40% of participants showed meaningful change between T1 and T2; that is, over the minimal important difference (MID) threshold (see, Table 3). We calculated the MID using the Wyrwich standard error of measurement for small effects (for an overview on MID, see, D. D. Turner et al., 2010). Note that other individual-level, distribution-based approaches to the MID would capture smaller (e.g., Reliable Change Index at 95% confidence) or larger proportions of participants over the MID threshold (e.g., 1/2 *SD* of Δ_i approach). Our approach, and these analyses, were for descriptive purposes only, to illustrate the proportion of participants showing statistically reliable change over time (greater than what could be attributed to measurement error). Table 3 also illustrates that these changes were correlated in ways consistent with predictions (e.g., experiencing an increase in leadership appraisals over time was associated with a strengthened sense of prototypicality). Overall, this indicated that a substantial proportion of individuals experienced meaningful change over time – detected in the span of a single year, and which corresponded to other theoretically consistent shifts including in their reflected appraisals of leadership.

Before testing predictions longitudinally, we also tested whether the model fit equally well for each racial or ethnic group at each time point (following analytical steps described in Study 1) and found that it did. As in Study 1, factor analyses also confirmed that the three constructs were related yet conceptually distinct, with a correlated factors structure providing the best theoretical and empirical fit to the data at both time points (compared to a unidimensional structure).

Primary analyses

We tested the hypothesized model longitudinally in an MSEM framework. ICCs were ≥ .49, highlighting the importance of using a multilevel framework. This framework tests if the hypothesized model fits well across individuals and time points (between-participants model) and, most importantly, whether changes *within* individuals over time (within-participants model) predict change on other specified factors. In part, this enabled us to account for the fact that some individuals would show increases in reflected appraisals of leadership over time, while others would show decreases, and still others would show little change over time. The analyses – the within-participants model, in particular – could assess whether those who *did* show an increase (or decrease) in reflected appraisals of

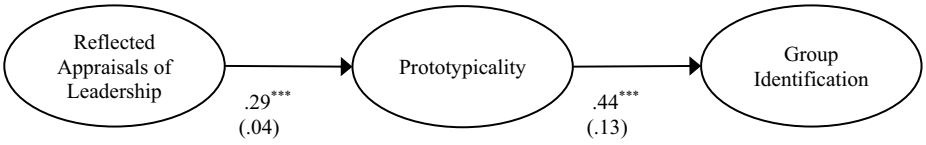

Figure2. Study 2, Longitudinal. Results of multilevel SEM (within-participants model; unstandardized coefficients with standard errors), demonstrating that an increase in individuals appraised leadership among ingroup members generated aconcomitant increase in their perceived embodiment of the group's prototype over time. An increased sense of prototypicality was in turn linked to astrengthening of their group identification over time (indirect effect: B= .13 (.02), p< .001). Lambdas are omitted here for simplicity but all manifest indicators were predicted by their respective latent factors at p< .001.*** p≤ .001.

leadership also showed a systematic increase (or decrease) in self-perceived prototypicality, for example, and whether those who showed little change on reflected appraisals also evince negligible change in prototypicality. Following recommendations (Yuan & Bentler, 2003, 2007), we examined the T_{CRADF} and F_{RADF} (residual-based asymptotically distribution free statistics). We also examined the SRMR, and the fit of the between- and within-participants models in MSEM separately using the average absolute standardized residual (AASR) and largest standardized residual (LSR). We also examined the significance of paths in the within- and between-participants models.

The measurement portion of the between- and within-participants models were expected to be equally strong and so we constrained factor loadings to be equal across them. Tests of (metric) invariance indicated each was indeed statistically invariant.

As expected, the model fit well, in the between-participants model (AASR = .01, LSR = .03), the within-participants model (AASR = .02, LSR = .09), and overall (T_{CRADF} = 49.13, p = .18, F_{RADF} (41, 272) = 1.24, p = .16, SRMR = .02). Moreover, all paths in the between- and within-participants models were significant. Most importantly, in the within-participants model (Figure 2) results demonstrated that those who took on an increasingly pronounced sense of leadership over time experienced agrowth in their perceived fit to the group's prototype (B= .29, SE = .04, p< .001). Individuals whose prototypicality increased over time also showed asystematic strengthening in group identification (B= .44, SE = .13, p< .001; indirect effect: B= .13, SE = .02, p< .001). Paths in the between-participants model were also significant: reflected appraisals of leadership → prototypicality, B= .66, SE = .08, p< .001; prototypicality → group identification, B= .68, SE = .13, p< .001 (indirect effect: B= .44, SE = .06, p< .001). Thus, longitudinal analyses supported predictions.

The importance of prototypicality

As in Study 1, we further assessed the importance of prototypicality for explaining how reflected appraisals of leadership produce change in identification, by testing a model where the direct effect of leadership on identification was also specified, and a model where prototypicality was wholly absent. As in Study 1, results demonstrated that

perceived prototypicality was critical for robustly detecting, and theoretically explaining, how leadership experiences generate change in the strength of individuals' group identification over time. See *SI* for details.

Study 3: Experimental test of predictions

Studies 1 and 2 provided support for predictions, both over time and through highly ecologically valid methodologies. Yet they could not demonstrate causal effects. To address this, in Study 3 we manipulated individuals' reflected appraisals of leadership and assessed its effects on their perceived prototypicality. We also tested whether this manipulation produced change in the strength of their group identification. Specifically, we primed individuals to feel like an informal leader – highly valued and looked up to within their racial or ethnic group – or to feel particularly *de*valued, and assessed its effects on their perceived prototypicality and group identification, compared to a control condition.

Method

Participants and design

Participants were 164 US-born racial and ethnic minorities (51% women, M_{age} = 29.0, SD = 8.31; n= 87 Black/African American, 37 Asian American, 40 Latinx/Hispanic), recruited through Amazon mTurk and assigned to one of three conditions: High Reflected Appraisals of Leadership, Low Reflected Appraisals of Leadership, or Control. Some did not complete all measures (in analyses, lowest n= 156).[3] Sensitivity analyses based on the lowest n indicated the study was adequately powered to detect key hypothesized effects (omnibus/contrast effects of $d \geq .44/.40$, one-tailed $\alpha = .05$, $1 - \beta = .80$).

Procedure and materials

As in Studies 1 and 2, individuals first completed an eligibility questionnaire. Eligible participants proceeded to the online study, where they completed a randomly assigned task, which served as the manipulation. In the High Reflected Appraisals of Leadership condition, participants were asked to recall and describe a time they felt highly admired by others in their racial or ethnic group, including instances of being seen as a role model or mentor for other members (see Introduction for more on our conceptualizing of informal leadership). In the Low Reflected Appraisals of Leadership condition, participants described a time they felt *de*valued or looked down upon by others in their racial or ethnic group. In the Control condition, participants described the route they take from home to work, school, or another place they often visit.

This structured recall task benefits from tapping into the richness of individuals' actual lived experiences, compared to paradigms relying on fabricated manipulations (e.g., false feedback paradigms, which also do not manipulate reflected appraisals but a preceding step). It also benefits from tapping into individuals' own true (internalized) reflected appraisal of leadership, as opposed to others' appraisals of them. Yet this task is limited to an individual's reflected appraisal as it exists in a single, specific instance. Conceptually,

reflected appraisals of leadership embody individuals' appraisal as it exists not in one specific instance but as a more aggregated appraisal, guided by one's *cumulative* experiences in that instance plus other similar ones. So while engaging in this task may have prompted recollection of other similar instances and thus spurred a more aggregated perception of how often one experiences reflected appraisals of leadership (while also making such instances salient) this more aggregated element of reflected appraisals was not formally built into the manipulation. However, a follow-up question helped account for this aspect of the construct by asking how often one experiences this type of situation (included as a covariate in primary analyses).

After completing the recall task, participants completed measures of appraised leadership (manipulation check; α = .93), prototypicality (α = .83) and group identification (α = .87; in line with Study 1 and 2 items).[4] Participants also indicated how much effort they put into their assigned recall task. As noted, participants also reported how often they are in situations corresponding to the recall task (e.g., "Generally, how often are you in situations that make you feel highly valued by other members of your racial/ethnic group?;" 1 *never* – 5 *very often*).

Results

Primary analyses were conducted using analyses of covariance and planned contrasts (comparisons to the Control condition). Preliminary analyses tested and found that participants across conditions did not differ on any demographic variables (age, race, ethnicity, gender, education), nor in the effort put into completing their recall task. There were differences in the frequency at which individuals experienced situations corresponding to their recall task (all conditions differed at $p \leq .001$; see *SI* for details). As described earlier, given that this question gauges how often these types of experiences occur, and thus how likely the appraisal described in that single instance/recall task reflected true reflected appraisals of leadership (an aggregated appraisal) – and given that individuals across conditions differed on this measure, we included it as a covariate in subsequent analyses (consistent with our theorizing and the logic underpinning its inclusion as a covariate, follow-up analyses without the covariate showed the same general pattern of results as primary analyses but effects were smaller; see *SI* for details).

Manipulation check

Overall, the manipulation affected leadership appraisals, $F(2, 152) = 7.95$, $p < .001$, $d = .65$. Contrasts revealed that those in the High Reflected Appraisals of Leadership condition reported greater reflected appraisals of leadership ($M = 5.21$, $SE = .24$) than those in the Control condition ($M = 4.08$, $SE = .27$), $F(1, 152) = 8.35$, $p = .004$, $d = .47$. However, individuals in the Low Reflected Appraisals of Leadership condition ($M = 4.11$, $SE = .26$) did not differ from the Control, $F(1, 152) = 0.004$, $p = .95$, $d = .01$, indicating that the manipulation successfully increased individuals' reflected appraisals of leadership (High Reflected Appraisals of Leadership condition) but did not lower them (Low Reflected Appraisals of Leadership condition). For thoroughness, results involving the Low Reflected

Appraisals of Leadership condition are reported but not substantively interpreted. Our focus is on the effects that emerged from strengthening individuals' reflected appraisals of leadership.

A secondary measure, perceived intragroup belonging (α = .93; e.g., "Most of the time, I feel that people in my racial/ethnic group . . ., e.g., accept me for who I am"), allowed us to better assess whether the manipulation precisely affected individuals' leadership appraisals, or instead elicited a conceptually more general positive effect – not just on their sense of being a leader but also their sense of belonging in the group. Analyses showed no effect on belonging (Control-High Reflected Appraisals of Leadership contrast $F(1, 152) = 1.63$, $p = .20$, $d = .21$; Control-Low Reflected Appraisals of Leadership contrast $F(1, 152) = 1.30$, $p = .26$, $d = .18$). This helped illustrate the relative precision, or conceptually discriminant effect, of the manipulation.

Prototypicality

(Figure 3). Consistent with predictions, results showed that strengthening individuals' reflected appraisals of leadership led to an increase in prototypicality ($M = 5.67$, $SE = .18$) compared to the Control ($M = 4.87$, $SE = .21$), $F(1, 152) = 7.18$, $p = .01$, $d = .43$ (omnibus $F(2, 152) = 3.92$, $p = .02$, $d = .45$; Low Reflected Appraisals of Leadership condition, $M = 5.31$, $SE = .20$; contrast $F(1, 152) = 1.69$, $p = .20$, $d = .21$). Thus, experimentally increasing individuals' reflected appraisals of leadership in the group led to subsequent increases in their perceived prototypicality.

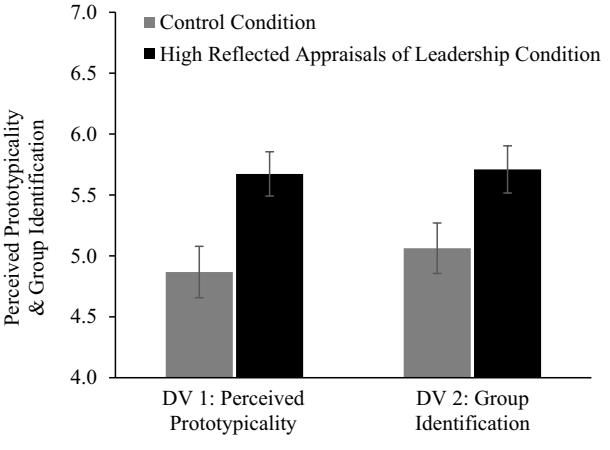

Figure 3. Study 3: Experimental effects of strengthening individuals' reflected appraisals of leadership (High Reflected Appraisals of Leadership condition; IV) on their perceived prototypicality (main DV) and group identification (secondary DV), compared to a Control condition. Error bars represent standard errors. Note that the manipulation had a direct effect on group identification when tested in isolation (not accounting for its effect on prototypicality; as shown here, bars on the right). Yet, as hypothesized, when considered in conjunction with its effect on perceived prototypicality (Figure 4) this direct effect was no longer evident, indicating that it was fully explained by the manipulation's more proximal and potent effect on perceived prototypicality.

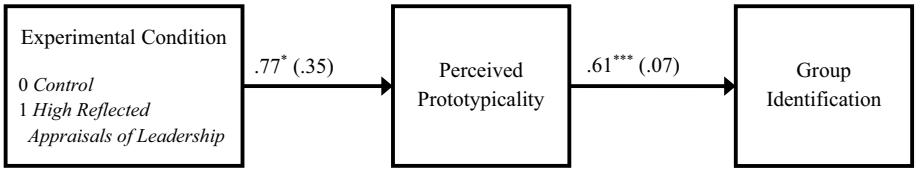

Figure 4. Study 3: Experimental effect of strengthening individuals' reflected appraisals of leadership (High Reflected Appraisals of Leadership condition) on their perceived prototypicality (compared to a Control condition), which in turn explains the strength of their group identification. Unstandardized coefficients displayed (standard errors). Tests of an alternative model with group identification as the mediator (prototypicality as the outcome) was not empirically supported, indicating that prototypicality and identification are neither conceptually nor theoretically interchangeable in the context of the hypothesized processes. * $p \leq .05$, *** $p \leq .001$.

Group identification

(Figure 3). Results also demonstrated that strengthening individuals' reflected appraisals of leadership led to an increase in group identification ($M = 5.71$, $SE = .18$) compared to the Control ($M = 5.06$, $SE = .21$), $F(1, 152) = 4.84$, $p = .03$, $d = .36$ (to be interpreted cautiously, given the omnibus $F(2, 152) = 2.75$, $p = .07$, $d = .38$; Low Reflected Appraisals of Leadership condition, $M = 5.38$, $SE = .19$; contrast $F(1, 152) = 0.92$, $p = .34$, $d = .16$). Note that the manipulation's effect was relatively stronger on perceived prototypicality, suggesting its effect on identification was more secondary or "downstream," consistent with predictions.

The importance of prototypicality

(Figure 4). To further probe the importance of prototypicality in explaining the effect of the manipulation on group identification, we tested the full hypothesized model (as in Studies 1 and 2) using PROCESS (Hayes, 2013; Model 4, 10,000 resamples; High Reflected Appraisals of Leadership vs. Control). As predicted, the manipulation – strengthening individuals' appraisals of leadership (coded as 1) led to an increase in perceived prototypicality, compared to the Control condition (coded as 0), $B = .77$ [0.08, 1.46], $SE = .35$, $p = .03$, which in turn predicted stronger group identification, $B = .61$ [0.46, 0.76], $SE = .07$, $p < .001$ (indirect effect = .47 [0.07, 0.97]). Perhaps most importantly, there was no direct effect of the manipulation on group identification in this analysis – that is, when accounting for the role of prototypicality, $B = .11$ [−0.42, 0.64], $SE = .27$, $p = .68$. This supported the prediction that prototypicality is key to (fully) explaining the effect (illustrated in Figure 3) of reflected appraisals of leadership on group identification.

Given the study's capacity to probe causal effects, we also tested an alternative model with identification as the mediator (prototypicality as the outcome). This model did not yield the same level of empirical support. Specifically, the manipulation had no effect on group identification (path *a*), $B = .58$ [−0.09, 1.24], $SE = .34$, $p = .09$ (identification → prototypicality, $B = .66$ [0.50, 0.82], $SE = .08$, $p < .001$; direct effect, $B = .39$ [−0.16, 0.93], $SE = .28$, $p = .16$; indirect effect = .38 [0.07, 0.75]). This demonstrated that while prototypicality and group identification are, as expected, empirically linked, they are not conceptually nor theoretically interchangeable in the context of the hypothesized processes.

Overall, Study 3 results showed that emboldening individuals' reflected appraisals of leadership can produce substantial change in their perceived fit to the group's prototype. Thus, experiencing these appraisals of leadership led individuals to reevaluate their place on the group's prototypicality gradient; specifically, these appraisals promoted the sense that they do in fact embody a number of qualities and characteristics that define the group as a whole. Moreover, this effect reverberated strongly enough to elicit change in the strength of their group identification. Consistent with predictions, tests of indirect effects indicated that the effect on identification was distinctly "downstream," and statistically explained by the manipulation's more proximal and prominent effect on prototypicality.

General discussion

Using longitudinal, cross-sectional and experimental data, the current research demonstrates how reflected appraisals of leadership – seeing oneself, through the eyes of other group members, as an informal leader – can shape individuals' sense of prototypicality and group identification. Results demonstrated that when individuals are able to feel like leaders within the group it enhances their sense of group prototypicality. It engenders a sense that they embody many of the ideal values and qualities that define the group. With a greater sense of prototypicality, individuals also more readily internalized that group membership as meaningful to who they are (stronger group identification). Altogether this suggests that when one is perceptibly regarded as an informal leader among group members it conveys a potent message, that one possesses a number of qualities and characteristics that are valued by and help define the group.

Theoretical contributions

Integrating theory on reflected appraisals

Altogether this research provides a number of extensions to existing literature on social identity and leadership. In part it integrates a reflected appraisals approach to examine the experience of (informal) leadership from the perspective of leaders themselves. To date, there is still a dearth of research on how individuals experience leadership themselves, and how it impacts their self-concept (Epitropaki et al., 2017). The current research helps fill this gap. It extends previous work explicating leadership processes from the observer's perspective by explicating them from the target's perspective.

This also enriches our understanding of leadership processes more broadly. For instance, previous work has often approached an individual's level of prototypicality as a key predictor or starting point for understanding subsequent processes (e.g., how, in a given group and context, others will evaluate and treat an individual based on that individual's level of prototypicality; Hogg et al., 2012). This generally suggests an individual's level of prototypicality is, as seen by others, or at least from a strict empirical point of view can be treated as, a fixed or "given feature" of the individual (in a particular group/context, or experimental paradigm). The current findings do not run counter to this, but they do highlight that an individual's prototypicality, when examined from their *own* perspective, is not a fixed feature of who they are but is instead something that can

change as a function of outside forces; namely, other members' perceptible treatment of and regard for them. In this way, and in line with a reflected appraisals approach, an individual's own perceived prototypicality may not be experienced as a stable or "given" feature but as an emergent one. Thus, overall, the current research illustrates an important and relatively understudied aspect of leadership processes. It goes beyond the study of *other* members' perceptions of one's prototypicality to help illustrate the experience of having those other members' perceptions reflected upon one, and its implications for how one's *own* perceived prototypicality and group identification change as a result.

Building on a social identity approach to leadership

It is also important to note that while the ideas outlined here share some overlap with other perspectives on leaders' experiences and self-concept (e.g., the idea that coming to see oneself as a leader is a gradual process; see, Epitropaki et al., 2017), the ideas outlined here are grounded in principles within the social identity approach and therefore differ in some key ways. Most notably, these other perspectives tend to conceptualize one's emerging perceptions of being a leader as the emergence of a unique and discrete "leader identity" (if not grounded in a distinct "leader prototype"). By comparison, we contend that seeing oneself as a leader does not entail development of a categorically discrete identity. It instead involves a shift in one's group-based self-appraisal (e.g., an increased sense of being admired, looked up to) and, in turn, seeing oneself as increasingly proximal to the prototype that already exists within and is defining of the broader group. Thus, our theorizing and evidence explain not how perceptions of being a leader yield a distinct identity – a discrete "leader identity" – but in fact leads individuals to more readily, and with increasing psychological strength, identify with the shared group. This theoretical emphasis is consistent with the idea that leaders are, at their core, group members, and thus leadership represents an interdependent role that is inextricably "embedded within a social system bounded by common group or category membership" (Hogg, 2001, p. 186). Indeed, our research shows how leadership processes influence individuals' attachment to that common group.

Illustrating processes on racial and ethnic minority group leadership

Additionally, given that previous work on the social identity theory of leadership has tended to focus on leadership in more structured groups (e.g., work organizations), the current research contributes to that work by examining (informal) leadership processes in a broader type of group: racial and ethnic minority groups. Importantly, we show that even without rigid hierarchical structure individuals develop meaningful conceptions of position and leadership. Its meaningfulness is evinced partly by how individuals' perceptions of being an informal leader alter their attachment to the group (i.e., group identification).

The importance of understanding these processes within racial and ethnic minority groups is further reiterated by the fact that these processes, including development of a stronger group identification, have a host of downstream implications. This includes for individuals' health (Begeny & Huo, 2017, 2018; Begeny et al., 2021; Hoffmann et al., 2020; Jetten et al., 2012), and their willingness to engage in collective action (Van Zomeren et al., 2008).

These leadership- and identity-based processes are also important for understanding other racial minority group dynamics. For instance, research shows that stronger racial identification, if not also prototypicality, increases minority individuals' likelihood of being a target of discrimination (Kaiser & Pratt-Hyatt, 2009; Wilkins et al., 2010). The current research illustrates that reflected appraisals of leadership may contribute to the development of that strong group identification. While this highlights a more sobering implication, it is important to recognize that strengthening group identification is also a source of power – having positive implications for the individual (e.g., greater health and well-being) and the collective (increased collective action tendencies; Postmes & Branscombe, 2002; Van Zomeren et al., 2008).

Beyond racial and ethnic minority groups, this research may have implications for understanding leadership in groups with more formal structure as well. This is because in groups with clear hierarchical structure there can also be a wealth of informal leaders that emerge, likely via processes explicated here. Thus, the processes outlined here may be key to understanding individuals' experiences in a multitude of groups.

Explaining change in group identification, via self-perceived prototypicality

Another important finding is that there was meaningful change in the strength of individuals' group identification over a relatively short span of time (see Study 2). This, coupled with finding that prototypicality underlies the strength of individuals' identification, may have implications for how we think about and empirically assess identification. Specifically, this suggests that individuals' experiences among ingroup members (e.g., feeling looked up to, as a leader) may lead to incremental changes in identification through subtle shifts in self-perceived prototypicality. Ultimately, this suggests that researchers might utilize self-perceived prototypicality as an effective proxy for assessing subtle or difficult-to-detect shifts in identification (e.g., where identification is quite stable).

Emboldening versus attenuating reflected appraisals of leadership

Study 3 results indicated that emboldening individuals' reflected appraisals of leadership, and attenuating them, are not perfectly mirrored processes. While the manipulation designed to embolden reflected appraisals of leadership had a reliable effect, the conceptually parallel manipulation designed to lower leadership appraisals did not. This may support the idea that individuals are motivated to maintain a sense of self-worth (Tajfel & Turner, 1979) and so more readily internalize experiences that signal high worth, as in the High Reflected Appraisals of Leadership condition, compared to those that signal low worth, as in the Low Reflected Appraisals of Leadership condition (e.g., more readily dismissing negative experiences by providing external attributions). It is also important to consider that the study's Low Reflected Appraisals of Leadership condition may not have mapped on to the key construct of interest as well as the High Reflected Appraisals of Leadership condition did. The Low Reflected Appraisals of Leadership condition emphasized notions of being devalued within the group, but did not specify whether this was about being devalued *relative to* ingroup leaders, or devaluation *as a leader*. In part, this highlights that reflected appraisals of *being* an informal leader may not have a perfectly

clear "opposite" appraisal. For instance, the opposite could simply entail *not* being an informal leader (in the eyes of others) – being a "follower" if you will. Yet it could also be explicitly more negative than a reflected appraisal of followership, per se, though this raises questions about what it means to be "less" or "lower" than a follower. Still another possibility is that the opposite appraisal is being a *denigrated* leader, but a leader no less. Yet this raises questions about how common is it for someone to be a leader, yet denigrated, in groups without formal structure (e.g., racial, ethnic groups). This seems more likely in structured groups, where one can be recognized by some other designation as a leader (e.g., "supervisor" job title), yet simultaneously denigrated by others while in that position. Thus, overall, our research suggests that compared to emboldening reflected appraisals of leadership, attenuating them may not be a clear or perfectly mirrored process.

Limitations and future directions

While the current research provided several advances to existing literature, it had limitations. For instance, Studies 1 and 2 supported predictions using ecologically valid methods but could not assess causality. Study 3 examined causal effects in the direction posited by theory on reflected appraisals, and found supporting evidence, but was not poised to test effects separately by racial/ethnic group, nor whether effects might also operate in the other direction (an important possibility to consider, even if less theoretically derived). Moreover, comparisons of racial and ethnic groups in Studies 1 and 2 via multiple groups analyses and invariance testing aimed to provide initial rather than definitively robust tests (though see, Putnick & Bornstein, 2016). Because invariance testing was a supplement to tests of key hypotheses, we did not seek racial and ethnic subsamples of particular sizes for invariance testing. So while Studies 1 and 2 generally suggest that these processes might operate similarly across racial and ethnic groups, it will be important to further test predictions with sample sizes designed for robustly comparing groups, including experimentally, while also probing reverse-directional effects both experimentally and via panel data with several measurement points for examining temporal effects. These studies should also be sufficiently powered to examine potential gender differences. For instance, drawing on intersectionality principles (Purdie-Vaughns & Eibach, 2008; Sesko & Biernat, 2010; also see, Begeny et al., 2021; Cole, 2009 for reviews of theory and research) – applied here to minority *intra*group dynamics – it is possible that because of androcentrism and certain masculine leader stereotypes, racial minority women will have fewer opportunities to develop strong reflected appraisals of leadership (e.g., because ingroup members may disproportionately convey/reflect leadership appraisals upon men in the group) ultimately rendering a more tenuous perceived fit to their racial group's prototype. More broadly, it will be valuable to assess whether these processes function similarly in other types of groups, with and without well-defined hierarchical structure (e.g., work organizations, LGBTQ+ community).

Similarly, while these studies found the hypothesized processes to function similarly across three different racial and ethnic groups – groups that may differ, in part, by how much they maintain individualistic versus collectivistic values and norms – these studies were not designed to test for differences as a function of individualistic-collectivistic values/norms (nor should one assume homogeneity in these values/norms within any

large racial or ethnic group; Phinney et al., 2000). Thus, it remains important for future research to probe whether these processes function similarly across groups, and/or individuals, varying in individualistic-collectivistic values/norms. One possibility is that seeing oneself through the eyes of other group members as an informal leader carries more psychological weight in groups where individualism is valued (e.g., where "standing out" is valued), and thus will have more potent effects on the strength of one's group identification (via heightened prototypicality). Where collectivism is highly valued (where "standing out" may be less valued), one's group identification may not so readily hinge on reflected appraisals of leadership. Still, another possibility is that these processes will function similarly across groups varying in individualistic-collectivistic values/norms. This is because reflected appraisals of leadership capture an aspect of the self that, at its core, serves to benefit others within a shared social group – that is, one's capacity to be an informal leader *for others* in that group. In this way, even where collectivism is valued, seeing oneself through the eyes of others as an informal leader may carry psychological weight and thus shape the strength of one's self-perceived prototypicality and group identification because those reflected appraisals correspond to one's capacity to serve others within that collective (similarly, see, Becker et al., 2012; Vignoles et al., 2000). Thus, future research is needed to discern whether reflected appraisals of leadership and the processes evinced in the current studies function similarly across groups, and/or individuals, varying in individualistic-collectivistic values/norms.

This research utilized self-reported appraisals of intragroup leadership, and so may include single-source bias. It is important to recognize, however, that self-reports are not only theoretically appropriate to assess reflected appraisals, but are also generally accurate insofar as they parallel other group members' perceptions of one's standing (Anderson et al., 2006; for more on metaperception accuracy, see, Wallace & Tice, 2012; though still, our studies cannot fully disaggregate one's reflected appraisals from strict self-perception [detached from appraisals coming from other group members, or the group's generalized other]). Moreover, we evinced support for our hypotheses when also systematically manipulating these appraisals. It is also important to note that self-reported appraisals of leadership arguably matter most in this context because it reflects one's true, even if subjective, experience and thus has the most potent effects on prototypicality and group identification – just as one's subjective intragroup standing has more potent consequences than one's more "objective" position (Anderson et al., 2012). Nevertheless, going forward it will be valuable to complement the current studies of reflected appraisals of leadership with "other-focused" studies (e.g., studying peer evaluations, collecting multisource data).

Future research might also complement the current studies by operationalizing reflected appraisals of leadership with more direct conceptual emphasis on notions of influence (toward the attainment of group goals), which is central to some definitions of leadership, and so could presumably also be made more central to conceptualizations of *reflected appraisals* of leadership. This might also be done while creating greater conceptual distance from notions of intragroup value or standing; in the current research, these cannot be fully teased apart given that reflected appraisals of leadership was operationalized and assessed with items about leadership, but also about intragroup value/standing more generally (the Study 3 control condition was also not poised to tease these apart). Such studies might experimentally manipulate individuals'

perceptible influence over other members' behavior/group-serving actions, either in a paradigm where ingroup confederates are perceptibly influenced by the participant, or by using an experimental recall task that focuses on real-world instances of an individual having perceptible influence on the group-serving behaviors of fellow members.

Conclusion

The current research provides a unique window into leadership- and identity-development processes from the perspective of leaders themselves. To date, this remains an understudied aspect of intragroup- and leadership processes. Moreover, these processes are examined in the context of broad social groups (racial and ethnic minority groups), which illustrate that even in such groups individuals develop meaningful conceptions of (informal) leadership. This ultimately shapes individuals' own understanding of whether they embody the qualities and characteristics that help define the group, and with critical implications for how strongly they identify with the group. Taken together, this suggests that theorizing on the social identity of leadership, coupled with insights from a reflected appraisals perspective, are rich and ripe for developing a deeper understanding of leadership processes in a multitude of social groups.

Notes

1. Although a group's prototype can vary across time and context, in long-standing social groups such as racial and ethnic minority groups there is likely to be a core to this prototype that is quite stable. As Hogg et al. (2004, p. 254) point out, the variability of a prototype in some groups will be "modest due to the inertial anchoring effect of enduring group representations (e.g., in large ethnic groups)." We contend that this relative stability similarly allows individuals to develop enduring and meaningful evaluations of where they fall along the group's "prototypicality gradient" (Haslam, 2004; Hogg, 2001).
2. There was substantial variance around each factor but with multivariate non-normality.
3. Individuals omitted from analyses if they failed to follow manipulation task instructions (e.g., typed nothing in the open-ended text box; $n = 6$) or were not exposed to the manipulation (instead completing a task being piloted; being asked to think of instances when they felt admired by others without a racial or ethnic ingroup referent specified; unlike other conditions they were subsequently asked if they recalled instances that mostly involved ingroup or outgroup members; approx. half reported instances that mostly [but not entirely] involved ingroup members; as such, these respondents did not have empirically parallel/comparable data to those in the experimental conditions).
4. Three items from Study 1/2 measured appraised leadership (we did not include the "role model" item as it overlapped with the language/content of the manipulation). All items from Study1/2 were used to measure identification and prototypicality. Prototypicality included one more item: When I think about the most influential leaders in the [] community (either in the past, or currently), I feel that I share a lot of the same values and beliefs as them. This taps into a sense of shared values and beliefs with one's group (perceived prototypicality), yet because the "leader" term overlaps with the manipulation check items (reflected appraisals of leadership) we ran follow-up analyses with this item removed ($r = .71$). Results evinced the same patterns of statistically significant results.

Acknowledgments

This work was supported in part by a Faculty Research Grant awarded to Y.J.H. from the Council on Research, Academic Senate at the University of California, Los Angeles, and a European Research Council Consolidator Grant (ERC-CoG 725128) awarded to M.K.R. The funders had no role in study design, data collection, analysis or interpretation, nor in the preparation or decision to submit this work for publication. This research was approved by the University of California, Los Angeles Institutional Review Board, and carried out in compliance with APA standards for human research. Data reported in this article are available upon request from the corresponding author.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the European Research Council [ERC-CoG 725128], and the University of California, Los Angeles Academic Senate, Council on Research [Faculty Research Grant].

ORCID

Christopher T. Begeny http://orcid.org/0000-0003-4734-8840
Michelle K. Ryan http://orcid.org/0000-0003-1091-9275

References

Anderson, C., Kraus, M. W., Galinsky, A. D., & Keltner, D. (2012). The local-ladder effect: Social status and subjective well-being. *Psychological Science*, *23*(7), 764–771. https://doi.org/10.1177/0956797611434537

Anderson, C., Srivastava, S., Beer, J. S., Spataro, S. E., & Chatman, J. A. (2006). Knowing your place: Self-perceptions of status in face-to-face groups. *Journal of Personality and Social Psychology*, *91*(6), 1094–1110. https://doi.org/10.1037/0022-3514.91.6.1094

Becker, M., Vignoles, V. L., Owe, E., Brown, R., Smith, P. B., Easterbrook, M., Herman, G., de Sauvage, I., Bourguignon, D., Torres, A., Camino, L., Lemos, F. C. S., Ferreira, M. C., Koller, S. H., González, R., Carrasco, D., Cadena, M. P., Lay, S., Wang, Q., & Yamakoğlu, N. (2012). Culture and the distinctiveness motive: Constructing identity in individualistic and collectivistic contexts. *Journal of Personality and Social Psychology*, *102*(4), 833–855. https://doi.org/10.1037/a0026853

Begeny, C. T., & Huo, Y. J. (2017). When identity hurts: How positive intragroup experiences can yield negative mental health implications for ethnic and sexual minorities. *European Journal of Social Psychology*, *47*(7), 803–817. https://doi.org/10.1002/ejsp.2292

Begeny, C. T., & Huo, Y. J. (2018). Is it always good to feel valued? The psychological benefits *and* costs of higher perceived status in one's ethnic minority group. *Group Processes & Intergroup Relations*, *21*(1), 193–213. https://doi.org/10.1177/1368430216656922

Begeny C. T., Huo Y. J., Smith H. J., Ryan M. K. (2021). Being treated fairly in groups is important, but not sufficient: The role of distinctive treatment in groups, and its implications for mental health. PLoS One, 16(5), e0251871 10.1371/journal.pone.0251871

Begeny, C. T., van Breen, J., Leach, C. W., van Zomeren, M., & Iyer, A. (2022). The power of the ingroup for promoting collective action: How distinctive treatment from fellow minority members motivates collective action. Manuscript under revision.

Begeny, C. T., Wong, C. Y. E., Kirby, T. A., & Rink, F. (2021). Gender, race, and leadership. In *Oxford research encyclopedia of psychology*. Oxford University Press. https://doi.org/10.1093/acrefore/9780190236557.013.450

Bentler, P. M. (2006). *EQS 6 structural equations program manual*. Multivariate Software Inc.

Blader, S. L., & Chen, Y.-R. (2014). What's in a name? Status, power, and other forms of social hierarchy Cheng, J. T., Tracy, J. L., Anderson, C. eds. In *The psychology of social status* (pp. 71–95). Springer Science. https://doi.org/10.1007/978-1-4939-0867-7_4

Blader, S. L., & Tyler, T. R. (2009). Testing and extending the group engagement model: Linkages between social identity, procedural justice, economic outcomes, and extrarole behavior. *Journal of Applied Psychology*, *94*(2), 445–464. https://doi.org/10.1037/a0013935

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. L. Erlbaum Associates.

Cole, E. R. (2009). Intersectionality and research in psychology. *American Psychologist*, *64*(3), 170–180. https://doi.org/10.1037/a0014564

Cooley, C. H. (1902) Human nature and the social order (New York: Charles Scribner's Sons).

Ellemers, N., Sleebos, E., Stam, D., & Gilder, D. D. (2013). Feeling included and valued: How perceived respect affects positive team identity and willingness to invest in the team. *British Journal of Management*, *24*(1), 21–37. https://doi.org/10.1111/j.1467-8551.2011.00784.x

Emler, N., & Hopkins, N. (1990). Reputation, social identity, and the self. In M. A. Hogg & D. Abrams (Eds.), *Social identity theory: Constructive and critical advances* (pp. 113–130). Springer-Verlag.

Epitropaki, O., Kark, R., Mainemelis, C., & Lord, R. G. (2017). Leadership and followership identity processes: A multilevel review. *The Leadership Quarterly*, *28*(1), 104–129. https://doi.org/10.1016/j.leaqua.2016.10.003

Greenaway, K. H., Cruwys, T., Haslam, S. A., & Jetten, J. (2016). Social identities promote well-being because they satisfy global psychological needs. *European Journal of Social Psychology*, *46*(3), 294–307. https://doi.org/10.1002/ejsp.2169

Greenaway, K. H., Haslam, S. A., Cruwys, T., Branscombe, N. R., Ysseldyk, R., & Heldreth, C. (2015). From "we" to "me": Group identification enhances perceived personal control with consequences for health and well-being. *Journal of Personality and Social Psychology*, *109*(1), 53–74. https://doi.org/10.1037/pspi0000019

Haslam, S. A. (2004). *Psychology in organizations* (2nd ed.). SAGE.

Haslam, S. A., Jetten, J., Postmes, T., & Haslam, C. (2009). Social identity, health and well-being: An emerging agenda for applied psychology. *Applied Psychology*, *58*(1), 1–23. https://doi.org/10.1111/j.1464-0597.2008.00379.x

Haslam, S. A., Reicher, S. D., & Platow, M. J. 2011. *The new psychology of leadership: Identity, influence and power*. Psychology Press: xxv 267.

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

Hoffmann, P., Platow, M. J., Read, E., Mansfield, T., Carron-Arthur, B., & Stanton, M. (2020). Perceived self-in-group prototypicality enhances the benefits of social identification for psychological well-being. *Group Dynamics: Theory, Research, and Practice*, *24*(4), 213–226. https://doi.org/10.1037/gdn0000119

Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, *5*(3), 184–200. https://doi.org/10.1207/S15327957PSPR0503_1

Hogg, M. A., Abrams, D., Otten, S., & Hinkle, S. (2004). The social identity perspective: Intergroup relations, self-conception, and small groups. *Small Group Research*, *35*(3), 246–276. https://doi.org/10.1177/1046496404263424

Hogg, M. A., & van Knippenberg, D. (2003). Social identity and leadership processes in groups Zanna, M. P. ed. In *Advances in experimental social psychology* (Vol. 35, pp. 1–52). Elsevier Academic Press. https://doi.org/10.1016/S0065-2601(03)01001-3

Hogg, M. A., van, K., & Rast, D. E., III. (2012). The social identity theory of leadership: Theoretical origins, research findings, and conceptual developments. *European Review of Social Psychology*, *23*(1), 258–304. https://doi.org/10.1080/10463283.2012.741134

Huo, Y. J., & Binning, K. R. (2008). Why the psychological experience of respect matters in group life: An integrative account. *Social and Personality Psychology Compass*, *2*(4), 1570–1585. https://doi.org/10.1111/j.1751-9004.2008.00129.x

Huo, Y. J., Binning, K. R., & Molina, L. E. (2010). Testing an integrative model of respect: Implications for social engagement and well-being. *Personality & Social Psychology Bulletin*, *36*(2), 200–212. https://doi.org/10.1177/0146167209356787

Iyer, A., & Achia, T. (2021) Mobilized or marginalized? Understanding low-status groups' responses to social justice efforts led by high-status groups.2021 *Journal of Personality and Social Psychology*, *120*(5), 1287–1316. . https://doi.org/10.1037/pspi0000325

****Not sure why the publication year appears after the article title (should be after author names)**

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*(7), 789–802. https://doi.org/10.1002/ejsp.2333

Jetten, J., Haslam, C., & Haslam, S. A. (2012). *The social cure: Identity, health and well-being*. Psychology Press.

Kaiser, C. R., & Pratt-Hyatt, J. S. (2009). Distributing prejudice unequally: Do whites direct their prejudice toward strongly identified minorities? *Journal of Personality and Social Psychology*, *96* (2), 432–445. https://doi.org/10.1037/a0012877

Leach, C. W., & Allen, A. M. (2017). The social psychology of the black lives matter meme and movement. *Current Directions in Psychological Science*, *26*(6), 543–547. https://doi.org/10.1177/0963721417719319

Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., Ouwerkerk, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology*, *95*(1), 144–165. https://doi.org/10.1037/0022-3514.95.1.144

Mead, G. H. (1934). *Mind, self, and society from the standpoint of a social behaviorist*. University of Chicago Press.

Phinney, J. S., Ong, A., & Madden, T. (2000). Cultural values and intergenerational value discrepancies in immigrant and non-immigrant families. *Child Development*, *71*(2), 528–539. https://doi.org/10.1111/1467-8624.00162

Postmes, T., & Branscombe, N. R. (2002). Influence of long-term racial environmental composition on subjective well-being in African Americans. *Journal of Personality and Social Psychology*, *83*(3), 735–751. https://doi.org/10.1037/0022-3514.83.3.735

Purdie-Vaughns, V., & Eibach, R. P. (2008). Intersectional invisibility: The distinctive advantages and disadvantages of multiple subordinate-group identities. *Sex Roles: A Journal of Research*, *59*(5–6), 377–391. https://doi.org/10.1007/s11199-008-9424-4

Putnick, D. L., & Bornstein, M. H. (2016). Measurement invariance conventions and reporting: The state of the art and future directions for psychological research. *Developmental Review*, *41*, 71–90. https://doi.org/10.1016/j.dr.2016.06.004

Satorra, A., & Bentler, P. M. (1990). Model conditions for asymptotic robustness in the analysis of linear relations. *Computational Statistics & Data Analysis*, *10*(3), 235–249. https://doi.org/10.1016/0167-9473(90)90004-2

Sesko, A. K., & Biernat, M. (2010). Prototypes of race and gender: The invisibility of black women. *Journal of Experimental Social Psychology*, *46*(2), 356–360. https://doi.org/10.1016/j.jesp.2009.10.016

Smith, H. J., Tyler, T. R., & Huo, Y. J. (2003). Interpersonal treatment, social identity, and organizational behavior Haslam, S. A., van Knippenberg, D., Platow, M. J., Ellemers, N. eds. In *Social identity at work: Developing theory for organizational practice* (pp. 155–171). Psychology Press.

Soper, D. (2020). *Sample size calculator for structural equation models*. Free Statistics Calculators. https://www.danielsoper.com/statcalc/calculator.aspx?id=89

Steffens, N. K., Haslam, S. A., Reicher, S. D., Platow, M. J., Fransen, K., Yang, J., Ryan, M. K., Jetten, J., Peters, K., & 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. https://doi.org/10.1016/j.leaqua.2014.05.002

Steffens, N. K., Munt, K. A., van Knippenberg, D., Platow, M. J., & Haslam, S. A. (2020). Advancing the social identity theory of leadership: A meta-analytic review of leader group prototypicality. *Organizational Psychology Review* 11(1), 35–72. https://doi.org/10.1177/2041386620962569

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Brooks/Cole.

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

Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective: cognition and social context. *Personality & Social Psychology Bulletin*, *20*(5), 454–463. https://doi.org/10.1177/0146167294205002

Turner, D., Schünemann, H. J., Griffith, L. E., Beaton, D. E., Griffiths, A. M., Critch, J. N., & Guyatt, G. H. (2010). The minimal detectable change cannot reliably replace the minimal important difference. *Journal of Clinical Epidemiology*, *63*(1), 28–36. https://doi.org/10.1016/j.jclinepi.2009.01.024

Tyler, T. R., & Blader, S. L. (2003). The group engagement model: procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, *7*(4), 349–361. https://doi.org/10.1207/S15327957PSPR0704_07

van Knippenberg, B., & van Knippenberg, D. (2005). Leader self-sacrifice and leadership effectiveness: The moderating role of leader prototypicality. *Journal of Applied Psychology*, *90*(1), 25–37. https://doi.org/10.1037/0021-9010.90.1.25

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*(4), 504–535. https://doi.org/10.1037/0033-2909.134.4.504

Vignoles, V. L., Chryssochoou, X., & Breakwell, G. M. (2000). The distinctiveness principle: Identity, meaning, and the bounds of cultural relativity. *Personality and Social Psychology Review*, *4*(4), 337–354. https://doi.org/10.1207/S15327957PSPR0404_4

Wallace, H. M., & Tice, D. M. (2012). Reflected appraisal through a 21st-century looking glass Leary, M. R., Tangney, J. P. eds. In *Handbook of self and identity* (pp. 124–140). The Guilford Press.

Wilkins, C. L., Kaiser, C. R., & Rieck, H. (2010). Detecting racial identification: The role of phenotypic prototypicality. *Journal of Experimental Social Psychology*, *46*(6), 1029–1034. https://doi.org/10.1016/j.jesp.2010.05.017

Wright, S. C., Aron, A., & Tropp, L. R. (2002). Including others (and groups) in the self. In J. P. Forgas & K. D. Williams (Eds.), *The social self: Cognitive, interpersonal, and intergroup perspectives* (pp. 343–364). Psychology Press.

Yuan, K.-H., & Bentler, P. M. (2003). Eight test statistics for multilevel structural equation models. *Computational Statistics & Data Analysis*, *44*(1–2), 89–107. https://doi.org/10.1016/S0167-9473(02)00349-3

Yuan, K.-H., & Bentler, P. M. (2007). Multilevel covariance structure analysis by fitting multiple single-level models. *Sociological Methodology*, *37*(1), 53–82. https://doi.org/10.1111/j.1467-9531.2007.00182.x