Losing sight of oneself in the above-average effect: When egocentrism, focalism, and group diffuseness collide ☆

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Abstract

Four experiments examined the relative influence of three causal processes in the above-average effect (AAE) and related comparative biases: (a) egocentrism, (b) focalism, and (c) referent group diffuseness. By manipulating the inclusion or exclusion of the self from the referent group (Experiments 1–3) or target group (Experiment 4), the relative contributions of each influence were assessed. In direct comparisons, single peers were systematically judged more favorably relative to groups including the self, suggesting that egocentrism plays a lesser role than focalism or group diffuseness. Thus, in response to the question such as "How friendly is Nancy compared to the rest of *us*?" the answer tends to be "More friendly."
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Introduction

In one nationwide survey of high-school students, 85% reported they were above the average in ability to get along with others (College Board, 1976–1977). This is an example of one of the most robust and widely replicated social psychological phenomena—the above-average effect (AAE), whereby people rate themselves more favorably than their peers (e.g., Alicke, 1985; Brown, 1986; College Board, 1976–1977; Klar, 2002; Taylor & Brown, 1988). Such effects are also found in judging the likelihood of experiencing positive and negative life events (e.g., Chambers, Windschitl, & Suls, 2003; Klein & Weinstein, 1997; Weinstein, 1980), abilities (e.g., Kruger, 1999; Kruger & Dunning, 1999), and predictions about engaging in prosocial behaviors (e.g., Epley & Dunning, 2000). Although the AAE has been extensively studied with respect to self versus peer comparisons (Alicke, 1985; Taylor & Brown, 1988), a similar bias is also seen when a randomly selected peer target (such as an acquaintance) is compared to a peer group (Klar, 2002; Suls, Lemos, & Stewart, 2002); the single peer is evaluated more positively than the group.

The AAE focuses on personal traits and idiosyncratic attributes which define the personal or individual self. The personal self can be differentiated from the relational and the collective self in the social identity tradition (see Brewer & Gardner, 1996; Hogg, 2003). Hence, the AAE is best considered as distinct from inter-group comparison biases where the collective self is salient (but see Hogg, 2000; Tajfel, 1978; Turner, 1975). Indeed, AAE is usually documented with respect to members of one's own in-group (e.g., fellow college students of the same sex), so it is unlikely to reflect an instance of in-group bias.

Several processes contribute to the AAE and related social comparative biases, but there is little consensus about which processes are necessary, sufficient or most

influential (see Chambers & Windschitl, 2004, for discussion). The purpose of the present research is to evaluate the relative merit of three of the most popular cognitive explanations: egocentrism, focalism, and group diffuseness.

To facilitate the presentation, we follow the conventional terminology in this literature (e.g., Tversky, 1977). For a direct comparison, such as "How friendly is Jim compared to other college students?", "Jim" is considered to be the comparison *target* and the other students as the comparison *referent*. If the comparison involved the self, such as "How friendly are you compared to other college students?", then the self is the target and the other students comprise the referent.

The AAE has been demonstrated with two different methods (see Otten & van der Pligt, 1996). As in the above example, in the *direct* method, participants compare their standing on an attribute with their peers. Typically, the direct comparisons are made on Likert-response scales with anchors such as "much more friendly," "the same," to "much more unfriendly". The *direct* comparison is our focus because it tends to yield the strongest and most consistent AAEs (Chambers & Windschitl, 2004). The other method is considered to be *indirect* (e.g., Alicke, 1985) because participants make separate absolute ratings for themselves and their peers (e.g., "How friendly are you?"; "How friendly are college students on average?") on Likert scales. The difference between the 'self' and 'other' judgments is operationalized as the index of the judgment of comparative standing (Brown, 1986). Although the absolute differences index is not the main focus of the research, it was also computed to both identify differences between the outcomes of direct versus indirect comparisons and to show how the processes engaged in the two kinds of comparisons differ (Chambers & Windschitl, 2004; see also Moore, 2007). This will be explained below.

Sources of comparative bias

The original explanation for people judging themselves to be "better" than others was self-enhancement motivation (e.g., Alicke, 1985; Codol, 1975; Taylor & Brown, 1988). This motivation clearly plays a role (e.g., Alicke & Govorun, 2005), but there are several reasons to question whether it is a necessary condition (see Chambers & Windschitl, 2004). As noted above, AAEs are observed when other persons, such as acquaintances (Klar, 2002), serve as comparison targets, but also when non-social objects (e.g., Giladi & Klar, 2002; Windschitl, Conybeare, & Krizan, 2008) are targets. In addition, people sometimes report that they are below-average on certain desirable attributes (e.g., Kruger, 1999). The role of self-enhancing motivation is not apparent in such cases. For these reasons, the focus here will be on non-motivated sources of comparative bias, although the implications and role of self-enhancement will be considered in the general discussion.

Egocentrism

This explanation (e.g., Chambers & Windschitl, 2004; Kruger, 1999) actually implicates several different processes, although they all reflect the idea that in comparisons self-relevant information is more influential than other-relevant information. Indeed, self-relevant information appears to figure more prominently than other types of information in cognitive processing. People find it easier to recall their own contribution to a group product (Ross & Sicoly, 1979), make judgments about the self more rapidly, easily and confidently (Kuiper & Rogers, 1979), and tend to have richer and more complex knowledge structures about themselves than about others (e.g., Kihlstrom & Cantor, 1984, see also Karniol, 2003).

In the case of the AAE, egocentrism might be manifested via two distinct routes. One is differential *valuation* in self- relative to other-assessments, producing favoritism for the self. This is because the wealth of information available about oneself should facilitate recall of relevant behavioral instances when judging the self versus judging a peer (e.g., Ross & Sicoly, 1979). Further, because the majority of people have positive self-concepts (e.g., Baumeister, Tice, & Hutton, 1989; Rosenberg, 1965), there should be more positive information cognitively available, resulting in more favorable assessments of the self.

A critical implication of differential value of self- versus other-assessment idea is that the self should be favored in both the direct and indirect comparison methods because favoritism results from differential assessments of self and other on an "absolute" basis. It is largely irrelevant whether judges engage in an explicit or indirect comparison, as differential valuation should be influential in both judgment contexts (cf. Moore, 2007).

A different route involves differential *weighting* of self- as compared to other-relevant information in the direct comparison between a target and a referent. This means there might be no differences in how self versus others are evaluated in isolation, or on an absolute basis. When comparing with others, we might initially consider our characteristics and behavior (i.e., anchoring), and consider others' characteristics and behaviors later, if at all (i.e., adjustment) (Kruger, 1999). Consistent with this idea, research suggests that when comparing with others, judges give more weight to information about the self than about other people, although in a true comparison both should figure equally (e.g., Klar, 2002; Kruger, 1999; Wood, 1996).

Greater weighting of self-information in direct comparison represents the conventional treatment of egocentrism in the literature on comparative bias (see Kruger, 1999). But this second egocentric route is only relevant to direct comparison so it fails to explain why AAE's are also found with the indirect method. The implication is that both differential valuation and differential weighting might influence direct comparison, but only differential valuation can affect indirect comparisons (see also Moore, 2007).

The diffuse generalized group

According to this explanation (Chambers & Windschitl, 2004; Perloff & Fetzer, 1986), the target is rated higher on the evaluative dimension because of the ease associated with forming a discrete impression of a single object versus a larger or diffuse referent group (i.e., "the average student"). In fact, information about individuals tends to be stored in a more organized, schematic fashion than information about groups, especially when the latter are low in perceived cohesiveness (see McConnell, Sherman, & Hamilton, 1994; McConnell, Sherman, & Hamilton, 1997). This might lead to greater confidence in assessments of a single individual than of a group, and in turn, more weight being assigned to the single individual in the comparison. This is consistent with finding that the AAE is reduced, and sometimes eliminated, when the self is compared to a specific individual rather than with a group or an abstracted "average" other (e.g., Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Klar, Medding, & Sarel, 1996).

Focalism

In the present context, focalism refers to the tendency for the target of comparison to receive more weight than the referent (e.g., Chambers & Suls, 2007; Eiser, Pahl, & Prins, 2001; Suls, Krizan, Chambers, & Mortensen, submitted for publication; Windschitl, Kruger, & Simms, 2003). By definition, focalism applies only to direct comparisons. For a comparison such as "Are you friendlier than other students?," if focalism is operating then more weight should be given to evidence about the target (i.e., the self) and less weight to evidence about the referent (i.e., other students). Accounts of focalism make no distinction between whether the referent consists of a single member or a collective; whichever stimulus is the target of the comparison should receive greater weight. Indeed, recent research indicates that comparing a single target peer to another peer is sufficient to produce comparative biases favoring the target (Suls et al., 2002, Study 5; see also Moore & Kim, 2003; Windschitl et al., 2003).

When processes combine

All three processes may contribute to the "above-average" effect when the self is compared to a group such as "the average college student." In accord with egocentrism, the self should be rated more positively on an absolute basis (i.e., differential valuation) *and* receive greater weight in the comparison (i.e., differential weighting). If the self is also the target of the comparison, it should receive additional attention and weight via focalism. Finally, because the self is a single entity, it should be evaluated with more confidence, which presumably affords it greater weight in the comparison (see Kruger, Windschitl, Burrus, Fessel, & Chambers, 2008). In short, all three processes push in the same direction. However, of the three, egocentrism has often been considered to be the most important single cause of the above-average effect (Alicke & Govorun, 2005). Direct evidence about the relative influence of egocentrism versus the other processes has been unavailable, however.

When processes collide

To assess the relative impact of egocentrism, we tested whether the self would be favored even when focalism and group diffuseness should pull judgments in the opposite direction. One such case would be when a peer target is compared to a group that includes the self. To this end, three experiments tested for the above-average effect in direct comparisons of a target peer with a referent group that included the self (*self-in-group* condition). In another condition, a target peer was compared to a referent group that excluded the self (the *no-self* condition). A conventional self-to-peer group comparison case (*self-as-target* condition) was also included. To test the contribution of focalism, in the final experiment the situation was reversed so the group (including or excluding the self) was made the comparison target and a single peer served as the referent.

Rationale and predictions

Some favoritism for a target peer versus a group of peers (*no-self* condition) is expected because of focalism and the diffuseness of the referent group (e.g., Klar, 2002; Suls et al., submitted for publication). When the self is the target (*self-as-target* condition), both egocentric valuation and egocentric weighting should be operative. If egocentrism is the primary mechanism for the AAE, then favoritism should be stronger when the self is the target, rather than a peer. However, if focalism and group diffuseness are the primary influences in self-to-other comparisons, then favoritism should be of similar magnitude whether the target is the self or a single peer.

The most interesting case is when a peer is compared to a referent group which includes the self (*self-in-group* condition). Focalism and referent group diffuseness should favor the peer target over the group because the former increases the attention to and utilization of target information and the latter hinders weighting and utilization of information about the referent group. However, egocentrism should pull in the opposite direction when the referent group includes the (favorably evaluated) self. In fact, if egocentrism is the most influential factor then the group should be evaluated more favorably when it includes the self. This could either eliminate the usual favoritism for the target or produce favoritism for the referent group (that contains the self). If focalism and group diffuseness have greater influence (than egocentrism), however, then the single target should be favored more than a group including the self.[1]

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[1] The idea that a group including the self should be judged less positively relative to a single target might seem contrary to a considerable body of evidence showing positive evaluation of in-groups (Abrams & Hogg, 1990). However, the classic in-group bias generally involves separate judgments of the ingroup and outgroup. Whether the inclusion of the self will extend to egocentric weighting in direct comparison is unclear.

To assess whether egocentric valuation and/or egocentric weighting are operating, absolute ratings of the target and referent group were also collected in Experiments 2–4. These ratings were included to determine whether a group with the self included is evaluated more positively on an absolute basis—an indication of egocentric valuation (in-group favoritism). A subsidiary aim was to see whether direct comparisons and the indirect comparison index (difference between absolute ratings of target and of referent group) show different patterns.

Experiment 1

This initial study tested the strong version of the egocentrism hypothesis—favoritism for the target peer should be reduced (or reversed) because of egocentric weighting of information about a group including the self (*self-in-group* condition). To approximate a natural group, participants were asked to generate a list of friends or acquaintances who all shared a positive attribute or trait with them. In two conditions, the self was also included on the list; in the third (*no-self condition*), the self was not included. In all conditions, a target was then randomly selected. In the *self-as-target condition*, participants rated themselves on the dimension compared to the rest of the people on the list. In the *self-in-group* condition, participants rated another peer (randomly selected) compared to the rest on the list (including the self). The *no-self condition* involved judging a randomly selected peer compared to the rest of the persons on the list (which did not include the self).

Based on past research, the AAE was predicted in the *no-self* and *self-as-target* condition. However, the effect should be stronger in the *self-as-target* condition because both egocentric valuation and weighting should apply. As noted above, the "strong" egocentrism hypothesis predicts that favoritism for the target peer should be eliminated or reversed in direct comparisons in the *self-in-group* condition (because egocentric weighting should "pull" in the opposite direction). Alternatively, focalism and group diffuseness might overpower egocentrism and thus maintain favoritism toward the target peer.

Method

Participants and design

Seventy-nine undergraduate students enrolled in an introductory psychology course at a large Midwestern university served as participants, for which they received credit toward their course requirement. Participants came into the laboratory in small groups ranging from one to twelve. All participants within a given session were randomly assigned to the *no-self*, *self-as-target*, or *self-in-group* condition of a between-subjects design.

Materials and procedure

Upon arrival at the laboratory, participants were informed that the study concerned how people judge themselves and others. Participants were then provided with a packet that contained all the instructions and dependent measures. Participants were first instructed to "*Reflect on your recent social experiences. Think of three college acquaintances with which you share a positive attribute, such as a trait or ability. For example, you may all be good at writing or you may all be open-minded.*" They were then instructed to describe the attribute in a few words. On the same page appeared a table with four rows labeled 'a' through 'd'. Participants assigned to the *self-as-target* and *self-in-group* conditions were instructed to write down their own initials in the row labeled 'c', and complete the remaining rows with the initials, names or nicknames of three other acquaintances. Participants in the *no-self* condition were instructed to complete all the rows with identifying information of four acquaintances. Participants were then asked to wait for further instructions.

Next, the experimenter displayed a large manila envelope and said, "*I will now randomly draw a letter from this envelope. The letter I draw will stand for the person you marked down in the row with that letter. Most of the questions on the following pages will refer to that person.*" The experimenter then shuffled the envelope, drew out a note card with a letter on it, and said "*please answer the questions on the following pages with reference to person designated with this letter.*" In reality, the envelope contained all four letters only for participants in the *no-self* condition. For participants in the *self-as-target* condition all note cards had the letter *c* on them, ensuring that the participant would be the target in subsequent comparisons. For participants in the *self-in-group* condition, each note card had one of the four letters with the exception of letter *c*, ensuring that participants would be a part of the referent group, and not the target.

Next, participants responded to the dependent measures. First, participants were requested to compare the target entity (the person signified by the letter that the experimenter had drawn from the envelope) to the remaining people that participants had listed (i.e., the referent entity). Specifically, participants were instructed to "*Consider the person that the experimenter randomly selected from the envelope. With this person in mind, please answer the following questions to the best of your knowledge. The questions request that you compare this randomly selected person to the other people on the list.*" Participants then compared the randomly selected individual to the rest of the group, responding to the question "*Compared to the other people on the list, how does the person randomly selected by the experimenter stand on the positive attribute you described?*" Participants made the comparative rating on a 11-point scale with labeled anchors. The bottom anchor (0) was labeled *much worse than the others*, the middle anchor (5) was labeled *about the same*, and the top anchor (10) was labeled *much better than the others*. Finally, participants were debriefed and dismissed.

Results

Overall, participants generated a variety of attributes with 65% listing a trait (e.g., outgoing, caring) and the remainder either an ability (e.g., swimming) or an interest/attitude (e.g., like sports, liberal political views).

Above-average effects within conditions

One-sample *t*-tests were conducted to ascertain whether the AAE was present in each condition by contrasting the mean comparative rating to the scale mid-point (5, "*about the same*"). As predicted, the AAE was present in both the *no-self* ($M = 6.61$, $t(27) = 4.75$, $p < .001$) and *self-as-target* ($M = 5.92$, $t(25) = 2.78$, $p < .01$) conditions. That is, the randomly selected acquaintance from the participant's list was rated more positively than the group of acquaintances. The self was also rated more positively than the group of acquaintances. The critical question was whether inclusion of the self in the referent group would reduce or reverse the favoritism for the target because of egocentrism. In the *self-in-group* condition, the peer target was also rated more favorably than the group ($M = 6.04$, $t(24) = 2.73$, $p < .05$). Egocentrism did not appear to "trump" group diffuseness and/or focalism, which produced favoritism for the peer.

Magnitude of AAE across conditions

An overall ANOVA contrasting the direct comparison ratings among the three conditions was non-significant, $F(2, 76) = 1.13$, *ns.* This was consistent with the substantial AAE's observed in all three conditions. Note that the AAE was not of significantly greater magnitude in the *self-as-target* condition than in the *no-self* condition.

Discussion

As anticipated, generally robust AAEs were observed both when the self was compared directly to a group of peers and when a single peer was compared directly to a group of peers. The magnitude of the AAE was approximately the same whether the self or an acquaintance served as the comparison target. Contrary to the 'strong' version of the egocentrism hypothesis, a randomly selected peer was judged more favorably even when the self was a part of the referent group.

Experiment 2

In the initial experiment, inclusion of the self in the referent group did not eliminate favoritism for a single peer target, suggesting that egocentrism did not exert dominance over focalism and/or group diffuseness. However, this first study examined judgments of only one attribute that was selected by the participant so there was considerable variation in the types of attributes being judged. Moreover, to the extent the groups that participants generated were self-relevant, there might

have been substantial overlap between representations of the self and the peers who share a personally relevant characteristic. To increase experimental control, in subsequent studies participants again generated a list of acquaintances, but the acquaintances were not closely related to participants and the judgmental dimensions were provided by the experimenters. The next two studies had the same three-group design as Experiment 1: *no-self*, *self-as-target*, and *self-in-group* conditions. Absolute ratings of the target and referent group were also collected. The main purpose of Experiment 2 was to test whether inclusion of the self in the referent group would reduce (or reverse) the favoritism for the target peer due to egocentric weighting of the information about that group. The addition of absolute ratings again allowed us to ascertain whether inclusion of the self increases ratings of the group (egocentric valuation), but does not effect direct comparisons.

Method

Participants and design

Ninety-two undergraduate students enrolled in an introductory psychology course at a large Midwestern university served as participants, for which they received credit toward their course requirement. Participants came into the laboratory in small groups ranging from one to twelve. All participants within a given session were randomly assigned to the *no-self*, *self-as-target*, or *self-in-group* condition of a between-subjects design.

Materials and procedure

Participants were first instructed to "*reflect on social experiences you have had and think of several college acquaintances you know or have known in the past.*" On the same page appeared a table with six rows labeled 'a' through 'f'. Participants assigned to the *self-as-target* and *self-in-group* conditions were instructed to write down their own initials in the row labeled 'd', and complete the remaining rows with the initials, names or nicknames of five other acquaintances. Participants in the '*no-self*' condition were instructed to complete all the rows with identifying information of six acquaintances. Participants were then asked to wait for further instructions.

Next, the experimenter displayed a large manila envelope and said, "*I will now randomly draw a letter from this envelope. The letter I draw will stand for the person you marked down in the row with that letter. Most of the questions on the following pages will refer to that person.*" The experimenter then shuffled the envelope, drew out a note card with a letter on it, and said "*please answer the questions on the following pages with reference to person designated with this letter.*" As in Experiment 1, the contents of the envelope were sometimes rigged such that the self was always selected in the *self-as-target* condition, but never in the *self-in-group* condition.

Next, participants responded to the dependent measures. First, participants were requested to compare the target entity (the person signified by the letter that the experimenter had drawn from the envelope) to the remaining people that participants had listed (i.e., the referent entity). Specifically, participants were instructed to "*Consider the person that the experimenter randomly selected from the envelope. With this person in mind, please answer the following questions to the best of your knowledge. The questions request that you compare this randomly selected person to the other people on the list.*" Participants then made comparative ratings for seven desirable traits, randomly ordered. Four of these traits (*generous, fair, polite,* and *friendly*) were taken from Klar (2002); three additional traits were selected by the authors (*considerate, attractive,* and *bright*). Participants made all the comparative ratings on 9-point scales with labeled anchors. For example, for the trait *friendly* the bottom anchor (1) was labeled *much less friendly than the other people on the list*, the middle anchor (5) was labeled *about equally friendly as other people on the list*, and the top anchor (9) was labeled *much more friendly than the other people on the list*.

Next, participants provided absolute ratings for the target entity (person signified by the letter that the experimenter had drawn from the envelope) for all seven traits. They were instructed to "*Consider the person that the experimenter randomly selected from the envelope. With this person in mind, please answer the following questions to the best of your knowledge.*" Note that the participant was the target in the 'self-as-target' condition. The ratings were again made on 9-point scales with labeled anchors. For example, for the trait *friendly* the bottom anchor (1) was labeled *not friendly at all*, and the top anchor (9) was labeled *very friendly*.

Next, participants made absolute ratings for the referent entity (all the people on the list) on all seven traits.[2] They were instructed to "*Consider the entire group of people that you listed. With this entire group in mind, please answer the following questions to the best of your knowledge.*" Note that the participants themselves were part of this group in the *self-in-group* condition. Ratings were again made on 9-point scales, with the same anchors as scales for absolute ratings of the target.[3] Finally, participants completed several individual difference variables, and were then debriefed and dismissed.

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[2] In studies on comparative biases instructions for absolute judgments of the reference group often vary. Although we requested judgments of the "entire group of people you have listed", other researchers have asked for judgments of the group's average. Previous research suggests these differences to be mostly inconsequential (e.g., Klar, 2002).

[3] The order of comparative and absolute ratings were not counterbalanced in these experiments. Previous research employing this general paradigm have found no order effects on either absolute or comparative judgments (Chambers & Suls, 2007; Giladi & Klar, 2002).

Results

Preliminary analyses were conducted with each of the seven trait ratings. Because the results were similar across traits, the comparative and target/referent absolute ratings were aggregated across the traits (internal consistencies for all three composites exceeded .80). The means and standard deviations for the aggregated comparative ratings, absolute ratings of targets and referents, and the difference between the absolute ratings are displayed in Table 1, separately for each condition.

Above-average effects within conditions

One-sample *t*-tests were conducted to ascertain whether the AAE was present in each condition by contrasting the mean comparative rating to the scale mid-point (5, "*equally*"). As predicted, the above-average bias was present in both the *no-self* ($M = 5.92$, $t(25) = 3.74$, $p < .01$) and *self-as-target* ($M = 6.24$, $t(33) = 7.67$, $p < .01$) conditions. That is, the randomly selected acquaintance from the participants' list was rated more positively than the group of acquaintances. The self was also rated more positively than the group of acquaintances.

The critical question concerns judgments when the self was part of the referent group and its inclusion could potentially reduce or reverse the favoritism for the target via egocentrism. As in Experiment 1, the peer target also was rated more favorably than the group ($M = 5.75$, $t(30) = 4.33$, $p < .01$) in the *self-in-group* condition (see Table 1). Egocentrism did not appear to "trump" group diffuseness and/or focalism.

Difference scores between participants' absolute ratings of the target and absolute ratings of the referent (see last column of Table 1) were also calculated to examine for differences in absolute ratings between targets and referents. For the *no-self* and *self-as-target* conditions, comparisons derived via this method exhibited patterns similar to those for the direct comparative ratings; $M = .30$, $t(25) = 1.52$, $p = .14$, and $M = .29$, $t(33) = 2.01$, $p = .05$, respectively. Whether the target was the self or a randomly selected acquaintance, the absolute trait ratings were marginally higher than those for the referent group. However, the absolute ratings were completely reversed in the *self-in-group* condition, $M = -.42$, $t(30) = -1.89$, $p < .05$, one-tailed, with the referent ratings more positive than those for the target. Thus, although there was favoritism for the group including the self in absolute terms, this did not translate into favoritism for the group in *direct* comparisons.

Magnitude of AAE across conditions

An overall ANOVA contrasting the direct comparison ratings among the three conditions was non-significant, $F(2, 88) = 1.83$, *ns*. This seems consistent with the above finding of substantial AAE's in all three conditions. The AAE also was not of significantly greater magnitude in

Table 1
Comparative and absolute ratings as a function of condition in Experiment 2 ($N = 91$)

	Comparative rating	Target rating (individual)	Referent rating (group)	Difference
No-self ($N = 26$)	5.92** (1.26)	6.43 (1.30)	6.13 (1.18)	.30 (1.02)
Self-as-target ($N = 34$)	6.24** (.95)	6.77 (.87)	6.48 (1.02)	.29* (.84)
Self-in-group ($N = 31$)	5.75** (.97)	6.19 (1.06)	6.61 (.84)	−.42* (1.23)

Note. Standard deviations appear in parentheses. The last column displays the difference between mean target (second column) and mean referent (third column) ratings. Significance levels reflect whether significant bias was observed in participants' comparative ratings (first column) or in the difference between their absolute ratings (last column).

  * $p < .05$ one-tailed.
  ** $p < .01$.

Table 2
Standardized regression weights of target and referent absolute judgments predicting comparative ratings within conditions of Experiment 2 ($N = 91$)

	Target (individual)	Referent (group)	Target–referent correlation
No-self ($N = 26$)	1.14**	−.47**	.66**
Self-as-target ($N = 34$)	.81**	−.39*	.62**
Self-in-group ($N = 31$)	.71**	−.25+	.17

  + $p < .10$.
  * $p < .05$.
  ** $p < .001$.

the *self-as-target* condition relative to the *no-self* condition, although there was a trend in that direction.[4]

Differential weighting

A series of regressions were conducted to directly examine whether there was a differential contribution of target and referent information to the direct comparison ratings. For each experimental condition, the aggregate of comparative ratings were regressed on aggregates of absolute ratings of the targets and referents. Following Klar (2002) and Kruger (1999), if target ratings predicted comparison ratings better than group ratings, this is interpreted as evidence of differential weighting. Regression analyses indicated that the target contributed greater weight than the referent group, regardless of whether the self was involved (see Table 2). Even with the self as part of the referent group, the absolute rating of the peer target was a superior predictor of comparative judgments.

Discussion

Consistent with prior research, robust AAEs were observed both when the self was compared directly to a group of peers and when a single peer was compared directly to a group of peers. The magnitude of the AAE was approximately the same whether the self or an acquaintance served as the comparison target (although there was a trend favoring the self that suggests a modest contribution of egocentrism).

Favoritism for the target was evident even when a single peer was compared directly to a group that included the self. However, the group including the self was evaluated more positively on an absolute basis. The regression results are consistent with the idea that difficulties with appropriately weighting the group in a direct comparison were responsible: absolute ratings of the target seemed to contribute much more to the comparative rating than did the group, even thought the latter was perceived more favorably in isolation.

Although egocentric valuation seems to affect how groups involving the self are evaluated on an absolute basis, egocentric weighting does not extend to groups that contain the self in direct comparison. Thus, egocentrism appeared not to be potent enough to override the tendency to give greater weight to information about the focal and single target peer. This could be a function of focalism, group diffuseness, or their combined influence. The fact that the group including the self received higher absolute ratings, but no advantage in direct comparison, highlights the difference between direct and indirect comparisons.

Experiment 3

Experiments 1 and 2 found a robust AAE for a target even when egocentrism was irrelevant (*no-self* condition) or could have acted as a competing influence (*self-in-group* condition). The results imply that egocentric weighting plays a lesser role in the AAE when focalism and the influence of group diffuseness are both operative.

In Experiment 3, we tested whether reducing the size of the referent group (i.e., decreasing group diffuseness) would make it easier to form an impression and utilize information about the group, thereby increasing the weight given

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[4] Difference scores derived via the indirect comparison method differed significantly between conditions, $F(2, 88) = 4.82$, $p < .01$. Post hoc tests showed that absolute ratings of the referent group were more positive than those for the target in the *self-in-group* condition ($M = −.42$) while ratings of the target were more positive in the *no-self* condition ($M = .30$), $t(55) = −2.40$, $p < .05$. This pattern probably results from the more positive absolute ratings given to the referent group in the *self-in-group* condition ($M = 6.61$) than in the *no-self* condition ($M = 6.13$), $t(55) = −1.80$, $p < .05$, one-tailed. Absolute ratings of the target did not differ across conditions, $F(2, 88) = 2.42$, *ns*.

to the group in direct comparison. In Experiment 2, the self was one of six people that participants generated. Although smaller than the broad social categories, such as "all college students of your age and sex" used in prior studies, the mental calculation required to think about six persons (including oneself) as a collective entity might be cognitively challenging and thereby reduce the impact of egocentrism (see Chambers & Windschitl, 2004). In Experiment 3, the peer group consisted of only three persons. Presumably, it is easier to form an impression and consider a heterogeneous collective of three (including the self) than six, and accordingly, the influence of egocentrism might increase. This experiment also served as a replication of the *no-self* and *self-as-target* conditions.

An unresolved issue from Experiments 1 and 2 is whether participants truly believed that the single peer (or the self) was randomly selected. Although we took steps to ensure that participants believed the target selection procedure was random, this belief was not assessed in prior studies. If participants thought the target was purposely selected, that might lead them to give it more attention. In Experiment 3, participants were probed for suspicion about the selection procedure at the conclusion of the study. A final concern was that the acquaintances that subjects listed in the previous experiments might have been close friends with whom the subjects felt strong connections and treated like themselves when they served as comparison targets. To reduce this potential confound, participants were asked to list acquaintances that they did not know well.

Method

Overview

The materials and procedures of Experiment 3 were largely the same as those in Experiment 2, with the exception that the overall group size was reduced to three people, and participants were explicitly instructed to list people they did not know well.

Participants and design

Fifty-five undergraduate students enrolled in an introductory psychology course at a large Midwestern university served as participants, for which they received credit toward their course requirement. Participants came into the laboratory in small groups ranging from one to eight. All participants within a given session were randomly assigned to the *no-self*, *self-as-target*, or *self-in-group* condition of a between-subjects design.

Materials and procedure

The procedure and measures were almost identical to those in Experiment 2, except that participants listed only three acquaintances (or two acquaintances and themselves in *self-as-target* and *self-in-group* conditions). Additionally, when generating acquaintances participants were reminded that "*These people should not be friends, but rather casual acquaintances you don't know much about.*" Participants were also probed for suspicion about the selection of comparison target with an open-ended response to the following question: "*Initially we asked you about a specific person. How was it decided that you were asked about that person, rather than one of the other people you listed?*" Finally, participants were debriefed and dismissed.

Results

Preliminary analyses of each trait indicated comparable results so the ratings were aggregated across traits (all α's > .77). The means and standard deviations for comparative ratings, absolute ratings of targets and referents, and the differences between the absolute ratings are displayed in Table 3, separately for each condition. Inspection of open-ended responses about the target selection procedure revealed that only one participant was suspicious (26% of participants used the word "random" to describe the selection procedure) and was removed from the analyses.

AAE within conditions

One-sample *t*-tests were computed to test for the AAE in each condition. As before, the AAE was found in both the *no-self* ($M = 5.71$, $t(17) = 2.59$, $p < .05$) and *self-as-target* conditions ($M = 6.11$, $t(18) = 6.57$, $p < .01$). In addition and consistent with the previous experiments, a randomly selected acquaintance from the participant's list of acquaintances was also rated more favorably than the group including the self, $M = 5.80$, $t(16) = 3.43$, $p < .01$, even when the group consisted only of the self and two other acquaintances.

Table 3
Comparative and absolute ratings as a function of condition in Experiment 3 ($N = 54$)

	Comparative rating	Target rating (individual)	Referent rating (group)	Difference
No-self ($N = 18$)	5.71** (1.17)	6.08 (1.11)	6.10 (.97)	−.02 (1.63)
Self-as-target ($N = 19$)	6.11** (.73)	6.71 (.69)	6.31 (.91)	.40* (.93)
Self-in-group ($N = 17$)	5.80** (.96)	6.20 (1.27)	6.74 (.71)	−.55* (1.15)

Note. Standard deviations appear in parentheses. The last column displays the difference between mean target (second column) and mean referent (third column) ratings. Significance levels reflect whether significant bias was observed in participants' comparative ratings (first column) or in the difference between their absolute ratings (last column).

  * $p < .05$ one-tailed.
  ** $p < .01$.

Table 4
Standardized regression weights of target and referent absolute judgments predicting comparative ratings within conditions of Experiment 3 ($N = 54$)

	Target (individual)	Referent (group)	Target–referent correlation
No-self ($N = 18$)	.86[**]	−.16	−.21
Self-as-target ($N = 19$)	.54[*]	−.42[+]	.34
Self-in-group ($N = 17$)	.82[**]	−.22	.44[+]

[+] $p < .10$.
[*] $p < .05$.
[**] $p < .001$.

The difference between absolute ratings of the target minus those of the referent (see last column of Table 3) was also computed. Although there was no evidence of preference for the target entity in the *no-self* condition, $M = −.02$, $t(17) < 1$, the absolute ratings of the self were higher than those of the group in the *self-as-target* condition, $M = .40$, $t(18) = 1.87$, $p < .05$, one-tailed. Again, however, the indirect index of the AAE was completely reversed in the *self-in-group* condition, $M = −.55$, $t(16) = −1.96$, $p < .05$, one-tailed, with the group rated more positively than the target on absolute scales. In sum, the group was evaluated more positively on an absolute basis when it included the self, but this was not paralleled in the direct comparison.

Magnitude of AAE across conditions

A single-factor ANOVA contrasting direct comparative ratings among conditions was non-significant, $F(2, 51) < 1$. As in previous studies, the AAE for the target in the *self-in-group* condition was not smaller than the other two conditions. The AAE in the *self-as-target* condition did not differ significantly from the *no-self* condition (although there was a trend favoring the self-as-target).[5]

Differential weighting

AAE ratings were again regressed on the 'absolute' evaluations of the target peer and the referent group, separately for each experimental condition (see Table 4). The pattern of regression weights previously observed was replicated; the absolute rating of the target was the best predictor of AAE ratings in all three conditions (although the difference was atypically small in the *self-as-target* condition).

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[5] For the indirect index, there was a marginally significant effect, $F(2, 51) = 2.5$, $p = .09$. The *self-as-target* ($M = .40$) and *self-in-group* ($M = −.55$) conditions were significantly different, $t(34) = 2.72$, $p < .05$. As in Experiment 2, the referent group was rated more positively in the *self-in-group* condition ($M = 6.74$) than in the *no-self* ($M = 6.10$) condition, $t(33) = −2.23$, $p < .05$.

Discussion

The results of Experiment 3 largely replicated those of Experiments 1 and 2. Reducing referent group size from six to three people did not affect direct comparative judgments, as the AAE favoring the individual peer target was still manifested in the *self-in-group* condition. Moreover, the comparative judgments were not affected by instructing participants to generate distant acquaintances. Also, as in Experiments 1 and 2, there was no significant difference in the AAE between *no-self* and *self-as-target* conditions. Although the peer group including the self was again rated more positively on an absolute basis, favoritism toward for target peer was still evident when the target and referent group were directly compared.

Experiment 4

In three experiments, there was no evidence of egocentric weighting producing bias in favor of the groups including the self when they served as comparison referents. Surprisingly, egocentric weighting was not even sufficient to reduce the typically found bias in favor of the target peer. This was true regardless of whether the self was included along with two, three, or five other persons. The results are consistent with the idea that focalism and diffuseness of the reference group acting alone or in concert lead to overweighting of the target peer; egocentric weighting does not appear to have sufficient strength to contradict these other processes. The question is whether both focalism or group diffuseness are necessary or one is sufficient.

Focalism or diffuseness?

If focalism is the critical factor, then a *target* entity should be judged more favorably (and receive greater weight in the comparison) than a referent even if the latter is a single entity. This would explain why the target peer is judged more favorably in direct comparison even with a group including the self. However, if diffuseness is critical, a single entity should be judged more favorably (and receive greater weight in the comparison) than a group entity, even if the group is the target of the comparative judgment. This might be why a target peer (i.e., a single entity) is judged more favorably than a group including the self.

To differentiate between these two alternatives, the target and referent were reversed in Experiment 4. Participants were asked to compare a group of peers that they previously generated (including the self in the *self-in-group* condition), to a single randomly selected peer (*How friendly is the group of acquaintances compared to X? [i.e., the randomly selected person from the list]*). In this scenario, focalism and group diffuseness should pull judgments in opposite directions. Whereas in Experiments 1–3, both focalism and diffuseness presumably facilitated favoritism for a target peer, in Experiment 4 only focalism can

increase favoritism for a target that is a group. The diffuse or aggregate nature of a target peer group should presumably temper favoritism because of the difficulty with utilization of diffuse entities (relative to singular entities) in direct comparisons.

In addition, with the target and the referent group reversed, egocentrism should *increase* favoritism toward the target peer group that includes the self. Most critically, if focalism is the dominant factor, favoritism for the target, in this case the group, should be exhibited. Alternatively, if group diffuseness is the primary factor, no bias toward the target group or a positive bias in favor of the single peer referent should be exhibited (as a result of increased weighting of information about the single entity).

Method

Overview

The materials and procedures of this experiment mirrored those of Experiment 2 with two notable exceptions. First, only *no-self* and *self-in-group* conditions were employed. Second, the direction of comparisons was reversed such that the entire group of acquaintances served as the comparison *target*, while the single acquaintance randomly selected by the experimenter served as the comparison *referent*.

Participants and design

Fifty-two undergraduate students enrolled in an introductory psychology course at a large Midwestern university served as participants, for which they received credit toward their course requirement. Participants came into the laboratory in small groups ranging from one to twelve. All participants within a given session were randomly assigned to either the *no-self* or *self-in-group* condition of a between-subjects design.

Materials and procedure

The procedure was identical to one used in Experiment 2, but only four traits adapted from Klar (2002) were used (*generous*, *fair*, *polite*, and *friendly*). Also, the direction of the direct comparative judgments was reversed such that the randomly selected acquaintance always served as the comparison referent, whereas the entire group of acquaintances (including the self in *self-in-group* condition) served as the comparison target.

The procedure for generating acquaintances and selecting a target person was the same as in Experiment 3. Before making the comparative ratings, however, participants were instructed to "*Consider the entire group of acquaintances you listed and the person that the experimenter randomly selected from the envelope. With them in mind, please answer the following questions to the best of your knowledge. The questions request that you compare the group of acquaintances to the randomly selected person.*" Participants then made comparative ratings on 9-point scales with labeled anchors. For example, for the trait

friendly the bottom anchor (1) was labeled *much less friendly than the randomly selected person*, the middle anchor (5) was labeled *about equally friendly as the randomly selected person*, and the top anchor (9) was labeled *much more friendly than the randomly selected person*. Participants then made absolute ratings of the randomly selected person and the entire group exactly as in Experiments 2–3. Finally, participants were probed for suspicion about the target selection procedure as in Experiment 3, and were then debriefed and dismissed.

Results

Preliminary analyses for each trait indicated similar patterns, thus aggregates for the comparative and target/referent absolute ratings were computed across the four traits (all α's > .74). The means and standard deviations for comparative ratings, absolute ratings of targets and referents, and the difference between the absolute ratings are displayed in Table 5, separately for each condition. Inspection of the open-ended responses about the target selection procedure revealed no suspicions. In fact, 52% of participants spontaneously used the word *random* to describe the selection procedure.

AAE within conditions

As before, *t*-tests were computed to assess comparative bias within each condition. Recall that the comparison target was the entire group of acquaintances listed (including the self in the *self-in-group* condition); the comparison referent was a randomly selected individual. These tests involved the contrast of the mean of the comparative ratings to the scale mid-point (5, "*equal*"). There was no evidence for comparative bias either in the *no-self* condition, $M = 5.12$, $t(26) < 1$, or the *self-in-group* condition, $M = 4.96$, $t(24) < 1$. Directly comparing a group (with or without the self) to a single acquaintance yielded no comparative bias in either direction.

Differences between absolute evaluations were also computed. In parallel with the direct comparative ratings, there was no evidence of favoritism for the target or the referent; *no-self* ($M = .18$, $t(26) < 1$) and *self-in-group* ($M = -.24$, $t(24) < 1$) conditions.

Magnitude of comparative biases across conditions

The magnitude of the AAE did not differ between conditions, $t(50) < 1$, nor did the indirect indices, derived from the absolute ratings, $t(50) < 1$, see Table 5.[6]

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[6] As in previous studies, the absolute ratings of the group were more positive in the *self-in-group* condition than in the *no-self* condition, $t(50) = -2.14$, $p < .05$, see Table 6. The absolute ratings of the referents (i.e., single persons) were also more positive in the *self-in-group* condition than in the *no-self* condition, $t(50) = -2.49$, $p < .05$, see the third column of Table 6. Given this last finding was not replicated in the other two experiments it will not be discussed further.

Table 5
Comparative and absolute ratings as a function of condition in Experiment 4 (*N* = 52)

	Comparative rating	Target rating (group)	Referent rating (individual)	Difference
No-self (*N* = 27)	5.12 (1.04)	6.18 (1.16)	6.01 (1.56)	.18 (1.56)
Self-in-group (*N* = 25)	4.96 (1.20)	6.90 (1.22)	7.13 (1.68)	−.24 (1.96)

Note. Standard deviations appear in parentheses. The last column displays the difference between mean target group (second column) and mean referent single entity (third column) ratings.

Differential weighting

We again regressed the comparative judgments on the 'absolute' evaluations of the target group and the referent peer, separately for each experimental condition (see Table 6). In contrast to Experiments 2 and 3, the regression weights in both conditions showed a different pattern. The AAE was more strongly related to the absolute ratings of the referents (i.e., an individual) than to the absolute ratings of the target (i.e., a group). Apparently focalism, which should produce bias in favor of the group when it was the target, did not "trump" the effect of group diffuseness.

Discussion

In contrast to the previous studies, no evidence for the AAE was found in Experiment 4. Since a group served as the comparison target, rather than as the referent, the implication is that group diffuseness is a critical factor. A group, even one including the self, was not favored when it served as the comparison target. This is important because both focalism and egocentrism might have been expected to produce favoritism for the peer group (the *self-in-group* condition) in direct comparisons. In supplementary analyses, comparative ratings were much more strongly related to absolute ratings of the single peer who served as the referent than to the absolute ratings of the target peer group. This is a reversal of the usual finding in which absolute ratings of the comparison target have the strongest associations with the AAE.

As in the prior studies, the findings do not provide consistent support for the "strong" version of the egocentrism account. However, the inclusion of the self in the peer group was associated with more favorable absolute evaluations of the group than when the self was not included.

Table 6
Standardized regression weights of target and referent absolute judgments predicting comparative ratings within conditions of Experiment 4 (*N* = 52)

	Target (group)	Referent (individual)	Target–referent correlation
No-self (*N* = 27)	.51[*]	−.80[**]	.37[+]
Self-in-group (*N* = 25)	.46[*]	−.71[**]	.11

[+] *p* < .10.
[*] *p* < .01.
[**] *p* < .001.

Taken together, the results indicate that egocentrism may contribute to favorable (absolute) evaluations of peer groups which include the self, but this influence is not powerful enough to offset the apparent judgmental difficulties people have with making direct comparisons involving diffuse groups either as targets or referents.

General discussion

Four experiments examined the relative effects of egocentrism, focalism, and group diffuseness on comparative judgment. Specifically, we reasoned that if egocentric weighting is the predominant factor then it should eliminate or even reverse the AAE despite the opposing effects of focalism and group diffuseness when self was included in the referent group. Egocentrism and self-enhancement motivation are frequently evoked as explanations for the AAE, but the present findings suggest caution in attributing this bias mainly to egocentrism. Direct comparisons favored another individual more than the group even when the self was included in the referent group (Experiments 1–3). Although inclusion of self should attenuate the bias (via egocentrism) when such a group serves as the comparison referent (Experiments 1–3), or facilitate the bias when such a group is the comparison target (Experiment 4), there was no support for these predictions. The results of Experiment 4 also suggest that the persistence of the AAE, even with modifications of the usual procedure, is primarily a function of the diffuse nature of the peer group, rather than focalism. This is inferred from the absence of favoritism toward groups with the self when they served either as targets or referents. In addition, groups that included the self (versus groups excluding the self) contributed no greater weight to direct comparisons in the regression analyses.

In contrast, inclusion of the self in the group *did* influence how groups were rated in absolute terms. Results consistently showed a tendency for groups that included the self to be rated more positively than groups without the self (although this pattern was not statistically significant in Experiment 2). As a consequence, the AAE measured with the indirect index showed a reversal of the usual effect: a group that included the self was rated more favorably than the single target. This is consistent with a large body of findings showing favoritism toward in-groups (see Abrams & Hogg, 1990), but this did not translate into favoritism toward the group when a direct comparison was made. Taken together, the results provide evidence for the utility

of distinguishing between egocentric valuation and egocentric weighting.

Implications for understanding the AAE and other biases

The present findings have direct relevance concerning the relative strength of egocentrism, focalism, and group diffuseness. From a theoretical perspective, when a single peer is compared to a group including the self, both focalism and diffuseness of the peer group should facilitate a comparative bias in favor of the randomly selected peer; but egocentrism should work in the opposite direction (by drawing attention to the referent group and potentially increasing its weight in the comparison). Egocentric weighting, surprisingly, failed to exert sufficient influence to affect comparative judgments even when the group was personally meaningful (Experiment 1), very small (Experiment 3) or served as the comparison target (Experiment 4).

The apparent inability of egocentric weighting to overcome the effects of focalism and group diffuseness suggests more caution in attributing the AAE solely to egocentrism (cf. Kruger, 1999). As mentioned earlier, when self is compared against a generalized group, both focalism and diffuseness of the group can contribute to comparative biases (e.g., Eiser et al., 2001; Klar et al., 1996; see also Chambers & Windschitl, 2004). Moreover, findings from Experiments 1–3 at least suggest that egocentrism adds little over and above these influences (given no significant differences between comparative bias in the *no-self* and *self-as-target* conditions). When comparisons involve only single individuals (as in many competitions), however, egocentrism might play more of a role (see Hoorens, 1995; Windschitl et al., 2003). Understanding how situational factors influence the relative contributions of different sources of comparative bias (i.e., egocentrism, focalism, and group diffuseness) should be a high research priority.

The results also have implications for the diffuse reference group explanation which has seemed to have the weakest support in the literature. This is because, in some experiments, AAEs have even been found when a single target is compared to another (e.g., Moore & Kim, 2003; Suls et al., 2002; Windschitl et al., 2003). This "solo comparison bias" suggests that a diffuse referent group is not a *necessary* condition for comparative bias. However, the present results indicate that diffuseness does contribute to the effect (see also Suls et al., submitted for publication). Across four studies, egocentrism did not boost direct comparative evaluations of the referent group with the self included because, apparently, the self is "lost sight of" as part of the collective.

These findings demonstrate the importance of the way comparative bias is operationalized. There was no effect of including the self in the referent (cf. Otten & Van der Pligt, 1996) in the direct comparisons, but the bias was completely reversed with the indirect method. In their recent review, Chambers and Windschitl (2004) described how and why many non-motivated (cognitive) factors may influence comparative judgments in the direct, but not in the indirect method. Critically, focalism is likely to be a substantial source of bias in the direct method (e.g., Suls et al., submitted for publication), but is irrelevant for biases computed through the indirect method as the comparison is operationalized as the difference between absolute ratings (which by definition weighs both ratings equally). Similarly, whereas egocentric valuation can contribute to bias computed both through direct and indirect methods, egocentric weighting can only operate when direct comparisons are made.

In a direct comparison, there also may be difficulty giving appropriate weight to a diffuse referent group, but indirect comparisons should not be affected. The cognitive processes underlying absolute evaluations of groups (especially those low in cohesiveness) are different from those underlying absolute evaluations of individuals (see McConnell et al., 1994; McConnell et al., 1997). Processing differences might not be apparent when comparisons are derived *indirectly* (e.g., subtracting two ratings from each other does not adjust for the confidence associated with each rating). In direct comparisons, however, people may be more influenced by the evaluation of an entity held more confidently (cf. Kruger et al., 2008), in this case the single entity. Of course, the composition of the peer group (in this case whether it includes the self) might influence absolute evaluations of that group and consequently be associated with favoritism in terms of the indirect index of the AAE.

Finally, as indicated earlier, the findings contrast with the inter-group processes literature which finds favoritism toward in-groups on a variety of self-report and behavioral measures (e.g., Abrams & Hogg, 1990). In the current series of studies, a positive evaluation of the in-group was not sufficient to ameliorate comparative bias in favor of the peer, regardless of whether the peer shared a personally meaningful attribute with the respondent (Experiment 1), or was a more distal acquaintance (Experiment 3). This further suggests that the phenomena observed on "absolute" judgments (i.e., those that do not involve explicit comparisons) might not necessarily translate onto direct comparative judgments; in fact, our data suggest they might even reverse. Given that comparative judgments often have practical consequences (e.g., Johnson, 2004; Malmendier & Tate, 2005), it is important to understand how direct comparisons may have different behavioral implications and consequences than other types of judgments.

Conclusions

The present research explored the boundary conditions of egocentric influences in the AAE, particularly egocentric weighting. Although groups were evaluated more favorably on an absolute basis when the self was included, the peer target was still rated more favorably in direct comparisons. We demonstrated that when egocentrism, focalism, and group diffuseness collide the results can lead direct

and indirect comparisons to suggest divergent conclusions. The findings also indicate that self-enhancement and egocentrism in the AAE social comparisons do not have the ubiquitous influence often attributed to them (Alicke & Govorun, 2005; Kruger, 1999). In sum, the self does not always have privileged status in direct comparison. This suggests there is humility, but it appears to be cognitively-mediated.

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