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Understanding the Better Than Average Effect: Motives (Still) Matter

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Abstract

People evaluate themselves more positively than they evaluate most other people. Although this better than average (BTA) effect was originally thought to represent a motivated bias, several cognitively oriented theorists have questioned whether this is the case. In support of a motivational model, the author reports five studies showing that the BTA effect is stronger for important attributes than unimportant ones (all five studies) and that once attribute importance is taken into account, the effect occurs when self-evaluations are compared with a single peer (Study 2) and when self is specified as the referent rather than the target (Study 4). Finally, Study 5 shows that the BTA effect increases in magnitude after participants experience a threat to their feelings of self-worth. Collectively, these findings establish that motivational processes underlie the BTA effect.

Keywords

self-evaluations, self-enhancement, better than average effect, motivation

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> I'm just average, common, too, I'm just like him, the same as you.
> I'm everybody's brother and son, I ain't different than anyone.
> Ain't no use a-talk to me, it's just the same as talking to you.
>
> —Bob Dylan, "I Shall Be Free #10," 1964

Though he is widely considered the voice of his generation, Bob Dylan's self-description is strikingly at odds with most people's self-view. Instead of viewing themselves as average and common, most people think of themselves as exceptional and unique, especially in comparison with their peers. Among other things, most people believe they are more (a) virtuous, honorable, and moral than others; (b) capable, competent, and talented than others; and (c) compassionate, understanding, and sympathetic than others (for reviews, see Brown, 2007; Dunning, Heath, & Suls, 2004). People even believe they are more human than others (Haslam, Bain, Douge, Lee, & Bastian, 2005), though less biased and prone to error (Pronin, Gilovich, & Ross, 2004).

Since first being identified more than 25 years ago (Alicke, 1985; Brown, 1986), this "better than average" (BTA) effect has been the subject of a great deal of research and a good deal of debate. As is often the case, subsequent research has focused on two, related, tasks: (a) identifying variables that moderate the BTA effect and (b) generating explanations for why it occurs. With respect to the first issue, research has shown that the BTA effect is reduced when the attributes being compared are uncontrollable or unambiguous rather than controllable or unambiguous (Alicke, 1985; Dunning, Meyerowitz, & Holzberg, 1989), when difficult rather than easy skills are being assessed (Kruger, 1999), when comparisons are made directly rather than indirectly (Otten & van der Pligt, 1996), when people believe they must justify their claims to an audience (Sedikides, Herbst, Hardin, & Dardis, 2002), and when a self–other comparison involves a specific individual rather than an aggregate represented by the term *most other people* (Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Klar & Giladi, 1997).

With respect to theoretical explanations, the BTA effect was originally thought to be motivated by self-enhancement needs (Alicke, 1985; Brown, 1986). According to this account, people appraise themselves more positively than they appraise others because it makes them feel good about themselves to believe they are above average. A number of other researchers have offered alternative accounts. Though generally conceding that self-enhancement needs play some role in the genesis of the BTA effect, these theorists have described a variety of cognitive mechanisms that also

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produce the effect (Chambers & Windschitl, 2004; Giladi & Klar, 2002; Klar & Giladi, 1997; Krizan & Suls, 2008; Krizan & Windschitl, 2007; Kruger, 1999; Pronin et al., 2004; Windschitl, Conybeare, & Krizan, 2008). For example, it has been suggested that informational differences (i.e., a tendency to know more about oneself than others), focalism (i.e., a tendency to focus on oneself when making comparative judgments), naïve realism (i.e., a tendency to assume one's view of the world is a passive reflection of the world as it actually is), and egocentrism (i.e., a tendency to give undue weight to one's own perspective) produce a BTA effect in the absence of any motivated need.

Researchers studying the cognitive underpinnings of the BTA effect have been remarkably inventive, sophisticated, and prolific as they have illuminated our understanding of the specific processes that shape comparative judgments. At the same time, their success makes it easy for readers to lose sight of the role motivational forces play in producing the BTA effect. Although this impression would be consistent with the general tendency on the part of psychologists to favor cognitive explanations over motivational ones (Brown & Marshall, 1999), I think it paints a particularly distorted picture of the BTA effect. To redress this imbalance, I conducted five studies designed to show that, apart from whatever cognitive processes are involved, the BTA effect is motivated by a desire to preserve, enhance, or restore feelings of self-worth.

Comparing the Two Models

> Ego-involvement, or its absence, make a critical difference in human behavior. When a person reacts in a neutral, impersonal, routine atmosphere, his behavior is one thing. But when he is behaving personally, . . . he behaves quite differently. In the first condition his ego is not engaged; in the second condition it is. (Allport, 1943, p. 459)

Cognitive models assume that the BTA effect is but one kind of comparative judgmental task, shaped by processes that are no different than those involved when people compare songs, foods, vacation spots, or a great variety of other products, experiences, or individuals (Giladi & Klar, 2002; Suls et al., 2010). There are good reasons to wonder whether this is so. As Gordon Allport noted nearly 70 years ago, people who are emotionally invested in an outcome behave very differently than people who are objective or dispassionate. Because motivational forces manifest themselves only under limited conditions (e.g., when people care about an outcome), any attempt to assess the relative strength of cognitive and motivational processes must ensure that people are sufficiently motivated to behave in ways that promote feelings of self-worth.

With respect to the BTA effect, this boundary condition mandates that the attributes being assessed must be of sufficient importance to instigate motivational processes. After all, if people do not care much about possessing a quality, believing they have it will not make them feel good about themselves; in this case, we shouldn't expect them to be motivated to believe they possess it in unusual abundance. On the other hand, if people care a great deal about a quality, believing they have it will make them feel good about themselves; accordingly, we should find they are inclined to say they possess the quality more than do most other people.

Many (though not all) previous tests of the cognitive model either have failed to take importance into account or have used attributes about which people care very little. To illustrate, consider an article by Moore and Healy (2008). In a test of their cognitive model, they invited college students to participate in a study called *Tons o' Trivia*. Not only does the use of the colloquialism "Tons o" connote a lack of importance, but the use of the word *trivia* denotes it. Perhaps this explains why participants were willing to claim comparatively low ability when they were asked "In what year did Nigeria gain its independence from Great Britain?" and "Laudanum is a form of what drug?"

In sum, previous research on the BTA effect has not carefully considered the importance of importance. Insofar as motivational processes operate only when importance is high, this omission might have led researchers to overestimate the impact of cognitive factors relative to motivational ones.

Study 1: The Importance of Importance

In an initial attempt to illuminate the role importance plays in the BTA effect, I conducted a correlational study and examined the association between attribute importance and the magnitude of the BTA effect. Consistent with a motivational model, I predicted that the BTA effect would be stronger for important attributes than for unimportant ones.

Method

Participants. The participants were 29 University of Washington (UW) undergraduates enrolled in an upper-division psychology course.[1]

Materials and procedure. Participants received a stapled questionnaire with three pages. Instructions at the top of each page directed participants to make a series of judgments regarding 10 traits (described below). One page instructed them to rate each attribute according to how well it "describes you," one page instructed them to indicate how well each attribute describes "most other people," and one page instructed them to indicate "how important it is for a person to possess the attribute." Questionnaire order was counterbalanced across participants, and all judgments

Table 1. Attribute Ratings for Self and Most Other People: Study 1

	Importance	Self	Most other people	Better than average effect (self–most other people)	η_p^2
Honest	4.79	4.24	2.69	1.55***	.64
Kind	4.66	4.34	3.31	1.03***	.49
Responsible	4.55	4.48	3.14	1.34***	.59
Intelligent	4.17	4.14	3.21	0.93***	.38
Competent	4.07	4.14	3.17	0.97***	.44
Secure	3.97	4.03	2.79	1.24***	.52
Conscientious	3.90	3.83	3.00	0.83**	.28
Agreeable	3.83	3.93	3.03	0.90***	.43
Imaginative	3.48	3.76	3.00	0.76**	.30
Outgoing	3.00	3.48	3.41	0.07	.00

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

were made using 5-point Likert-type scales with appropriate endpoints.

Ten traits were selected for study. Five of the traits are commonly considered markers of the five factor model in personality (agreeable, conscientious, imaginative, secure, sociable); the other five traits are qualities of character and skill (competent, honest, intelligent, kind, responsible). I expected that the latter cluster would be judged to be more important than the former and that the BTA effect would therefore be most evident for qualities of character and skill.

Results

Table 1 shows all ratings for all 10 traits, including a column for difference scores reflecting the discrepancy between self-ratings and ratings of most other people (i.e., the BTA effect). The table is sorted in order of descending importance. Overall, the BTA effect was significant for 9 of the 10 traits. More importantly, the magnitude of this bias was related to attribute importance ($r = .88$, $p < .001$). This correlation is all the more remarkable when one considers that none of the traits was judged to be unimportant in an absolute sense (i.e., all ratings are at or above the scale midpoint). Additional analyses showed that importance scores were positively related to self-ratings ($r = .94$) but negatively related to ratings of most other people ($r = –.33$). In short, on average, people believe they possess important traits more than do most other people.

There are several other ways to analyze these data. First, I used mixed modeling, with the BTA effect as the criterion and importance ratings (centered around each participant's mean) as a predictor. The regression coefficient was significant ($b = .44$, $p < .001$), indicating that, within participants, importance was a significant predictor of the BTA effect.

Next, I averaged the five most important traits (competent, honest, intelligent, kind, and responsible) and the five least important traits (agreeable, conscientious, imaginative, outgoing, and secure). I then submitted these means to a 2 (target) × 2 (importance) repeated measures analysis of variance (ANOVA). The ANOVA revealed significant effects of target and importance (both ps $< .001$) and a Target × Importance interaction, $F(1, 28) = 12.59$, $p = .001$, $\eta_p^2 = .31$. Figure 1 shows the nature of the interaction. Consistent with a motivational account, the BTA effect was more pronounced when importance was high, $t(28) = 14.37$, $p < .001$, $\eta_p^2 = .88$, than when importance was low, $t(28) = 9.35$, $p < .001$, $\eta_p^2 = .76$.

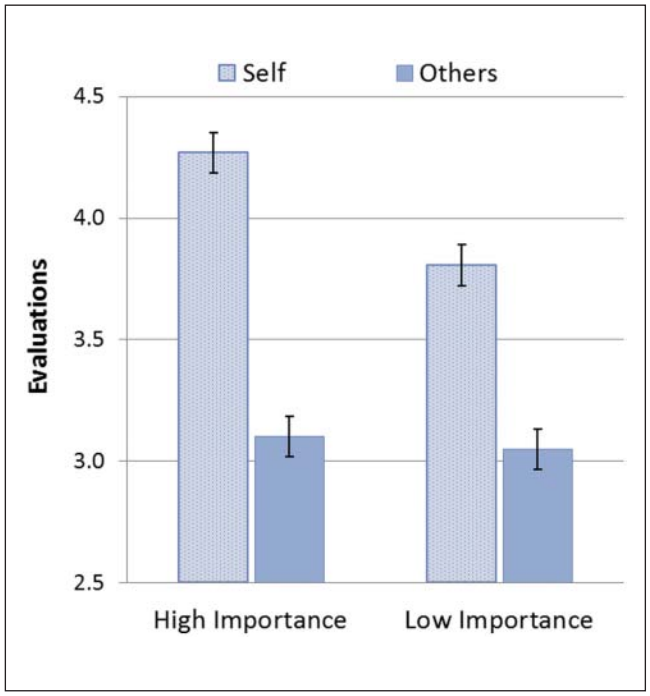

Figure 1. Evaluations of self and most other people as a function of attribute importance: Study 1

Discussion

The results from Study 1 show that importance moderates the BTA effect. The tendency to evaluate oneself more positively than one evaluates most other people was more apparent for important traits than for unimportant ones. These effects at the aggregate level were matched by ones at the personal level. One conclusion to be drawn from these findings is that people view themselves as better than others, especially when they think it is important to be better than others. This interpretation hints at the operation of a motivated bias.

Apart from their implications for the motivated nature of the BTA effect, the results from Study 1 also revealed that personality traits were judged to be less important than qualities of character and competence. This finding is not surprising. Although people's preferences about personality traits vary (e.g., some people value flamboyance, others value elegance), rectitude and kindness are universally prized, personal attributes.

Study 2: Up Close and Personal

In most studies of the BTA effect, participants are asked to compare a single entity (themselves) with an aggregate (most other people). Conceivably, this confounding could explain why people view themselves more positively than they view people in general. In support of this interpretation, previous research has shown that participants tend to rate any given person (or object) as "better than average" (Klar & Giladi, 1997), and the magnitude of the BTA effect is reduced when people compare themselves with a particular person rather than a social aggregate (Alicke et al., 1995).

To my knowledge, previous research has not, however, taken importance into account when assessing whether differences in target breadth (i.e., self vs. aggregate) explain the BTA effect. The findings from Study 1 give reason to believe participants will rate themselves more positively than they rate a single person on important traits. Study 2 was conducted to examine this possibility.

Method

Participants. In exchange for extra credit in an upper-division psychology course, 55 UW undergraduates participated.

Materials and procedure. Participants met in groups of four to discuss theories of personality. Each participant was issued a note card with a letter to identify them during the conversation. The conversation lasted 20 minutes, and each participant was required to speak during the discussion. At the end of the discussion, participants were given two evaluation forms. One of the forms asked them to evaluate themselves, and the other form asked them to evaluate one other group member (chosen at random, with the constraint that everybody was rated by one other group member). Order was counterbalanced, such that one half of the participants evaluated themselves before evaluating one of their fellow students, whereas the other half evaluated themselves after evaluating one of their fellow students. The same 10 traits used in Study 1 were used in Study 2, with the traits split into two groups (important and unimportant) based on the importance ratings made in Study 1.[2]

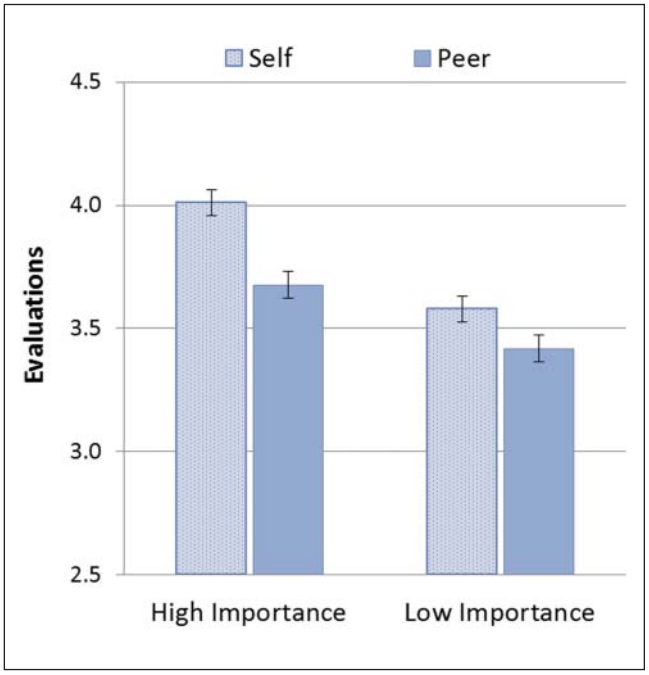

Figure 2. Evaluations of self and one other person as a function of attribute importance: Study 2

Results

After averaging the ratings for the five important traits and the five trait unimportant traits, I submitted the scores to a 2 (target) × 2 (importance) repeated measures ANOVA. A main effect of target indicated that self-evaluations were more positive (M = 3.80) than were evaluations of others (M = 3.55), $F(1, 54) = 16.81$, $p < .001$, $\eta_p^2 = .24$, and a main effect of importance indicated that evaluations were higher for important traits (M = 3.84) than for unimportant traits (M = 3.50), $F(1, 54) = 79.82$, $p < .001$, $\eta_p^2 = .60$. More importantly, these effects were qualified by a Target × Importance interaction, $F(1, 54) = 5.29$, $p = .025$, $\eta_p^2 = .09$. Figure 2 shows the nature of the interaction. As predicted, the BTA effect was stronger when importance was high, $t(54) = 6.23$, $p < .001$, $\eta_p^2 = .42$, than when importance was low, $t(54) = 2.98$, $p < .01$, $\eta_p^2 = .14$.

Discussion

As in Study 1, trait importance moderated the strength of the BTA effect, with participants describing themselves much

more positively than a single peer on important qualities of character and competence. Apparently, when it matters, people have little trouble convincing themselves they are better than the person sitting across the table from them.

Study 3: Manipulating Importance

A critic might argue that I have not convincingly established the importance of importance because I have drawn causal inferences from correlational data. Although this criticism applies to Study 1, it does not apply to Study 2. In Study 2, the importance ratings were made by an independent sample, so the design is akin to pretesting different traits for their importance and then asking a new sample of participants to rate themselves and others on these previously rated traits.

That being said, I agree that stronger inferences could be made by experimentally manipulating importance. Accordingly, I conducted a third study using only the five traits previously judged to be unimportant by participants in Study 1.[3] Unlike the previous two studies, however, I experimentally varied the (alleged) importance of these traits, leading some participants to believe the traits were important and others to believe the traits were unimportant. I then examined how this experimental manipulation affected the BTA effect.

Method

Participants. In exchange for extra credit in various psychology courses, 38 UW undergraduates participated.

Materials and procedure. All participants were given a one-page questionnaire asking them to indicate how well five traits previously judged to be relatively unimportant (agreeable, conscientious, imaginative, outgoing, secure) describe themselves and most other people (1 = *not at all*, 5 = *very*). The 10 judgments (5 for self, 5 for most other people) were presented in a single random order. Two experimental conditions were created. Participants in the high importance condition read, "Listed below are some important and desirable personality traits," whereas those in the low importance condition read "Listed below are some ordinary and common personality traits." The questionnaires were identical in all other respects.

Results

After averaging the traits in each category, I submitted the data to a mixed ANOVA, with importance as a between-subjects variable and target as a repeated measure. The ANOVA produced a main effect of target, $F(1, 36) = 24.41$ $p < .001$, $\eta_p^2 = .40$, and an Importance × Target interaction, $F(1, 36) = 6.76$, $p = .01$, $\eta_p^2 = .16$. Figure 3 displays the nature of the interaction and, as predicted by the motivational model, it is apparent that the BTA effect was more pronounced when the traits were described as being desirable and important, $t(36) = 5.33$, $p < .001$, $\eta_p^2 = .44$, than when they were described as being ordinary and common, $t(36) = 1.65$, $p = .11$, $\eta_p^2 = .07$.

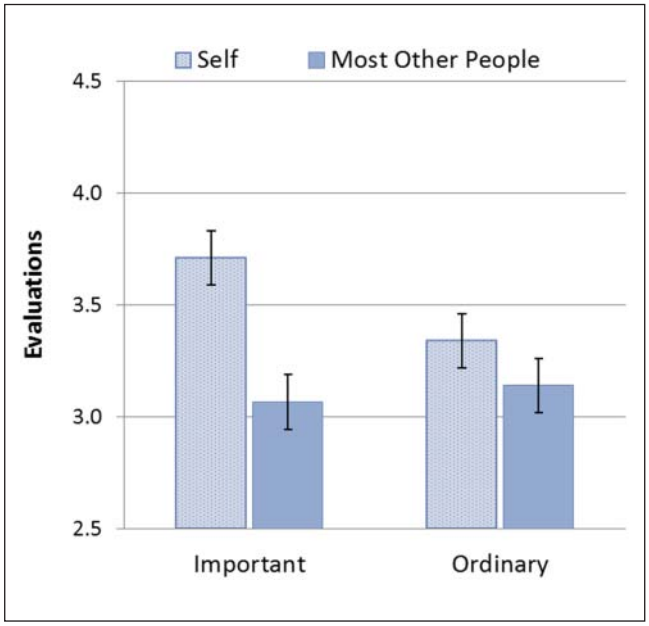

Figure 3. Evaluations of self and most other people as a function of the experimental manipulation of attribute importance: Study 3

Discussion

By experimentally manipulating attribute importance, the results from Study 3 provide compelling evidence that motivational processes shape the BTA effect. The power of the effect is worth noting: Simply switching the description from "ordinary and common" to "important and desirable" led participants to overwhelmingly describe themselves in more positive terms than they described most other people. The simplest explanation for this finding is that people believe they are better than others when they care about being better than others.

Study 4: Reversal of Fortune

To this point I have calculated a BTA effect by first asking participants to make separate evaluations of themselves and others and then observing the disparity between these two judgments. This "indirect" approach is consistent with the way the BTA effect was originally assessed (Alicke, 1985; Brown, 1986). Readers familiar with this research literature might be aware, however, that cognitive approaches ordinarily (though not always) adopt a direct comparison approach, asking participants to explicitly compare themselves with most other people using a single rating scale (e.g., Krizan & Suls, 2008; Otten & van der Pligt, 1996; for an exception, see Klar & Giladi, 1997). For example, instead of asking participants to indicate "How kind are you?" and "How kind

are most other people?" participants might be asked "How kind are you compared to most other people?" Insofar as many of the cognitive processes that have been thought to underlie the BTA effect apply only when the effect is measured directly (Windschitl et al., 2008), it might be argued that my exclusive reliance on the indirect method has stacked the deck in favor of a motivational account. Study 4 was conducted to address this issue.

The most significant finding from direct comparison studies is evidence that the magnitude of the BTA is greatly affected by the manner in which direct comparisons are framed. The effect is strong when self is specified as the target and other people are specified as the referent ("How kind are you compared to most other people?) but weak or nonexistent when most other people are specified as the target and self is specified as the referent ("How kind are most other people compared to you?"). One explanation for this effect (known as focalism) is that people give more weight to the target than the referent when making comparative judgments, and this differential weighting leads them to claim to be better than others when self is the target, but not better than others when self is the referent (Windschitl et al., 2008).

To my knowledge, previous studies using the direct comparison approach have not taken attribute importance into account. If focalism is the force driving direct comparative judgments, we should find that these judgments are unaffected by attribute importance. If, on the other hand, motivational processes operate, we might expect that the BTA effect occurs for important qualities even when self is the referent and most other people are the target.

Method

Participants. In exchange for extra credit in various psychology courses, 40 UW undergraduates participated.

Materials and procedure. Participants were given a two-page questionnaire that required them to evaluate themselves on the 10 attributes used in Studies 1 and 2. On one page, the questions were worded with the self as the target and most other people as a referent (e.g., "Compared to most other people, how kind are you?"); on the other page, the questions were worded with most other people as the target and the self as a reference (e.g., "Compared to you, how kind are most other people?"). Order was counterbalanced across participants, and both questions were answered on 9-point Likert-type scales, with three labeled values (1 = *less than most other people* [*me*], 5 = *the same as most other people* [*me*], 9 = *more than most other people* [*me*]).

Results

After reversing the scoring for the "self-as-referent" questions (so that high scores indicated a BTA effect), I averaged the five traits previously judged to be important (competent, honest, intelligent, kind, responsible) and the five traits previously judged to be less important (agreeable, conscientious, imaginative, outgoing secure). I then submitted the scores to a 2 × 2 repeated measures ANOVA, with importance and question frame as repeated measures. Figure 4 presents the means.

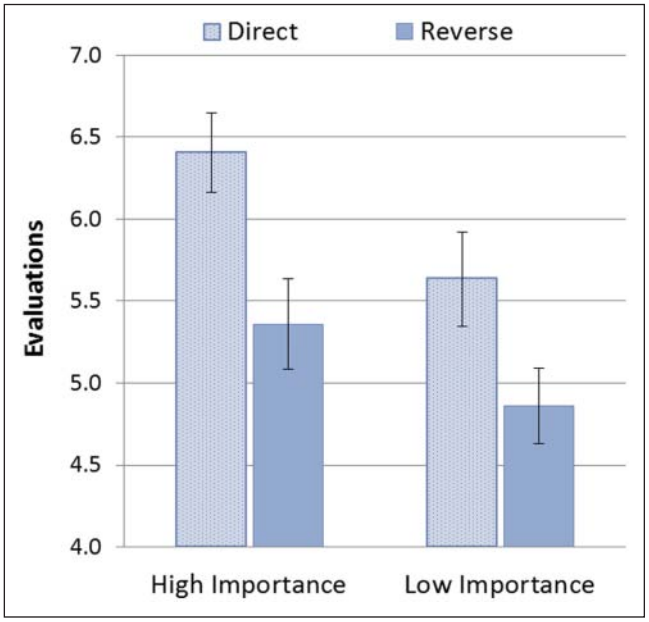

Figure 4. Comparative evaluations of self and most other people as a function of target frame: Study 4

Three effects reached significance. First, a main effect of question frame indicated that the BTA effect was stronger with the self-as-target questions (M = 6.02) than with the self-as-referent questions (M = 5.11), $F(1, 39) = 54.11$, $p < .001$, $\eta_p^2 = .58$. Second, a main effect of importance indicated that the BTA effect was again greater for important qualities (M = 5.88) than for unimportant qualities (M = 5.25), $F(1, 39) = 40.87$, $p < .001$, $\eta_p^2 = .51$. Finally, the Question Frame × Importance interaction was also significant, $F(1, 39) = 5.70$, $p < .025$, $\eta_p^2 = .13$. As can be seen in Figure 3, question framing had a greater effect for important traits, $t(39) = 13.06$, $p < .001$, $\eta_p^2 = .81$, than unimportant ones, $t(39) = 9.69$, $p < .001$, $\eta_p^2 = .71$.

Comparisons with the scale midpoint are of particular interest when a direct comparison method is used, as these comparisons establish whether self was judged to be "better" than most other people. The error bars in Figure 4 show that the BTA effect was significantly greater than the scale midpoint (of 5) for three of the four judgments. Most importantly, when important traits were assessed, the BTA effect was significant even when most other people were the target and self was the referent.

Discussion

Replicating previous research, the findings from Study 4 show that the BTA effect is stronger when self is specified as

the target of comparison rather than a referent (Chambers & Windschitl, 2004) This effect is most easily understood as reflecting a cognitive process, namely focalism. The findings from Study 4 also show, however, that when important traits are considered, the BTA effect achieves significance even when self is the referent. This finding is novel, suggesting that motivational processes balance (if not overwhelm) cognitive processes when importance is high.

Study 5: When Push Comes to Shove

In an article that comprehensively reviewed cognitive interpretations of the BTA effect, Chambers and Windschitl (2004) argued that research has not convincingly shown that comparative judgments are greater following threats to self-worth (p. 817). Although I believe this conclusion ignores some important findings (Brown, Collins, & Schmidt, 1988; Brown & Gallagher, 1992; Dunning, Leuenberger, & Sherman, 1995), I agree that a motivational account of the BTA effect would be most clearly supported by evidence that the magnitude of the effect increases as threats to self-worth increase. Accordingly, I conducted a final study in which participants received negative (or no feedback) regarding a valued ability before comparing themselves with others. Because I assume that the BTA effect is motivated by a desire to increase (or restore) feelings of self-worth, I predicted it would be stronger following negative feedback than in a control condition.

Method

Participants. In exchange for extra credit in lower-division psychology courses, 44 UW undergraduates participated.

Materials and procedure. At the start of the experiment, each participant was greeted and led into a small room equipped with a computer. The experimenter then left the participant alone, instructing him or her to indicate when he or she was through. Thereafter, all instructions and materials were presented on the computer, assuring participants of privacy during the remainder of the experiment.

Experimental manipulation of success and failure. At this point, participants in the control condition began completing the self-evaluation measure (described below), whereas those in the experimental condition learned they would be taking a test that measured an intellectual ability called integrative orientation. Integrative orientation was described as an ability to find creative and unusual solutions to problems. The ability was (allegedly) measured using the Remote Associates Test (Mednick, 1962). With this task, participants are shown three words (e.g., car–swimming–cue) and asked to find a fourth word that relates to the other three (pool). Working interactively with the computer, participants completed three sample problems to ensure that they understood how the problems were solved.

The experimental task was then administered. All participants who took the test received a set of difficult problems. (Difficulty was based on published norms and prior research.) When the allotted time for working on the test had expired, the computer paused for several seconds and informed the participants that they had scored in the bottom 23% of all UW students.[4]

All participants (including those in the control condition) then completed a self-evaluation questionnaire identical to the one used in Study 1. As before, participants rated themselves and most other people on 10 traits using 5-point Likert-type scales, and target order was counterbalanced across participants. When they had finished making their ratings, participants informed the experimenter and they were debriefed, thanked, and excused.

Results and Discussion

After averaging the five important traits and the five unimportant traits, I submitted the scores to a 2 (condition: control vs. negative feedback) × 2 (target: self vs. most other people) × 2 (importance) mixed ANOVA, with the first factor treated as a between-subjects variable and the other factors treated as repeated measures. Replicating the results from Study 1, the ANOVA revealed main effects of target and importance (both ps < .001) and a Target × Importance interaction, $F(1, 42) = 11.91$, $p = .001$, $\eta_p^2 = .22$. As before, the interaction shows that the BTA effect was stronger when important traits were assessed, $t(42) = 13.43$, $p < .001$, $\eta_p^2 = .81$, than when unimportant traits were assessed, $t(42) = 8.55$, $p < .001$, $\eta_p^2 = .64$.

Of greater relevance to the present discussion is the presence of an Outcome × Target interaction, $F(1, 42) = 11.45$, $p < .005$, $\eta_p^2 = .21$. Figure 5 presents the means necessary to interpret the interaction. In accordance with a motivational model, it may be seen that the BTA effect was stronger following negative feedback, $t(42) = 13.94$, $p < .001$, $\eta_p^2 = .82$, than following no feedback, $t(42) = 8.05$, $p < .001$, $\eta_p^2 = .61$. Additional analyses showed that, in comparison to the control condition, self-evaluations were more positive following negative feedback, $t(42) = 2.30$, $p < .05$, $\eta_p^2 = .11$, but the opposite was true for evaluations of most other people, $t(42) = 3.60$, $p = .001$, $\eta_p^2 = .24$.

Discussion

The findings from Study 5 show that the magnitude of the BTA effect increases when self-worth had recently been threatened. This pattern seems most predictable from a model that assumes that the BTA effect represents a motivated bias to restore and promote feelings of self-worth. Note, however, that only participants in the negative feedback condition worked on an experimental task before evaluating themselves and most other people. Conceivably, the mere act of working on a task, rather than negative feedback per se, drove the observed effect. Future research

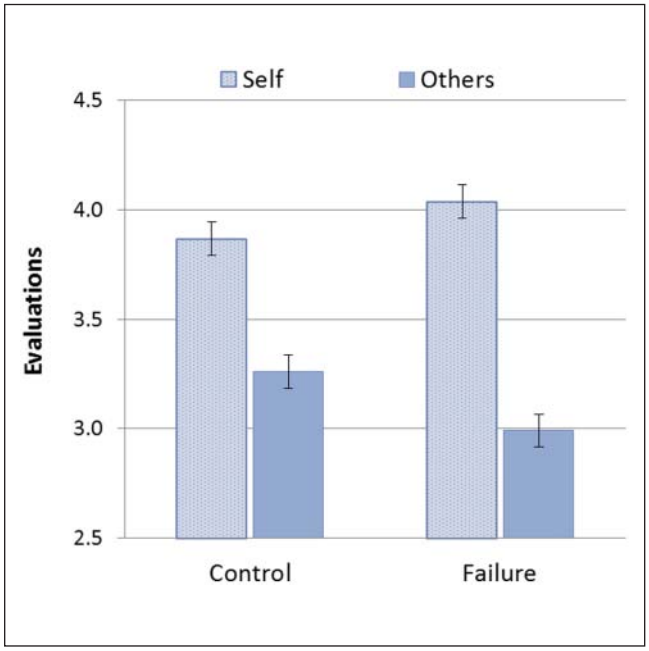

Figure 5. Evaluations of self and most other people as a function of threats to self-worth: Study 5

should address this limitation by including a positive feedback condition or one in which participants work on a task but receive no feedback.

General Discussion

A fundamental tenet of science, traceable to the 14th-century philosopher William of Ockham, maintains that we should never use complex logic when simple logic will suffice. Over time, this argument has come to be known as the law of parsimony, which states that when theories can explain a phenomenon equally well, the theory with the fewest assumptions is preferred.

In this report, I have gathered evidence that a single process—the desire to feel good about ourselves—is sufficient to explain the BTA effect. Unlike a variety of different cognitive mechanisms that may contribute to the effect, a single need to feel good about ourselves can explain why the BTA effect (a) is greater for important qualities than unimportant qualities (all five studies) and (b) increases in magnitude following a threat to self-worth (Study 5). Moreover, by taking trait importance into account, the present findings have also shown that the BTA effect occurs when self-evaluations are (c) compared with a single peer (Study 2) and (d) made directly, with self as referent rather than target (Study 4). Collectively, these findings underscore the important role motivational processes play in producing the BTA effect (also see Guenther & Alicke, 2010).

Some readers might question the contribution of the present research, noting that proponents of the cognitive view readily concede that motivation can affect BTA judgments. For example, Chambers and Windschitl (2004) wrote, "We do not wish to suggest that motivational forces are irrelevant to above-average . . . effects" (p. 813). The problem with such concessions is that they are just that, concessions, which, by their very nature, diminish the role of motivational forces relative to cognitive ones. In contrast, the present research shows that when people care about being better than others (i.e., when importance is high), motivational forces play a dominant role, not a supplemental one.

A failure to carefully consider the importance of importance might explain why the BTA effect is sometimes reversed (i.e., people sometimes acknowledge being worse than others at specific tasks or abilities). For example, Kruger (1999) asked participants how skilled they were compared to others on several tasks that varied in their difficulty, such as riding a bicycle, telling a really good joke, programming a computer, and juggling. The results showed a BTA effect for the easy tasks (riding a bicycle, telling a really good joke) but a reversal for the difficult tasks (programming a computer, juggling). To explain his findings, Kruger argued that people make comparative judgments by first assessing their own skills and then insufficiently adjusting for this anchor. Although this explanation is certainly plausible, none of the tasks Kruger studied is particularly important, so we shouldn't expect motives to matter much. This is especially true in comparison with the sorts of character traits and qualities I assessed. Sure it would be nice to juggle, but it's not comparable to being an honest, competent person.

A similar interpretation can be applied to research on optimism. Paralleling the BTA effect, people also generally believe their future will be brighter than most other people's. For example, most people believe they are more likely than their peers to own their own home, have a gifted child, or live past the age of 80 and less likely than their peers to be involved in a serious automobile accident, be a crime victim, or become seriously ill (Helweg-Larsen & Shepperd, 2001; Klein & Helweg-Larsen, 2002; Taylor & Brown, 1988; Weinstein, 1980; Weinstein & Klein, 1995). Like the BTA effect, this comparative optimism bias was originally attributed to motivational forces (i.e., it makes people feel good about themselves to believe their life will be especially wonderful), but Chambers, Windschitl, and Suls (2003) argued that the infrequency of negative events could explain the effect. People believe infrequent events are unlikely to occur, so they are unrealistically optimistic that they will not experience them. In apparent support of this interpretation, Chambers et al. found that people are pessimistically biased for rare positive events (e.g., they believe they will be less likely than their peers to ride a train or see a comet in the sky). These outcomes are not highly consequential, so we shouldn't expect motives to guide comparative assessments. However nice it would be to ride a train or see a comet, it is hardly comparable to having a loving marriage or living a long, healthy life.

By claiming that motivational forces are sufficient to produce the BTA effect, I am not suggesting that they must be present to produce the effect (i.e., sufficient doesn't mean necessary). Many investigations have shown that cognitive processes can affect comparative social judgments under some conditions, and I see no reason to quarrel with these findings (for reviews, see Chambers & Windschitl, 2004; Windschitl et al., 2008). Instead, my point is only that people who are motivated to feel good about themselves will claim to be "better than others" even when a variety of cognitive variables are eliminated or controlled.

I also believe there is a danger in assuming that cognitive processes ordinarily produce the BTA effect. Consider, for example, cross-cultural research on the BTA effect. Once trait importance is taken into account, there is ample evidence that East Asians show a BTA effect that is comparable to the effect shown by Westerners (Brown & Cai, 2009; Brown & Kobayashi, 2002; Sedikides, Gaertner, & Toguchi, 2003; Sedikides, Gaertner, & Vevea, 2005). Although these findings suggest that self-enhancement needs are a universal imperative (Brown, 2003, 2010; Gaertner, Sedikides, Cai, & Brown, 2010), Hamamura, Heine, and Takemoto (2007) have dismissed this claim by arguing that cognitive processes, not motivational ones, produce the BTA effect. This position confuses "can" for "does." Although cognitive processes can affect the magnitude of the BTA effect, motivational biases ordinarily produce it.

A focus on cognitive processes also ignores the correlates of the BTA effect. Across numerous studies, people who enjoy psychological well-being (e.g., low depression, low anxiety, high self-esteem, happiness, and subjective well-being) exhibit a greater BTA effect than those who are chronically anxious, depressed, unhappy, or dissatisfied with themselves or their life (Brown, 1991, 2007; Marshall & Brown, 2007; Taylor & Brown, 1988, 1994a, 1994b; Taylor, Lerner, Sherman, Sage, & McDowell, 2003a, 2003b). These relations are also found in East Asian cultures, suggesting that the psychological correlates of the BTA are broad and general (Brown & Cai, 2009; Cai, Wu, & Brown, 2009; Gaertner, Sedikides, & Chang, 2008; Kobayashi & Brown, 2003). It is difficult to see how cognitive processes of focalism and egocentrism would predict (or perhaps promote) psychological well-being.

As is true of all research, the present research has limitations. First, it is important to acknowledge that the BTA effect represents a bias, but not necessarily an error. Not everyone shows the effect, and many of those who do might well be "better" than others on the attributes being assessed. Absent objective indicators of the attributes themselves, it is impossible to know who is being accurate and who is not. Consequently the data show only that the BTA is a bias (i.e., people generally believe they are better than others) and that the magnitude of the bias increases when it is especially important to be better than others (all five studies) and when feelings of self-worth have recently been threatened (Study 5).

It is also important to note that all of the participants were college students. Although the BTA effect has been observed across many other populations, the role of importance has not been investigated as thoroughly (but see Brown & Kobayashi, 2002, Study 3). The present research also studied a limited set of attributes. The items were selected because they represent broad dimensions of personality, character, and competence, but many other items could also be examined. The present results suggest that the BTA effect will emerge whenever an important attribute is being judged. Future research would be wise to gather such ratings whenever the magnitude of the bias is being assessed. Finally, it might be argued that the BTA effect is offered for public consumption but does not reflect how people privately feel about themselves in relation to others. I attempted to minimize the public nature of the evaluations participants offered by assuring them of privacy and anonymity, but I cannot be certain these attempts were entirely successful. It is comforting to know, however, that people act on their comparative self-assessments, suggesting that they privately believe they are better than others (Williams & Gilovich, 2008).

Coda

A Wiseman once said, "Show me a heuristic that makes people feel bad about themselves, and I'll show you a heuristic very few people use" (Seymour Wiseman, personal communication, April 1, 2011). In this article, I have provided evidence to support the wisdom in Wiseman's assertion. Although a variety of cognitive mechanisms may contribute to the magnitude of the BTA effect, the effect is ultimately driven by self-enhancement needs. I am not naïve enough to believe that everyone who reads this article will be convinced by my arguments, but I do hope I have provided enough evidence to restore the motivational explanation to more than a gratuitous, passing reference. Whatever cognitive mechanisms contribute to the effect, people believe they are better than others largely because it makes them feel good to do so.

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Notes

1. I did not gather information regarding gender in the research reported in this article, as previous research has not found gender differences in the better than average effect.

2. Given the small sample size, readers might wonder whether the importance ratings generated by the participants in Study 1 are replicable. To address this issue, I asked 56 University of Washington undergraduates to rate the importance of the 10 attributes used in Study 1. As in the original study, the five qualities of character and competence were judged to be more important ($M = 4.39$) than the five personality traits ($M = 3.74$), $t(55) = 9.61$, $p < .001$, $\eta_p^2 = .63$, and the two distributions did not overlap (i.e., all five character traits were rated as being more important than all five personality traits).
3. Also see Note 2.
4. As a check on the experimental manipulation, participants in the failure condition were asked to evaluate their performance (1 = *very poor*, 9 = *excellent*). As expected, participants evaluated their performance negatively ($M = 2.65$), $t(22) = -7.53$, $p < .001$ (for comparison against the scale midpoint of 5).

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