

Collective Self-Verification Among Members of a Naturally Occurring Group: Possible Antecedents and Long-Term Consequences

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Extending prior work on collective self-verification (e.g., Chen, Chen, & Shaw, 2004), the present study examined possible antecedents and long-term correlates of collective self-verification among members of a naturally occurring group. Group members were randomly paired and collective self-verification was assessed in terms of the degree of correspondence between ratings of the self as a group member and partners' ratings of the self as a member. Greater correspondence in self- and partner ratings was found for attributes that group members idiographically deemed highly central to defining the group relative to their idiographic, low-centrality attributes. Moreover, this attribute centrality effect was particularly apparent among highly identified group members. Finally, self-partner correspondence was positively associated with participants' perceptions of themselves as prototypical group members and their dedication to the group, both assessed months later.

The desire to be known by others as one knows the self has been documented in more than 2 decades of research on self-verification theory (Swann, 1990). Appraisals from others that verify one's existing self-conceptions confer psychological coherence and a sense of prediction and control. What self-conceptions, though, do people seek to verify? The vast majority of research on self-verification has focused on people's conceptions of themselves as individuals. Recent work, however, has begun to examine self-verification strivings with respect to collective self-views—conceptions of the self as a group member (e.g., Chen, Chen, & Shaw, 2004). Just as people seek to be known as individuals, they desire appraisals that verify their views of themselves as group members—for example, as women, Blacks, democrats, Sigma Nus, or Peace Corps volunteers. The present research extends prior work by examining possible antecedents of collective self-verification among members of a naturally occurring group, as well as long-term, group-related correlates of collective self-verification.

SELF-VERIFICATION THEORY

Self-verification theory maintains that at times people are motivated to seek appraisals from others that confirm their existing self-views, regardless of whether these self-views are favorable or unfavorable (Swann, Pelham, & Krull, 1989), or objectively accurate (Swann, Rentrow, & Guinn, 2002). People are thought to seek self-verification out of epistemic and pragmatic desires to maximize prediction and control. From an epistemic perspective, self-verification strivings reflect the need to know that one's beliefs about the self are coherent and sensible. On a pragmatic level, interactions should proceed more easily, free of misunderstandings and conflict, to the extent that one's interaction partners hold expectations about the self that match one's own self-views. Put differently, having others hold appropriate expectations for the self bolsters one's confidence that interactions with them will go smoothly. Supporting these assumptions about why people self-verify, Swann, Stein-Seroussi, and Giesler (1992) found that among the top reasons participants gave for choosing a self-verifying over a nonverifying interaction partner were ones reflecting epistemic concerns (e.g., "I'd feel more at ease with someone who can judge me for what I am") and

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pragmatic concerns (e.g., “Seeing as he knows what he’s dealing with we might get along better”).

Numerous studies have shown that people prefer to interact with others who confirm their self-views (e.g., Swann et al., 1992). People also judge self-confirmatory information to be more valid than disconfirmatory information (Swann, Griffin, Predmore, & Gaines, 1987) and attend more carefully to the former than to the latter (Swann & Read, 1981). People who hold negative self-views seek self-verification, just as do people who view themselves positively (e.g., McNulty & Swann, 1994; Swann et al., 1989). Such findings constitute clear evidence that self-verification motives may at times override oft-documented, self-enhancing tendencies to seek flattering appraisals of the self.

Elucidating when self-verification motives are likely to predominate over other self-evaluative motives, research has identified moderators of self-verification. For example, people are especially likely to seek verification of their confidently held (i.e., certain) self-views (e.g., Pelham & Swann, 1994; Swann & Ely, 1984) as well as of self-views they view as particularly central or important to their self-definition (e.g., Swann & Pelham, 2002). The impact of certainty and centrality on self-verification makes sense from both epistemic and pragmatic standpoints. Highly certain and central self-views are presumably near and dear to people’s self-understanding. Thus, when such self-views are not verified, one’s epistemic need to know the self is in greater jeopardy. As well, the potential for interpersonal misunderstandings and conflict looms larger.

MULTIPLE LEVELS OF SELF-DEFINITION

To date, the bulk of self-verification research has focused on the individual level of self-definition—that is, people’s desire to verify conceptions of themselves as separate and unique entities. Yet other levels of self-definition also exist (e.g., Brewer & Gardner, 1996; Sedikides & Brewer, 2001). Various theories have focused on the collective level of self-definition, or social identities, which refer to the self as a member of social groups (e.g., Hogg & Abrams, 1988; Tajfel, 1982). From the perspective of these theories, the collective self can be as self-defining, authentic, and influential as the individual self (e.g., Turner, Oakes, Haslam, & McGarty, 1994), if not more so (e.g., Hogg, 2001). What this implies is that satisfying the epistemic and pragmatic concerns that fuel self-verification strivings should hinge on being verified not only for who one is as an individual but also for who one is as a group member.

The present study examined self-verification with regard to collective self-views, which refer to a person’s beliefs about specific attributes that characterize him or her as a group member. Put another way, collective self-views reflect the characteristics a person views as self-descriptive when thinking about himself or herself as a member of a particular group. For example, the collective self-views associated

with John’s gender-group membership might include beliefs about his athleticism (e.g., “When I think about myself as a man, it is salient to me that I lack athletic skills”). Collective self-views therefore involve more than a person categorizing himself or herself as a group member (e.g., “I am a man”), although such self-categorization is implied when people define themselves in terms of their collective self-views. Here it might be helpful to point out that our definition of *collective self-views* is analogous to what is commonly meant by *individual self-views*. Just as *collective self-views* refer to beliefs about the attributes that characterize the self as a group member and not just to the fact that one is a group member, *individual self-views* refer to beliefs about the attributes that characterize the self as an individual (e.g., “I am an artistic and somewhat lazy individual”) and not just to the fact that one is an individual.

In accord with the aforementioned definition of collective self-views, *collective self-verification* refers to when others confirm a person’s particular conceptions of the self as a group member (e.g., “As a man, you are not very athletic”). Although such verification has the effect of verifying that the person is a group member (e.g., is a man), collective self-verification refers to more than confirmation of a person’s group membership by others. In this vein, it is important to note that although the collective self-views of members of the same group may refer to similar attribute dimensions, group members vary in their perceptions of their standing on these dimensions (e.g., Worchel, Iuzzini, Coutant, & Ivaldi, 2000). For example, John may see himself as unathletic when he thinks about his gender-group membership, whereas Steve views himself as fairly athletic. Thus, collective self-verification does not refer to either group-membership confirmation alone or to being viewed by others in typical, group-relevant terms. Rather, it refers to a more calibrated phenomenon whereby others verify a group member’s specific views of where he or she stands on group-relevant attribute dimensions.

In applying self-verification theory to collective self-views, we join other recent efforts to bridge research on different levels of self-definition. For instance, the individual-level idea that people include significant others in the self-concept (Aron, Aron, Tudor, & Nelson, 1991) has been extended to the collective level in research showing that people also include ingroup members (Smith & Henry, 1996). Another example is research that has extended appraisal theories of emotions, which had previously been considered only with respect to the individual experience of emotion, to the realm of intergroup emotions in which emotional experiences stem from group-based self-definition and perceptions (Mackie, Devos, & Smith, 2000).

PAST EVIDENCE FOR COLLECTIVE SELF-VERIFICATION

Some initial evidence for collective self-verification has been provided by Chen et al. (2004), who showed that participants

preferred to interact with a partner who verified a negative, collective self-view than with a nonverifying partner—but only when the self-view in question was confidently held and the partner was an ingroup (vs. non-ingroup) member. Thus, the certainty of participants' collective self-view and the ingroup status of the partner moderated collective self-verification. Another study (Chen et al., 2004) documented the same preference for a verifying over a nonverifying ingroup partner but only when the collective self had been primed (and not when the individual self had been primed). This latter finding thus demonstrates that individual and collective self-verification are distinct processes.

In a final study, participants reported a greater desire for collective self-verification from an ingroup member on attribute dimensions that are highly central to defining their group compared to low-centrality attributes. This centrality effect was more pronounced among highly identified group members compared to their low-identification counterparts. Chen et al. (2004) argued that highly identified group members exhibit especially strong and discriminating desires for collective self-verification because the epistemic and pragmatic costs of failing to receive verification of one's highly central, collective self-views are greater when the group identity is a core aspect of the self.

In an independent line of research, Lemay and Ashmore (2004) also examined collective self-verification. Departing from Chen et al. (2004) and our definition of collective self-verification stated earlier, these researchers defined the phenomenon as confirmation of a person's self-proclaimed group memberships rather than confirmation of a person's specific beliefs about attributes that characterize him or her as a member of a particular group. However, because our definition of collective self-verification has the effect of confirming one's membership in the relevant group, we suggest that Lemay and Ashmore's view of collective self-verification might simply be interpreted as a somewhat cruder definition of the phenomenon relative to our more calibrated one.

Supporting this interpretation, Lemay and Ashmore's (2004) findings are generally compatible with Chen et al.'s (2004) results. Specifically, Lemay and Ashmore showed that participants' self-categorizations (i.e., self-proclaimed group memberships) at Time 1 predicted their reflected categorizations (i.e., perceptions of being categorized by others into their self-proclaimed groups) at Time 2, and that this effect was stronger when initial, self-proclaimed group memberships were high in importance. These results fit Chen et al.'s (2004) finding that participants' desire for collective self-verification (defined as their desire for confirmation of their specific collective self-views) was greater to the extent the relevant group membership was high in self-definitional importance.

THE PRESENT RESEARCH

The present research aimed to replicate and extend the existing literature on collective self-verification. Specifically, as

in prior research, we examined the centrality of attributes in defining the group, as well as the self-definitional importance of the group identity, as moderators of collective self-verification. Consistent with past findings, we hypothesized that collective self-verification would be greater for high- compared to low-centrality attributes. Further, we predicted that this centrality effect would be most apparent among highly identified group members, given the pronounced epistemic and pragmatic stakes associated with collective self-verification when a group membership is high in self-definitional importance. However, unlike Chen et al. (2004), who examined these effects with regard to a hypothetical group membership (Studies 1 & 2), or in terms of the desire for a hypothetical ingroup member to verify collective self-views associated with a real group (Study 3), we examined verification of actual collective self-views among members of a real, naturally occurring group.

Although Lemay and Ashmore (2004) also examined real groups, the present study extends their work in terms of the manner in which collective self-verification was assessed. Lemay and Ashmore measured collective self-verification as the correspondence between student participants' actual, self-proclaimed group memberships and their metaperceptions of the proportion of other students at their university who thought they were a member of these groups. Thus, their measure of collective self-verification was based entirely on participants' own ratings. In sharp contrast, we assessed collective self-verification as the correspondence between the self-ratings of members of a naturally occurring campus group and ratings of those members provided by an ingroup member.

Finally, the present study explored potential long-term, group-related correlates of collective self-verification. Specifically, we examined the possibility that having an ingroup member verify highly central views of the self as a group member would be associated over time with higher perceptions of the self as a prototypical group member. In contrast, verification of low-centrality attributes—essentially non-group-related attributes—should have little impact on self-perceptions of group prototypicality. We also explored whether obtaining verification of core collective self-views would be correlated with greater dedication to the group over time. In contrast, verification from an ingroup member for low-centrality self-views should have little bearing on long-term group dedication.

To summarize, we sought to test four collective self-verification hypotheses among ingroup members of a naturally occurring group:

H1: Collective self-verification from an ingroup member should be greater for attributes judged to be highly central to defining the group as compared to low-centrality attributes.

H2: The centrality effect described in Hypothesis 1 should be more apparent among highly identified group members than those with low identification.

H3 & 4: In the long term, collective self-verification from an ingroup member on highly central group attributes is likely to be associated with higher perceptions of the self as a prototypical group member (Hypothesis 3) and greater dedication to the group (Hypothesis 4).

METHOD

Overview

Members of a campus group were randomly paired, after which members of each pair rated themselves and their partners as group members on a series of attribute dimensions. As noted, collective self-verification was assessed in terms of the degree of correspondence between self-and partner ratings. Measures of the centrality of the attribute dimensions to defining the group, as well as of group identification, were also administered. In a follow-up session approximately 5 months later, participants completed measures of their self-perceptions as prototypical group members and their dedication to the group.

Participants

Ninety-three members (59 men, 34 women) of a campus religious group (CRG) at a large public university participated in the main study session, which was conducted in the fall term of an academic year.¹ In exchange for their participation, a monetary donation was made to CRG (\$300). CRG is a Christian group with chapters on numerous university campuses. The group provides a forum for members to learn about Christianity through Bible studies, fellowship, and various sports and social activities. Participants were randomly paired. Five participants were excluded: one because he was the second partner of a participant who filled out the study questionnaire twice (the data from his first questionnaire were retained), two because they did not have partners, and both members of a participant pair because one member did not complete the study questionnaire. Analyses were conducted on the remaining sample ($n = 88$; 54 men, 34 women). On average, these participants reported being a member of CRG for 27.3 months. Of those who reported their ethnicity ($n = 84$), 95% were Asian or Asian American.

In a follow-up session conducted in the spring term of the same academic year, 84 CRG members participated in exchange for another donation (\$400). The follow-up data of one pair of participants had to be excluded because their data were removed from the main analyses. Two more were excluded because one member of each did not complete the follow-up questionnaire. Finally, 8 participants were excluded

because their partners did not return to the follow-up session. Follow-up analyses were conducted on the remaining sample ($n = 70$; 38 men, 32 women).

Procedure

Main study session. Participants were invited to attend one of two testing sessions, which were held on consecutive Friday afternoons right before CRG's weekly Friday night gathering. All three authors were initially present to serve as experimenters. As participants arrived, they were randomly paired by the third author, who was a member of CRG, with the only restrictions being that partners be of the same sex and that they know each other at least casually. Members of each pair were then given an envelope (marked either *A* or *B*), which contained an informed consent form and the study questionnaire. They were asked not to open the envelopes until they were told to do so.

Once everyone had arrived, participants were told that the experimenters were interested in what it means to people to be members of "real world" social groups, such as CRG. They were then reassured that their responses to the study questionnaire would be identified only by a code number, and that the third author, who was a fellow CRG member, would not be able to link names to questionnaires. At this point, the third author left the session (and did not return) so as to assuage any lingering concerns about confidentiality.

Next, one member of each participant pair (those with the *A* envelope) was taken to a separate room by one of the two remaining experimenters so as to minimize concerns about partners seeing one another's responses on the questionnaire. The other members (those with a *B* envelope) stayed with the other experimenter. Once separated, participants were told that they would be filling out a questionnaire about their perceptions of themselves and their partners specifically as CRG members. They were then told that because there would be a follow-up session, they would not be debriefed at the end of the current session. It was also stressed that they should not discuss their responses with other CRG members, including their partners, during the interim. Participants were then told to open their envelopes, read and sign the consent form, and begin the questionnaire.

In the questionnaire, participants completed Luhtanen and Crocker's (1992) 16-item Collective Self-Esteem Scale (CSES), which we altered to refer to CRG rather than social groups in general. Of the CSES's four subscales (Private, Membership, Public, and Importance to Identity), we focused on the 4-item Importance to Identity subscale (e.g., "Being a member of the group CRG is an important reflection of who I am" and "In general, belonging to CRG is an important part of my self-image"), which assesses group identification most directly. Moreover, it is arguably the most "collective" and least "individual" of the four subscales. For example, research has shown that it is the only subscale that

¹We do not use the actual name of the campus group we studied so as to protect the confidentiality of its members.

is negligibly or not significantly correlated with scores on individual self-esteem scales (Crocker, Luhtanen, Blaine, & Broadnax, 1994; Luhtanen & Crocker, 1992) as well as scores on other relatively "individual" measures such as the Individuation Scale (Maslach, Stapp, & Santee, 1985). Each item on this subscale was rated on a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). We reverse-scored the appropriate items and then averaged across participants' ratings of these items ($\alpha = .72$) to create a measure of group identification.

Next, participants responded to three items assessing how much they saw themselves as a prototypical CRG member (e.g., "Overall, how representative a member are you of the group CRG?"). Participants rated the items using a Likert-type scale ranging from 1 (*not at all*) to 9 (*very*). A baseline prototypicality score was computed by averaging across these ratings ($\alpha = .74$).

Participants then rated themselves on a set of 20 attributes that were selected on the basis of a pilot survey (see Table 1).² These attributes varied in their positivity and centrality to defining CRG members. Participants rated how descriptive each attribute was of them as CRG members relative to non-CRG undergraduates (1 = *not at all descriptive*, 11 = *extremely descriptive*). Intergroup comparison instructions were used because research has indicated that such comparisons activate the collective self whereas *intragroup* comparisons activate the individual self (e.g., Brewer & Weber, 1994; Schmitt, Silvia, & Branscombe, 2000). Thus, these instructions helped ensure that participants would be responding with respect to their self-views as a CRG member, rather than as an individual. After these self-ratings, participants rated their partners as CRG members on the same 20 attributes.

Participants then rated the 20 attributes in terms of their positivity (1 = *extremely negative*, 7 = *extremely positive*) and their centrality in defining CRG members (1 = *not at all*, 7 = *extremely*). Average centrality and positivity ratings for each attribute appear in Table 1. Finally, participants provided demographic information, including the number of weekly CRG activities they typically attend. They then put their questionnaires back into their envelopes, gave them to the experimenter, and were thanked for their participation.

Participants who were unable to attend a testing session completed the questionnaire on their own. They were given

TABLE 1
Means and Standard Deviations of Participants'
Attribute Positivity and Centrality Ratings

Attribute	Positivity		Centrality	
	M	SD	M	SD
Sophisticated	5.10	1.14	4.24	1.67
Conformist	2.82	1.35	3.76	1.81
Genuine	6.74	0.78	6.32	0.99
Annoying	1.85	0.99	2.59	1.52
Committed	6.50	0.71	6.52	0.64
Procrastinating	2.20	1.15	2.33	1.36
Friendly	6.62	0.61	6.47	0.74
Health-conscious	4.89	1.00	3.51	1.59
Cliquish	2.17	1.11	3.81	1.83
Indecisive	2.35	1.08	2.26	1.25
Gullible	2.36	1.20	2.39	1.43
Restrictive	3.47	1.43	4.49	1.58
Tidy	5.40	1.15	4.70	1.50
Enthusiastic	6.06	0.88	6.12	0.80
Intrusive	3.11	1.30	3.93	1.64
Well-read	5.61	1.11	4.93	1.52
Inhibited	3.27	1.43	3.70	1.56
Concerned	6.14	0.95	6.12	1.05
Childish	2.34	1.12	2.23	1.29
Perceptive	5.85	1.03	5.36	1.19

Note. The attributes are presented in the order in which participants rated them. Positivity and centrality ratings could range from 1 to 7. All means and standard deviations are based on the responses of 88 participants with one exception ($n = 87$ for the positivity rating for childish).

an envelope containing the same consent form and questionnaire, as well as a written version of all the instructions delivered in the testing sessions. In addition, these instructions underscored that participants must fill out the questionnaire alone. Partners were assigned to one another using the same criteria as during the testing sessions. Participants were told to seal their completed consent form and questionnaire in their envelope and return it to one of the authors.³

Follow-up session. For the follow-up session, most participants once again attended one of two possible testing sessions; the rest completed the follow-up measures on their own. Upon arrival, participants were greeted by the first or second author and given an envelope containing a consent form and questionnaire. In this questionnaire, participants completed the prototypicality measure ($\alpha = .72$) once again. They also responded to five items tapping their dedication to CRG (e.g., "Compared to the fall semester, I now devote more time to CRG" and "Next semester I see myself spending less time doing CRG activities"). Ratings were made on Likert-type scales ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). Group-dedication scores were computed by reverse-scoring the appropriate items and then averaging

²The aim of the pilot survey was to identify a broad enough range of attributes so that all participants would be able to find some that they saw as highly central and others as relatively low in centrality. In the survey, a small sample of CRG members ($n = 27$) were asked to freely list 5 positive and 5 negative attributes that are central to describing their group. They were then presented with 20 attributes and asked to rate each in terms of its centrality and positivity. Seventeen attributes were selected based on respondents' freely generated attributes and attribute ratings. These attributes fell into one of the four categories created by crossing high/low centrality and positive/negative valence. To have 5 attributes in each of these categories, the remaining 3 attributes were chosen based on consensual agreement among the three authors.

³Participants who completed the study questionnaire on their own ($n = 26$) versus in a scheduled testing session did not differ significantly on any of our predictor variables ($t_s < 1$).

across ratings ($\alpha = .92$). When done, participants turned in their envelopes and were thanked. Once all questionnaires had been returned, all participants were sent a written debriefing.

RESULTS

Computing Self–Partner Correlations as an Index of Collective Self-Verification

In line with prior research on (individual) self-verification (e.g., Pelham & Swann, 1994), we created indexes of collective self-verification for each participant by computing correlations between the participant's self-ratings and the ratings made by his or her partner of him or her.⁴ We computed two indexes for each participant—one for high-centrality attributes and the other for low-centrality ones. High- and low-centrality attributes were determined on an idiographic basis by rank-ordering the 20 attributes according to each participant's centrality ratings of them. The 10 attributes rated the highest in centrality comprised the participant's high-centrality set, whereas the 10 rated the lowest comprised his or her low-centrality set.⁵ A paired *t* test confirmed that the average centrality rating was significantly higher for the first set ($M = 5.87$) than for the latter ($M = 2.71$), $t(87) = 35.01$, $p < .01$. Finally, we transformed all self–partner correlations to z' scores before subjecting them to our analyses.

Hypothesis 1: Attribute Centrality

Our first hypothesis was that self- and partner ratings should correspond more on attribute dimensions that participants

view as being highly central to defining the group relative to low-centrality attributes. Supporting this hypothesis, the average correlation between self- and partner ratings was significantly greater for participants' idiographic set of high-centrality attributes ($M = .37$) than for their low-centrality ones ($M = .20$), $t(87) = 2.51$, $p = .01$.⁶

Hypotheses 2: Group Identification

To test our second hypothesis that the greater self–partner correspondence found for high- relative to low-centrality attributes would be most apparent among highly identified group members, we compared the self–partner correlations for the two sets of attributes separately for high- and low-identification participants, determined on the basis of a median split of the distribution of group-identification scores (high-identification, $M = 6.28$; low-identification, $M = 4.52$). As predicted, among high-identification participants, the correlation between self- and partner ratings was greater for high- ($M = .42$) compared to low-centrality attributes ($M = .14$), $t(43) = 3.26$, $p < .01$. Thus, self–partner correspondence among highly identified group members was very discriminating; it emerged specifically for attributes that were top-most in centrality. In contrast, among low-identification participants, the average self–partner correlation did not differ for high- ($M = .33$) compared to low-centrality attributes ($M = .26$), $t < 1$. Instead, self- and partner ratings appeared to correspond to a moderate degree—even on attributes rated as not at all central to defining the group.

Hypotheses 3 and 4: Self-Perceptions of Group Prototypicality and Group Dedication Over Time

We explored self-perceptions of group prototypicality (Hypothesis 3) and group dedication (Hypothesis 4) as possible long-term correlates of collective self-verification. For Hypothesis 3, we examined the correlation between self–partner correlations during the first session and follow-up prototypicality ratings for high- and low-centrality attributes separately, controlling for baseline prototypicality ratings. In line with our hypothesis, collective self-verification on high-centrality attributes was marginally significantly associated with higher self-perceptions of group prototypicality, $pr(66) = .23$, $p = .06$. In contrast, self–partner correspondence on low-centrality attributes was not related to self-perceptions of prototypicality at follow-up, $pr(66) = .05$, *ns*. Because participants' group-identification scores were correlated with their follow-up prototypicality ratings ($r = .59$), we recomputed the partial correlations controlling for this variable and found nearly identical results.

For Hypothesis 4, we computed the partial correlation between self–partner correlations for high-centrality attributes

⁴Following Kashy and Kenny's (2000) procedures, we treated partners as independent observations due to the absence of significant, intraclass correlations for each of our predictor and outcome variables, $ps > .14$. However, we also tested Hypotheses 1 and 2 using dyad as the unit of analysis rather than individuals. Because these dyadic analyses produced virtually identical results, we report the individual-level analyses for ease of presentation. The details of the dyadic results can be requested from the authors.

⁵The rank order of attributes with the same centrality rating was randomly determined. This meant, however, that when there were moderately central attributes with the same centrality rating (e.g., the 10th and 11th attributes were both rated a 4 in centrality), they were randomly assigned to the high- or low-centrality set of attributes. In other words, for some participants, there was some degree of overlap in the rated centrality of attributes ranked the lowest in centrality in the high-centrality set and the attributes ranked highest in centrality in the low-centrality set. To minimize such overlap, we recomputed the within-subjects correlations based on only the 7 attributes highest and lowest in centrality and found similar patterns of results. We chose, however, to report the within-subjects correlations based on all 20 attributes because of their greater reliability. To ensure that the reported results were not attributable to the particular groupings of high- and low-centrality attributes that fell out from the random rank-ordering of attributes with the same centrality rating, we did two other rank-orderings of the 20 attributes based on their centrality ratings, allowing different random rank-orderings of the attributes with the same centrality ratings. Analyses of self–partner correlations computed on the basis of these alternate rank-orderings produced similar patterns of results.

⁶All reported self–partner correlations are z' scores.

and our follow-up dedication index, controlling for a relatively objective index of group dedication at baseline (i.e., the typical number of CRG events attended each week).⁷ As predicted, self-partner correspondence on highly central, collective self-views was positively linked to dedication to the group 5 months later, $pr(66) = .30, p < .05$, whereas collective self-verification on low-centrality attributes was not, $pr(66) = .15, ns$. Once more, controlling for initial group-identification scores, which were correlated with follow-up group dedication ($r = .47$), yielded virtually the same results.

Collective or Individual Self-Verification?

We interpreted our findings as evidence for verification of collective, not individual, self-views. This interpretation was based on the fact that participants rated themselves as CRG group members in response to instructions inducing an intergroup comparison context (which should activate the collective self) and were rated by their partners as group members. In addition, attribute centrality ratings were made specifically with respect to the importance of each attribute to describing CRG members. Further, we found that group identification—which was assessed using a widely used measure of this variable (e.g., Major, Quinton, & Schmader, 2003; McCoy & Major, 2003)—moderated the attribute centrality effect.

However, to provide further assurance that our results reflect verification of collective rather than individual self-views, we asked a small, additional sample of CRG members ($n = 23$) to make *both* individual and collective self-ratings for the same 20 attributes used in our main study.⁸ Specifically, they rated how descriptive each attribute is of them as a CRG member as well as how central each is to describing them as a group member. They also rated how descriptive each attribute is of them as individuals and how central each is to describing them as individuals.⁹ This allowed us to directly compare self-views and centrality ratings at the individual versus collective levels.

We first compared the attributes that received the highest and lowest centrality ratings at the two self levels. Nine out of the 10 attributes rated highest in centrality were the same, al-

though in every case the centrality rating was higher for the collective self. The latter finding makes sense given that the 20 attributes were chosen with the group CRG in mind. But the substantial overlap in high-centrality attributes at the two self levels may seem to call into question the distinction between individual and collective self-views. We believe this conclusion is unwarranted for several reasons.

On a theoretical level, research has indicated that attribute overlap across self levels does not dictate similar responses. For example, a large literature on social identity literature indicates that resource-allocation behavior can go against the best interests of the individual self when a collective self is salient (e.g., Turner, Brown, & Tajfel, 1979). Thus, even if a person's individual and collective selves overlap (e.g., on the self-interest dimension), his or her behavior might nonetheless differ depending on which self is activated in the current context. In addition, the same attribute may carry distinct meanings at different self levels. For example, research has indicated that different standards are often used to judge the same attribute when ascribed to different groups (e.g., Biernat & Manis, 1994), implying that attributes do not have inherent meaning but rather are interpreted with respect to the entities they describe. More relevant is research that has shown that the standards of comparison people use to judge the self are qualitatively distinct across levels of self-definition (e.g., Brewer & Weber, 1994; Gardner, Gabriel, & Hochschild, 2002; Schmitt et al., 2000). Thus, attributes are evaluated against different standards at different self levels, rendering attribute overlap across self levels more apparent than real.

On an empirical level, we compared individual and collective self-ratings for the 10 attributes rated highest and lowest in centrality at the individual and collective levels (which overlapped to a large but not perfect degree, as noted). That is, we first compared individual and collective self-ratings for the 10 attributes that were rated highest in centrality at the individual level. This comparison asked whether participants rated their individual and collective selves similarly for the attributes most central to describing them as individuals. The answer was no. The average individual self-rating for high-centrality individual attributes differed significantly from the average collective self-rating for these same attributes, $t(19) = 2.90, p < .01$. In contrast, though, the parallel comparison for the 10 attributes rated lowest in centrality at the individual level showed no difference in individual and collective self-ratings, $t = 1.05, ns$. Thus, participants' ratings of themselves as individuals and as CRG members differed significantly for attributes high but not low in centrality to describing their individual selves.

We then asked whether participants rated their individual and collective selves similarly for the attributes most central to describing them as CRG members. They did not. The average individual self-rating for high-centrality collective attributes differed significantly from the average collective self-rating for these same attributes, $t(19) = 3.11, p < .01$. In con-

⁷One participant from the follow-up session was not included in this analysis due to missing data on the objective index of group dedication during the first session.

⁸This additional sample was comparable to our main one in age (additional, $M = 21.0$ years; original, $M = 20.3$ years), gender (additional, 52.2% male; original, 61.4% male), and group identification (additional, $M = 5.71, SD = .65, Mdn = 5.50$; original, $M = 5.40, SD = 1.12, Mdn = 5.63$). Moreover, of the 10 attributes that were rated highest in centrality among our main participants, at least 7 were similarly rated highest in centrality by 17 out of the 22 additional participants who completed the collective-self centrality ratings, and at least 8 were rated highest in centrality by more than half of these 22 participants.

⁹Approximately half of the participants did the individual self-ratings first, whereas the other half did them second; preliminary analyses revealed no order effects.

trast, the parallel comparison for the 10 attributes that were rated lowest in centrality at the collective level showed no difference in individual and collective self-ratings, $t(19) = 1.01$, $p > .3$. Thus, like the results found for high- and low-centrality individual attributes, participants' ratings of themselves as individuals and as CRG members differed significantly for attributes high but not low in centrality to describing their collective selves.

Taken as a whole, then, despite overlap in attribute centrality, our additional participants' views of themselves as individuals differed significantly from their views of themselves as CRG members on both high-centrality individual and high-centrality collective attributes. This suggests that the self-ratings that our main participants made for their high-centrality CRG attributes distinctly reflected who they are as CRG members. And, of course, our hypothesis was that evidence for collective self-verification should emerge precisely for these high-centrality attributes. Finally, it makes sense that individual and collective self-ratings did not differ for low-centrality individual or low-centrality collective attributes in our additional sample, as people presumably lack a clear basis for making self-ratings on attributes that are of minimal importance to who they are (as individuals or group members).

Attribute Differences Across Groups?

On a different note, readers may wonder if attribute differences across groups might somehow account for our results. Specifically, did high- and low-identification participants choose different sets of high- and low-centrality attributes? No, they did not. There was substantial overlap in the attribute sets across participant groups. For example, *friendly* and *committed* were in the high-centrality sets of nearly all participants, and *procrastinating* and *gullible* in nearly all low-centrality sets. Moreover, a 2×2 (Group Identification \times Attribute Centrality) a mixed analysis of variance (ANOVA) for centrality ratings yielded only an attribute centrality effect, $F(1, 86) = 1233.05$, $p < .001$, indicating that high- and low-identification participants perceived a similar difference in the centrality of their high- versus low-centrality attributes. These results indicate that our group-identification effect was not due to systematic differences between participant groups in the composition of their attribute sets or the perceived centrality of these sets.

Collective Self-Verification or Self-Enhancement?

As could be said of most groups in which membership is voluntary, it is likely that members of CRG chose to join the group because they hold positive views of the group and its members. Therefore, we might expect CRG members to rate themselves fairly positively as group members and to rate highly CRG-defining attributes fairly positively as well. To

assess the positivity of participants' self-ratings, we recoded these ratings on an idiographic basis so that higher values always connoted more positive self-views. That is, self-ratings on attributes that participants idiographically rated to be positive (i.e., < 4 on the 7-point positivity scale) were kept intact, but self-ratings on attributes participants rated negatively (i.e., > 4) were reverse-scored. Attributes rated as neutral (i.e., 4) were excluded ($M = 3.05$ out of 20 attributes). We then computed averages of the positivity of participants' self-views for their idiographic sets of high- and low-centrality attributes. A comparison of these averages showed that self-views were more positive for high- ($M = 7.74$) than for low-centrality attributes ($M = 7.31$), $t(87) = 2.64$, $p = .01$ (although both averages were only slightly above the midpoint of the 11-point self-rating scale). Such positivity was also reflected in participants' attribute positivity ratings. That is, participants rated the attributes they saw as being highly central to defining the group ($M = 5.47$) more positively than low-centrality attributes ($M = 3.02$), $F(1, 87) = 419.08$, $p < .001$.

Though unsurprising given the voluntary basis of membership in CRG, these findings raise the possibility that the strong self-partner correlations we found for high-centrality attributes, particularly among high-identification participants, were attributable at least in part to self-enhancement rather than solely to collective self-verification. We used two different tactics to explore this possibility.

First, because self-views were more positive on high- relative to low-centrality attributes, we computed a difference score reflecting this disparity, and then reconducted the analyses for Hypotheses 1 and 2 controlling for this difference. We reasoned that if our attribute centrality effect was due to differences in self-view positivity, rather than attribute centrality as we allege, this effect should be reduced when controlling for the difference in the positivity of participants' self-views. The results do not support a self-enhancement account in that the self-partner correlation remained significantly greater for high- compared to low-centrality attributes, $F(1, 86) = 4.07$, $p < .05$ (Hypothesis 1). In addition, the self-partner correlation remained greater for high- compared to low-centrality attributes among high-identification participants, $F(1, 42) = 6.54$, $p = .01$, but not low-identification ones, $F < 1$ (Hypothesis 2).

As a second tactic, we created indexes of the magnitude of the unique effects of collective self-verification as well as self-enhancement.¹⁰ We reasoned that a self-enhancement account would argue that correspondence between self- and partner ratings was due to participants rating their partners high on attributes that their partners rated positively and low on negatively rated attributes—regardless of the self-descriptiveness of these attributes. In contrast, our collective self-verification account argues that self-partner correspondence

¹⁰We thank an anonymous reviewer for this suggestion.

was due to participants rating their partners high on attributes that their partners rated as highly self-descriptive and low on attributes rated low in self-descriptiveness. Thus, self-enhancement can be indexed in terms of the correlation between participants' *attribute positivity ratings* and their partners' ratings of them as group members, whereas collective self-verification can be (and was) indexed in terms of the correlation between participants' *self-ratings* and their partners' ratings of them as group members.

However, to assess the unique effect of self-enhancement, we computed the partial correlation between participants' attribute positivity ratings and their partners' ratings of them, controlling for participants' self-ratings. We did this separately for each participant's idiographic set of 10 high- and 10 low-centrality attributes, resulting in two indices of the unique effect of self-enhancement, one for high-centrality attributes and the other for low-centrality ones. Then, to assess the unique effect of collective self-verification, we computed the partial correlation between participants' self-ratings and partners' ratings of them, controlling for participants' attribute positivity ratings. Once again, we did this separately for participants' high- and low-centrality attribute sets.

Next, we compared the magnitude of the unique effects of self-enhancement and self-verification by subjecting the above partial correlations to a 2×2 (Attribute Centrality \times Self-Evaluative Motive) within-subjects ANOVA, which yielded only two main effects. The attribute centrality effect, $F(1, 87) = 14.52, p < .001$, indicated that self-enhancement and self-verification were both greater for high- ($M = .35$) than for low-centrality attributes ($M = .19$). More informative, the self-evaluative motive effect, $F(1, 87) = 17.19, p < .001$, and lack of interaction, $F < 1$, indicated that self-enhancement was greater than self-verification for high- (self-enhancement, $M = .49$; self-verification, $M = .21$) as well as for low-centrality attributes (self-enhancement, $M = .29$; self-verification, $M = .09$).

At first blush, this finding may appear to undermine a collective self-verification interpretation of our results. However, self-evaluative motives are not mutually exclusive; they can and often do operate simultaneously (e.g., Morling & Epstein, 1997; Sedikides, 1993; Swann et al., 1989). Thus, the fact that self-enhancement was operating in the present study does not preclude the operation of collective self-verification. To demonstrate that collective self-verification occurred alongside self-enhancement, we retested Hypotheses 1 and 2 using the partial correlations representing the unique effects of collective self-verification (rather than our original self-partner correlations). In line with the original results for Hypothesis 1, the partial self-partner correlation was marginally significantly greater for participants' high- ($M = .21$) compared to low-centrality attributes ($M = .09$), $t(87) = 1.74, p = .085$. Moreover, bolstering Hypothesis 2, the partial self-partner correlation was significantly greater for high- ($M = .23$) compared to low-centrality attributes ($M = .02$) among high-identification participants, $t(43) = 2.13, p < .05$,

but not their low-identification counterparts (high-centrality, $M = .19$; low-centrality, $M = .15$), $t < 1$.

To summarize, the aforementioned analyses yielded clear evidence for self-enhancement in the form of participants' partners rating them high on attributes they rated positively and low on negatively rated attributes. This evidence is unsurprising when one considers the likelihood that CRG is perceived positively by its members, all of whom joined the group voluntarily. However, self-enhancement notwithstanding, we continued to find evidence for collective self-verification using two different methods of accounting for the influence of self-enhancement. Indeed, analyses based on both methods yielded evidence for the moderating effects of attribute centrality and group identification, both of which are specifically predicted by self-verification theory.

Attitudinal Similarity, not Collective Self-Verification?

Lastly, we considered the possibility that our results reflect shared attitudes or beliefs about CRG members as a group. That is, were partners actually verifying each other's specific collective self-views, as we have suggested, or were they simply stereotyping one another? The latter seems unlikely because there is no obvious reason to predict that only the partners of high-identification participants would rely on commonly held attitudes and beliefs about the group in rating their partners. Indeed, if anything, it would seem that the partners of low-identification members would need to rely the most on group stereotypes.

Nonetheless, we put an attitudinal similarity account to test. Specifically, this account predicts that similar results should emerge regardless of how participants are paired (i.e., regardless of the specific partner each participant rated or was rated by) because all participants would be drawing on the same shared stereotypes to rate their partners. Thus, we reconducted our analyses for Hypotheses 1 and 2 with two different random pairings of participants (i.e., participants were randomly paired with a CRG member other than their original partner). In both sets of analyses, we replicated our original attribute centrality effect, such that the correlation between self- and partner ratings was greater for high- than for low-centrality attributes (e.g., $r = .22$ vs. $r = .05, t = 3.19, p < .01$), although it is noteworthy that the size of the correlations for high-centrality attributes was considerably smaller (almost half the size) than the one we reported for high-identification participants (i.e., $r = .42$).

That an attribute centrality effect emerged even when partners were paired randomly makes sense as a defining quality of most groups is some overlap in the attitudes and beliefs of group members. Thus, even randomly paired group members are likely to show some convergence in their ratings, particularly for highly group-defining attributes, due to common reliance on group stereotypes. However, when we retested Hypothesis 2 using the self-partner correlations

based on randomly paired partners, group identification did not moderate the attribute centrality effect. Thus, although attitudinal similarity may have played some role in our centrality effect, such similarity alone cannot account for why the collective self-views of participants who were highly identified with CRG were more likely to correspond to partners' ratings. These findings support the view that collective self-verification involves verification of each group member's own particular views of the self as a group member, not simply group members being viewed in a homogeneous, stereotypic manner by their partners. Put differently, as we noted at the outset, there is individual variation among group members' collective self-views (e.g., Worchel et al., 2000), and thus collective self-verification is specific to each group member, rather than merely a matter of being viewed by others through the lens of commonly held attitudes and beliefs about the group.

DISCUSSION

Replicating Chen et al. (2004) and consistent with findings in the broader self-verification literature (e.g., Swann & Pelham, 2002), we found greater collective self-verification, indexed in terms of correspondence between self- and partner ratings, for high- relative to low-centrality attributes (Hypothesis 1). Moreover, this centrality effect was mainly apparent among highly identified group members (Hypothesis 2). Although Chen et al. (2004) found similar effects for attribute centrality and group identification, their findings involved either hypothetical collective self-views or a hypothetical source of collective self-verification. In contrast, the present study documented these effects with regard to actual collective self-views and among ingroup members of a real, naturally occurring group. Also, because the present study examined a group very different from the one previously investigated (i.e., gender), the current findings speak to the generalizability of the moderating effects of attribute centrality and group identification on collective self-verification.

Unlike the present study, Lemay and Ashmore (2004) assessed collective self-verification in terms of confirmation of people's self-proclaimed group memberships, rather than in the more calibrated terms of confirmation of people's specific beliefs about attributes that characterize them as group members. Nevertheless, the present results can be seen as a conceptual replication and extension of this earlier work. Specifically, our group-identification effect is consistent with Lemay and Ashmore's finding that participants' self-proclaimed group memberships predicted their perceptions of others' confirmation of these memberships a few months later, and that this effect was stronger for group memberships that participants initially deemed high in importance. However, extending Lemay and Ashmore, we measured collective self-verification in terms of the correspondence between group members' self-ratings and a fellow group member's

ratings of them, rather than in terms of the correspondence between group members' self-proclaimed group memberships and those same group members' metaperceptions of the degree to which others confirm these memberships.

Finally, the current study explored two long-term correlates of collective self-verification. First, we found that self-partner correspondence was positively associated with perceptions of the self as a prototypical group member 5 months later (Hypothesis 3). Self-perceptions of prototypicality lie at the heart of many social identity processes. For example, self-categorization theory (SCT) maintains that categorizing the self as a group member involves seeing the self as a prototypical group member (e.g., Turner et al., 1994). Thus, perceiving the self as prototypical is a precursor to the numerous intragroup and intergroup phenomena predicted by SCT and related perspectives. For instance, research has found that the positive link between threats to group distinctiveness (i.e., high similarity between the ingroup and outgroup) and ingroup bias is only apparent among group members who perceive themselves as prototypical (Jetten, Spears, & Manstead, 1997). The present research contributes to this broader literature by suggesting a new route—namely, collective self-verification—by which people come to see themselves as prototypical group members.

Second, we found that self-partner correspondence was linked to greater dedication to the group in the long run (Hypothesis 4). Thus, confirmation of one's highly central, collective self-views by an ingroup member may boost one's commitment to the group to which these self-views pertain. This finding suggests the interesting possibility that group dedication may be increased even among reluctant group members so long as fellow ingroup members' views of them match their own collective self-views on highly central attribute dimensions. Conversely, even the most devoted group member may loosen ties to the group if fellow ingroup members do not confirm his or her collective self-views. Future research is needed to directly examine these possibilities.

Several additional aspects of our findings warrant discussion. In particular, although we found clear support for Hypothesis 2 in that high- but not low-identification group members showed greater self-partner correspondence for their high- relative to low-centrality attributes, it is interesting to note that low-identification members showed a moderate degree of self-partner correspondence across attributes. Thus, it was not the case that low-identification members' collective self-views were entirely discrepant from their partners' views of them on highly CRG-defining attributes. Is it appropriate for us, then, to conclude that higher group identification is associated with greater collective self-verification? Yes, we think so. It is important to bear in mind that low-identification members exhibited a moderate degree of self-partner correspondence even on low-centrality attributes—ones that they rated as having little bearing on their self-conceptions as group members. Thus, it is not clear that any of the self-partner correspondence seen among low-

identification members reflected collective self-verification *per se*.

In contrast, the correspondence between high-identification participants' self-ratings and their partners' ratings of them on high- but not low-centrality attributes fits squarely with a collective self-verification interpretation. Moreover, we reported results from an additional sample to bolster our contention that the self-partner correspondence seen among these participants can be interpreted as evidence for verification of collective rather than individual self-views. Finally, we tested and diminished the likelihood of several alternative accounts for our findings.

Relations to the Broader Literature

Readers may wonder about the relation between our results and recent findings showing that self-verification among members of small workgroups is linked to higher group identification and enhanced creative task performance (Swann, Milton, & Polzer, 2000). The most important distinction is that we assessed collective self-views, whereas Swann and colleagues (2000) were focused on verification of group members' unique, individual self-views. Indeed, they defined self-verification as the process whereby group members bring others' appraisals into line with their existing views of themselves as unique individuals, thus creating their own personal "niches" in the group. Reflecting this focus on individual self-views, Swann et al.'s (2000) participants were asked to make intragroup comparisons when rating themselves (i.e., "Rate yourself relative to other 1st-year MBA students"), which research has shown activates the individual self (e.g., Brewer & Weber, 1994; Schmitt et al., 2000). In contrast, we had participants rate themselves as CRG members relative to non-CRG undergraduates—an intergroup comparison—which activates collective self-views.

On a different note, readers familiar with SCT might wonder about the relation between self-categorization and collective self-verification processes. Although a review of the extensive literature on SCT is beyond the present scope, it may be useful to highlight some basic differences between our collective self-verification perspective and the SCT approach. First and most fundamentally, the very process of collective self-verification is distinct from the central process about which SCT makes predictions—namely, categorizing the self as a group member. How so? As recently articulated by Swann, Polzer, Seyle, and Ko (2004), SCT focuses on the influence of groups on the self, whereby categorizing the self as a group member entails self-stereotyping, characterizing the self in terms of a salient, consensually defined group prototype. The content of this shared prototype is determined by the principle of metacontrast whereby intragroup similarities and intergroup differences are maximized. In sharp contrast, self-verification theory posits the opposite direction of influence, whereby group members bring others' perceptions of

them into line with their own established and idiosyncratically defined self-views.

Put another way, SCT assumes that people's collective self-views are described and prescribed by shared views of members of the relevant group as a whole, arrived at through the process of self-stereotyping, whereas self-verification theory assumes that people choose to join and remain in groups to verify their own particular collective self-views, which may or may not be shared by others. The attitudinal similarity analyses we reported illustrate this distinction. From a SCT perspective, similar results should have emerged regardless of how participants were paired due to common reliance on a shared group prototype when rating one another. But these analyses showed instead that who participants were paired with mattered, suggesting a self-to-other direction of influence whereby participants brought their partners' perceptions of them as CRG members into line with their own particular, rather than shared and prescribed, collective self-views.

In addition to differences in the direction of influence between the self and the group, and in whether collective self-views are consensually defined and shared, SCT and self-verification approaches differ in their views on whether collective self-views are fixed, preformed self-conceptions. SCT treats collective self-views as inherently contextual, constructed anew in each comparative context. For example, a psychology major's collective self-views may include "empirically oriented" when humanities majors constitute the comparative context (i.e., the outgroup), but "people oriented" when chemistry majors do. Thus, SCT posits not only that group prototypes dictate group members' collective self-views but also that these prototypes are ever-changing depending on the comparative context. Quite the opposite, self-verification theory assumes that people seek to verify relatively fixed, core self-views. These self-views may vary in accessibility across different contexts, and people may even possess contextualized self-views (i.e., views of themselves that are specific to particular contexts), but the theory assumes that the self-views that people seek to verify are preformed and cognitively represented in memory, indeed serving as a crucial basis for enduringness and continuity in the self.

A third major difference has to do with underlying motivational assumptions. SCT was originally developed as an extension of social identity theory (SIT; Tajfel & Turner, 1986), which assumes that people strive for positive social identities. Self-verification theory, in contrast, offers an explicit alternative to self-enhancement in positing that people seek to confirm existing self-views, regardless of the positivity or negativity of these self-views. Applied to the collective level of self-definition, then, self-verification theory predicts that people seek verifying appraisals of their positive as well as negative collective self-views, whereas a traditional SIT/SCT perspective would predict that people are more desirous of positive appraisals.

More recent treatments of SCT, however, posit motives other than self-enhancement. In particular, Hogg and colleagues (e.g., Hogg & Mullin, 1999) viewed uncertainty reduction as a powerful motive behind people's tendency to categorize as group members. Our collective self-verification thesis bears a resemblance to this uncertainty reduction hypothesis in that uncertainty is thought to be aversive because it undermines people's sense of prediction and control. Thus, concerns about prediction and control are central to both self-verification and uncertainty reduction perspectives. However, self-verification differs from this motivational perspective on SCT as well, most notably in making the opposite prediction regarding the role of uncertainty. Specifically, whereas self-verification theory predicts a greater desire for collective self-verification (or any form of self-verification for that matter) with increasing certainty, as documented by Chen et al. (2004, Studies 1 & 2), the uncertainty reduction perspective would be more apt to predict greater self-verification with lower uncertainty.

Finally, recall our earlier cited claim that our prototypicality finding (Hypothesis 3) suggests collective self-verification as a new route by which people come to see themselves as prototypical group members. The meaning of this claim should be clearer in light of the foregoing comparison of SCT and collective self-verification. SCT assumes that prototypicality is defined and thus enhanced by adherence to a normatively and contextually defined group prototype—an assumption borne out in substantial research (for reviews, see, e.g., Oakes, Haslam, & Turner, 1998; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Turner & Onorato, 1999). In comparison, our data offer initial evidence that when people bring others' perceptions of them as group members into line with their own particular rather than shared collective self-views, their subjective perceptions of being prototypical group members may be enhanced. In other words, self-perceptions of prototypicality may be defined at least in part in one's own terms, not just in terms of an externally defined group prototype.

Limitations and Future Directions

Finally, we discuss limitations of the present research, as well as the future directions they imply. First, the correlational nature of the present findings do not allow us to definitively conclude that group identification is an antecedent of collective self-verification; the former may result from collective self-verification. In fact, we speculate that both directions of influence are likely to occur in turns over the course of people's group memberships. Second, the causal ambiguity of the above effect places interpretive limits on causal claims regarding our longitudinal findings, although we note that we did control for the influence of group identification when testing the influence of collective self-verification on self-perceptions of group prototypicality and group dedication months later.

Third, even if we were able to conclude that group identification breeds collective self-verification, we did not assess the processes underlying this effect. Instead, we assumed that the higher epistemic and pragmatic stakes that come with high group identification lead people to behave in ways that facilitate correspondence between self- and partner ratings. Thus, highly identified CRG members are likely to exhibit behaviors associated with highly CRG-defining attributes. The notion that people enact behavioral strategies to elicit self-verification is supported by research on (individual) self-verification. For instance, Swann and Hill (1982) found that when participants received feedback from a partner that failed to verify their dominance-related self-conceptions, they behaved in ways designed to resist the feedback; dominant participants who were viewed as submissive behaved more dominantly, whereas the reverse behavioral tendency was seen among submissive participants who were viewed as dominant. Future research is needed to directly test the presumed processes underlying the link between high group-identification and collective self-verification by ingroup partners.

Fourth, the present study documented collective self-verification with regard to collective self-views associated with an overall positively evaluated group. Indeed, although we found clear evidence for the unique effect of collective self-verification, using two different methods of dealing with self-enhancement, this evidence emerged alongside evidence for self-enhancement. It is thus important to acknowledge that although other researchers have documented collective self-verification with regard to negatively evaluated group memberships (Lemay & Ashmore, 2004) and negative collective self-views (Chen et al., 2004), the present study does not offer such evidence. As such, it will be critical for future research to replicate the current results using both positively and negatively evaluated groups and associated collective self-views.

Next, readers may wonder whether our results are specific to the particular sample we used, as theory and research suggest that collective aspects of the self are more emphasized among members of relatively collectivistic cultures, such as those in East Asia (e.g., Cousins, 1989; Markus & Kitayama, 1991). As we had an overwhelmingly East Asian sample, we were unable to conduct cross-cultural comparisons. However, we can assure readers that collective self-verification is not limited to East Asians. Chen et al. (2004) documented the phenomenon in three studies using Midwestern U.S. samples comprised nearly entirely of European Americans, and Lemay and Ashmore (2004) found evidence for collective self-verification using a 57% European American sample. Although such evidence indicates that collective self-verification is not limited to cultures that place special emphasis on collective self-aspects, we submit that it would nevertheless be worthwhile to explore the possibility that self-verification processes may operate differently across cultures. In fact, recent findings suggest that individual dif-

ferences in naïve dialecticism, a belief system that is more prevalent in East Asian than in Western cultures, moderates the nature of individual self-verification processes. More specifically, individuals who are low in dialecticism tend to seek verification of global, individual self-views, whereas individuals high on dialecticism tend to seek verification of more contextualized self-views (Chen, English, & Peng, in press).

On another note, we took pains to assure readers of the distinction between individual and collective self-verification by collecting data from an additional sample that showed mean differences in the elevation of individual and collective self-ratings, suggesting that individual and collective self-views are distinct. However, a more complete demonstration of the distinction between individual and collective self-verification would have involved asking participants in our main study to make individual in addition to collective self-ratings, and then controlling for individual self-ratings when examining the correlations between self- and partner ratings at the collective level.

Although we are unable to provide this demonstration, it is crucial to recall that participants made their attribute centrality ratings specifically with respect to CRG, making it unclear why we were able to find an attribute centrality effect if our self-partner correlations reflected individual instead of collective self-verification. Also, it is unclear why we were able to find a moderating effect of group identification—assessed using a well-established, group-level measure—if our self-partner correlations reflected individual-level processes. Finally, it is worth noting that Chen et al. (2004) manipulated the salience of the individual versus collective self and found evidence for collective self-verification only when the collective self was primed. This suggests that even if individual and collective self-views overlap to some degree, individual- and collective-self processes are nonetheless distinct. Regardless, it will be important for future research to assess both individual and collective self-views, and examine collective self-verification controlling for the influence of individual self-verification.

Finally, we have interpreted our data as reflecting the degree to which participants' collective self-views were verified by their partners, but we did not actually give participants explicit feedback from their partners, nor did we assess the degree to which participants felt self-verified. Of course, there are several reasons why it is reasonable to assume that our self-partner correlations reflected, at least to some extent, the degree to which participants actually received collective self-verification. First, people tend to behave toward others in a manner consistent with their beliefs about them (e.g., Snyder, Tanke, & Berscheid, 1977). It is therefore likely that our participants received at least some behavioral feedback on how their partners viewed them in the course of their interactions with these partners at weekly CRG events. Second, numerous studies have indexed (individual) self-verification in a manner similar to the way in which we as-

essed collective self-verification, and have used this index to predict various outcomes without measuring the receipt of self-verification per se (e.g., McNulty & Swann, 1994; Swann, De La Ronde, & Hixon, 1994; Swann et al., 2000; Swann & Pelham, 2002). For instance, Swann and Pelham (2002) had college roommates make attribute ratings of themselves and each other. They found that when participants' roommates verified their views of themselves on highly central attributes, participants were more interested in continuing to be roommates. Overall, then, there are theoretical and empirical grounds for viewing our self-partner index as a measure of collective self-verification. Still, it would be useful for future research to replicate our findings using paradigms that include explicit feedback manipulations and/or measures of receipt of feedback.

In closing, the current research can be seen as part of broader efforts to integrate theorizing and research across different levels of self-definition. In the realm of self-verification, several decades of research have shown that people seek confirmation of their conceptions of themselves as individuals. The present data bolster recent research showing that self-verification strivings also apply to collective self-views. In addition, the current results extend earlier work by examining both antecedents and long-term consequences of collective self-verification among members of real-world groups, as well as by measuring collective self-verification in terms of the correspondence between self-ratings and an actual ingroup partner's ratings of the self. Understanding the antecedents and consequences of collective self-verification may inform a variety of questions about group memberships, such as how group devotion can be enhanced, or what leads people to continue or forego their memberships. As such memberships play a major role in most people's daily lives, it will be important for researchers to continue investigating the role of collective self-verification in both solidifying and weakening them.

ACKNOWLEDGMENTS

This research was conducted as part of the undergraduate honors thesis of the third author. Portions of this research were presented at the 6th Annual Conference of the Society for Personality and Social Psychology, New Orleans. We would like to thank the members of CRG for their willingness to participate in this research, as well as Ozlem Ayduk and Rodolfo Mendoza-Denton for their statistical assistance.

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