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WASHINGTON UNIVERSITY

Department of Psychology

**Knowing More than We Can Tell: People Are Aware of their Biased Self-
Perceptions**

by

Kathryn Leigh Bollich

A thesis presented to the
Graduate School of Arts and Sciences
of Washington University in
partial fulfillment of the
requirements for the
degree of Master of Arts

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There is no question that biases exist in people's self-perceptions of their personality. However, it is not known whether people are aware of these self-biases. In two studies ($N = 130$), I examined whether people have insight into their positive and negative self-biases across a range of traits. I predicted that self-biases result from self-deception (i.e., the intentional distortion of more realistic self-views), and as such, people should have some awareness of their self-biases. As predicted, people with positive biases (i.e., self-perceptions that are more positive than a reputation-based criterion measure) described themselves as positively biased, and people with overly negative self-views described themselves as negatively biased. These findings suggest that people may know more about themselves than they initially admit, and provide support for the existence of everyday self-deception in people's views of their personality. Implications for the use of self-reports and the study of self-knowledge are discussed.

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“He had two selves within him apparently, and they must learn to accommodate each other and bear reciprocal impediments. Strange, that some of us, with quick alternate vision, see beyond our infatuations, and even while we rave on the heights, behold the wide plain where our persistent self pauses and awaits us.”

- *Middlemarch*, p. 231, George Eliot

As Eliot's quote suggests, people may have more than one self-view. If this is the case, which self-view do we capture when people describe what they are like on self-perception measures? Perhaps more importantly, do we assess a person's most accurate self-view? Recent work has highlighted the many blind spots in self-knowledge, but it may be that people have more insight into what they are like than it seems at first glance. Specifically, the self-view people provide in personality questionnaires may not be their most accurate self-view, and people might know that these self-views are not entirely accurate. In this paper, I examine to what extent people, when asked, can accurately report on the biases in their self-perceptions of personality. Awareness of these biases would indicate that people have more self-knowledge of their personality than the research to date suggests.

There is no question that biases exist in people's self-perceptions (Dunning, Heath, & Suls, 2004). Biases are present in all aspects of self-perceptions, from self-views of skills and abilities (Kruger & Dunning, 1999) to personality traits (Back & Vazire, 2012; John & Robins, 1994; Vazire, 2010). Self-biases lead to both overly positive self-views (i.e., self-enhancement) and overly negative self-views (i.e., self-diminishment). On average, people tend to self-enhance, for example, reporting that they are more charitable, fairer, better drivers, and better teachers than their peers and colleagues (Alicke, 1985; Cross, 1977; Epley & Dunning, 2000; Messick, Bloom, Boldizar, & Samuelson, 1985; Sedikides, 1993; Svenson, 1981; Van Lange & Sedikides, 1998). However, self-perceptions can also be overly negative, for example, when a skill is particularly uncommon (e.g., juggling; Kruger, 1999). Furthermore, there are

considerable individual differences in the direction and magnitude of self-biases (John & Robins, 1994; Kwan, John, Kenny, Bond, & Robins, 2004). Narcissists and individuals with high self-esteem are prone to self-enhancement whereas individuals with low self-esteem tend to rate themselves more harshly than is warranted (Baumeister, 1982; Campbell & Fehr, 1990; John & Robins, 1994).

Some of these individual differences in positive and negative self-biases are in part due to the various motivations that self-perceptions fall victim to. Motivations, such as the desires to self-enhance, to self-verify, to self-improve, and to self-assess (Sedikides & Strube, 1995), are more or less salient for specific types of people and in different situations. With these multiple, competing motives at play in self-perception, attaining or maintaining accurate self-views is not always a priority (e.g., Sedikides, 1993). Thus, it may be naïve for researchers to assume that people are striving to be accurate when providing self-ratings, and it may be unfair to interpret a person's self-report as her most accurate guess about what she is like. In fact, it is possible that people know that they are not always striving to be accurate, and may even be aware of the motives that are influencing their self-perceptions. If so, people may have insight into when their self-views are biased as well as the direction and magnitude of those self-biases.

On the other hand, perhaps it is too much to ask of people to be aware of motivational influences on their self-perceptions. As previous literature has suggested, there is a lot people are unaware of and inaccurate about regarding their mental processes (e.g., Nisbett & Wilson, 1977). Research has demonstrated that people believe they are less prone to bias than their peers, and that the majority of people believe their self-

perceptions are in general accurate, even when confronted with information about the various biases to which people are susceptible (Ehrlinger, Gilovich, & Ross, 2005; Pronin, 2007; Pronin, Lin, & Ross, 2002; Vazire & Mehl, 2008). These biases are so robust that at times people are even less accurate than close others about their own personality (Kolar, Funder, & Colvin, 1996), particularly for evaluative traits (John & Robins, 1993; Vazire, 2010). Taken together, these findings suggest a clear lack of self-insight in many important areas of life, and in particular about motivated cognitive processes when judging one's own evaluative traits (e.g., Dunning et al., 2004; Vazire, 2010).

Despite this compelling evidence that people lack insight into their own personality traits, I predict that directly asking people about the biases in their self-views will reveal that people actually know more than their self-ratings suggest. I propose that people report overly positive or negative self-views because they are engaging in self-deception. Self-deception has been defined in many ways; I use it here to mean “the act of lying to oneself”¹ (Paulhus & Buckels, 2012). This type of self-deception typically occurs when two self-views are held simultaneously, but one is dominant due to underlying motivations (Gur & Sackeim, 1979). Because this type of self-deception requires that individuals first be aware (at some level) of the truth that they do not desire to acknowledge, people may indeed possess relatively accurate self-views that are simply overshadowed by the desire to see oneself in a positive or negative light. In other words, self-deception may not be so deep as to be unconscious, making it possible for people to

¹ I define self-deception broadly. I believe, however, that the present results have important implications regardless of whether one subscribes to this definition of self-deception or not.

report on it. Past research on self-deception has primarily examined its existence and process (Gur & Sackeim, 1979; Quattrone & Tversky, 1984) but has yet to examine whether it is present in self-perceptions of personality (c.f., Carlson, Vazire, & Oltmanns, 2011). If the biases that are often found in self-perceptions result from everyday self-deception, people may have insight into their true self beyond their biases (because self-deception requires some awareness of the reality that is being obscured).

Across two studies, I tested the prediction that people are aware of the positive and negative biases in their self-views of personality. Participants first completed traditional self-reports of personality traits. Next, participants were asked to review their self-reports of personality and rate how positively or negatively biased they believed their initial self-ratings were (i.e., their *perceived bias*). In order to assess actual bias in self-ratings of personality, self-reports were compared to a criterion measure. In selecting a criterion measure, I needed a measure of personality traits that was both valid and independent of self-reports. Previous research shows that well-acquainted peers are very accurate judges of personality, and are even more accurate than the self for evaluative traits (John & Robins, 1993; Vazire, 2010). The present study focused heavily on highly evaluative traits (because self-biases are likely to be strongest for these traits), and many of these traits are largely reputation-based (i.e., how funny, likeable, and attractive a person is depends largely on how funny, likeable, and attractive others find her). Thus, I reasoned that well-acquainted peers' perceptions ("other-perceptions") would be a good criterion because their ratings do not have method overlap with self-reports and are likely to be highly accurate. Specifically, I measured *actual bias* as the discrepancy between

self- and other-perceptions. By correlating actual bias scores with perceived bias scores, I was able to gauge the degree of people's self-knowledge of their bias. This design allowed me to examine whether people have some awareness of the motivated cognitive processes distorting their self-views, thereby testing the hypothesis that people are engaging in everyday self-deception when providing self-ratings. Positive correlations between actual and perceived bias would suggest that people are engaging in self-deception and that they are able to accurately report on the biases in their 'default' self-views.

The present two studies were very similar to each other. Study 1 was completed in a laboratory and participants reported their perceived bias four days after providing traditional self-reports. In Study 2, a classroom-based study, I sought to replicate the findings of Study 1 and to implement a few small changes to the design. Specifically, in Study 2, perceived bias reports were assessed immediately after traditional self-reports, allowing for a more direct examination of whether people concurrently hold both biased and realistic views of the self. In other words, I examined whether people who provide biased self-reports can immediately turn around and accurately report on their bias.

Study 1

Method

Participants. Participants² were 85 undergraduate students at Washington University in St. Louis (57 women, 28 men; $M_{age} = 20.15$, $SD_{age} = 1.67$) who completed the study for

^{2,3} Participants in both Study 1 and Study 2 were part of larger studies. Full details of these studies are available from the study author. Data from these studies are also used in Carlson (in press) and Solomon & Vazire (2012), but the analyses presented here do not overlap with the analyses in those papers.

pay or class credit. The majority of participants were Caucasian or White (58.8%), and smaller proportions were Asian (23.5%), African-American or Black (10.6%), Hispanic (2.4%), of mixed ethnicity (1.2%), and other (2.4%); one participant did not report ethnicity (1.2%).

Design and procedure. Participants completed self-reports of personality including the Big Five (TIPI; Gosling, Rentfrow, & Swann, 2003) and five single-item measures of evaluative traits (i.e., intelligent, funny, likeable, physically attractive, and high status) on a 15-point scale in the lab. These evaluative traits were selected because they are highly desirable and thus likely to elicit biased self-perceptions (Vazire, 2010). In addition to traditional self-reports, participants also completed generalized meta-perceptions indicating how they believed people who knew them well saw them on the same items included in self-reports. Finally, each participant also nominated up to five peers (e.g., friends, roommates) who were asked to describe the participant's personality.

Four days after the initial session, participants returned to the lab for a follow-up session. They were given a printed copy of their self-ratings from the first session and an electronic copy of a new questionnaire I designed to measure self-perceptions of bias. The instructions for the perceived bias survey asked participants "How biased were you in your original response to the items below when you rated yourself earlier?" I also provided definitions of positively biased ("you rated yourself more favorably than is objectively warranted") and negatively biased ("you rated yourself more harshly than is objectively warranted"). Participants rated their bias for each item on a 9-point scale from -4 (*Extremely negatively biased*) to +4 (*Extremely positively biased*) with a

midpoint of 0 (*Neither negatively nor positively biased*). Because the wording of the instructions posed a double negative for undesirable items (e.g., “critical, quarrelsome”), and reliability analyses suggested that people may not have interpreted these items correctly, only positively-phrased items were used for later analyses.

Following the second session, the close others whom participants nominated ($N = 403$) were contacted by email and asked to complete informant reports for the targets (following the procedures described by Vazire, 2006). One hundred and ninety-six peer informants responded (48.6% response rate), with at least one informant for 87.1% of participants. Thus, the final sample size for the current analyses (excluding participants whose informants did not respond and 11 participants who did not complete the perceived bias measure) was 65.

Results and Discussion

Means and standard deviations for self-perceptions, meta-perceptions, other-perceptions, and bias-perceptions for the 10 traits examined can be found in Table 1. In addition, Table 2 displays intercorrelations among self-, meta-, other-, and bias-perceptions, averaged across the 10 traits (using Fisher’s r -to- z transformation to compute the average, which was then transformed back to a correlation). Participants demonstrated only moderate agreement with their reputation, as evidenced by the moderate correlation between self- and other-perceptions (mean $r = .23$).

Informant reports were aggregated and served as an accuracy criterion for participants’ self-ratings. For each of the 10 traits, actual bias was calculated by regressing self-perceptions onto aggregated informant reports. The resulting standardized

residuals (“self-other residuals”) were saved and served as measures of actual bias, that is, how much each participant self-enhanced or self-diminished (the self-criterion residual technique; John & Robins, 1994; Paulhus & John, 1994). Panel C of Figure 1 shows a histogram of actual bias scores for a representative trait from Study 1. As this figure shows, the sample included self-enhancers and self-diminishers, as well as a moderate proportion of people who were relatively unbiased. In addition, Panel A of Figure 1 displays a histogram of participants’ perceived bias scores, that is, their responses to the self-report measure of perceived bias, for one of the traits. As this figure shows, people were willing to admit both positive and negative self-biases.

In order to assess whether people are able to accurately report their biases, actual bias scores were correlated with perceived bias scores for each trait. I found that perceived bias significantly correlated with actual bias scores for all of the traits examined (Pearson r correlations ranging from .30 to .64; see Table 3). Knowledge of bias was particularly high for: dependable, self-disciplined; sympathetic, warm; calm, emotionally stable; intelligent; funny; and physically attractive (all r s = .40 or higher). These findings provide support for the hypothesis that people are deceiving themselves but in doing so are partially aware of their underlying true self.

One possible reason for why people are able to accurately report their biases is that people are considering how they believe others perceive them (i.e., their meta-perceptions). That is, when people are determining self-bias, they may be thinking about the discrepancy between how they view themselves and how they believe others view them (although I did not specify this—or any—definition of “bias” and “accuracy” in the

perceived bias questionnaire). If this were the case, then perceived bias should correlate with the discrepancy between self-perceptions and meta-perceptions, that is, with people's views about the difference between how they see themselves and how others see them (a discrepancy that has been called "meta-insight"; Carlson, Vazire, & Furr, 2011). To examine whether people's perceptions of bias were indeed similar to this perceived discrepancy, I first computed a measure of self-meta discrepancy by regressing self-perceptions onto meta-perceptions and saving the standardized residuals ("self-meta residuals"). These standardized residuals indicated the extent to which people's self-perceptions departed from their meta-perceptions and could then be correlated with perceived bias scores to determine if people were in part using their self-meta discrepancy to ascertain their bias. If perceived bias is just another measure of meta-perceptions, self-meta residuals should strongly correlate with perceived bias scores. As shown in Table 3, I found that self-meta residuals correlated significantly with perceived bias, indicating that participants were likely using their meta-perceptions at least in part when determining how biased their self-perceptions were. Because the instructions on the perceived bias questionnaire did not indicate a criterion, this suggests that people may see their meta-perceptions as more accurate and less biased than their self-perceptions.

I next wanted to test whether people's perceived bias scores were *only* picking up on the discrepancy between their self- and meta-perceptions, or whether perceived bias scores were also capturing some information beyond meta-perceptions. If perceived bias scores are based on more than just meta-perceptions, then they should predict not just the difference between self- and other-perceptions (i.e., actual self-bias) but also the

difference between meta-perceptions and other-perceptions (i.e., actual meta-bias). To test this, I first regressed meta-perceptions onto other-perceptions and saved the standardized residuals (“meta-other residuals”). These residuals were then correlated with perceived bias to determine if perceived bias also correlated with actual meta-bias. The correlations were positive for all traits and significant for five traits, indicating that people’s perceived biases are not entirely based on how they think they are seen by others, at least for certain traits (see Table 3).

Study 2

Study 2 was conducted to replicate and extend the findings of Study 1. To more effectively examine whether people simultaneously hold both biased and realistic views of the self, self-reports of bias were collected immediately following the traditional self-reports of personality. In addition, as an alternative measure of meta-perception to those collected in Study 1, meta-perceptions were collected for each of the nominated close others and then aggregated to form a generalized meta-perception score for each participant, allowing for a more precise assessment of perceived reputation.

Method

Participants. Participants³ were 94 undergraduate students (59 women, 30 men, 5 no gender reported; $M_{age} = 19.96$, $SD_{age} = 1.00$) who completed the study as part of class activities in an undergraduate-level personality psychology course. The majority of participants were Caucasian or White (56.4%), and smaller proportions were Asian (25.5%), African-American or Black (5.3%), and other (7.4%); a few participants chose not to report their ethnicity (5.3%).

Design and procedure. The procedure for Study 2 was almost identical to the procedure for Study 1. As part of a classroom activity, participants first completed traditional self-reports of personality. Immediately following these reports, participants were asked to report how positively or negatively biased their initial self-perceptions were while still having access to these self-reports using the same perceived bias measure as in Study 1. In order to avoid the possibility that participants would have informant reports in mind as a criterion when completing the other measures, I collected informant nominations nine weeks before the self-report measures were collected. Finally, unlike in Study 1, participants completed meta-perceptions indicating how they believed they were seen by each of their informants. These were collected eight weeks prior to collecting self-report measures.

Nine weeks prior to participants completing traditional self-reports and the perceived bias measure, nominated informants ($N = 233$) were contacted and asked to provide other-perceptions of participants' personality. One hundred and twenty-five peer informants responded (53.6% response rate), with at least one informant for 87.2% of the 82 participants who nominated informants. Thus, the final sample size for the present analyses (excluding participants whose informants did not respond and five participants who did not complete the perceived bias measure) was 65.

Results and Discussion

Means and standard deviations for self-, meta-, other-, and bias-perceptions for the 10 traits examined can be found in Table 4. In addition, Table 2 displays intercorrelations among self-, meta-, other-, and bias-perceptions, averaged across the 10

traits (using Fisher's r -to- z transformation to compute the average, which was then transformed back to a correlation). These intercorrelations replicate those found in Study 1, and again demonstrate a moderate level of agreement between self- and other-perceptions (mean $r = .23$).

Actual bias was calculated as in Study 1 by regressing self-perceptions on aggregated informant reports (a histogram of actual bias scores for one of these traits can be found in Panel D of Figure 1). Actual bias scores were then correlated with perceived bias for each trait (a histogram of perceived bias scores for one of these traits can be found in Panel B of Figure 1). As shown in Table 3, participants' actual bias correlated significantly with their perceived bias for all traits, indicating that they were aware of the bias in their self-views (Pearson r correlations ranging from .34 to .65). Knowledge of bias was particularly high for: open to new experiences, complex; sympathetic, warm; calm, emotionally stable; funny; likeable; physically attractive, and has high status (all r s = .40 or higher).

As in Study 1, I examined the extent to which people used their meta-perceptions when determining their self-bias. As before, the discrepancy between self- and meta-perceptions correlated significantly with all but one of the traits examined (see Table 3), suggesting that meta-perceptions were likely considered when individuals determined their perceived bias. Finally, as in Study 1, when meta-perceptions were regressed on aggregated informant reports, these standardized residuals still correlated positively with perceived bias, and these correlations were significant for six traits (see Table 3),

suggesting that people were not basing their perceived bias scores entirely on their meta-perceptions.

General Discussion

Overall, the findings from these two studies suggest that people are surprisingly aware of the biases in their self-views. These results provide evidence that people engage in everyday self-deception when reporting their self-perceptions of personality, and that they are capable of tapping into more accurate self-perceptions when prompted to do so. Furthermore, although this awareness of bias is in part due to people recognizing the discrepancy between their self-views and their meta-perceptions, these results also provide evidence that people's awareness of their bias sometimes goes beyond what is captured by their meta-perceptions. Taken together, these findings suggest that people are able to hold two self-views—their default, often biased, self-perception and a realistic, less biased self-view.

It is also important to note that, like previous research (e.g., Kwan et al., 2004), I found strong evidence of large individual differences in self-bias. As Panels C and D of Figure 1 show, many people rated themselves more negatively than their close friends rated them. Moreover, I also found evidence of important individual differences in self-perceptions of bias. Many people are conscious of having overly negative self-views. This preponderance of self-diminishers is often overlooked in research on motivated cognition, and is worthy of further investigation.

Most important for the current investigation, however, was the finding that people's perceptions of their bias were very accurate. Self-enhancers largely reported

being positively biased and self-diminishers largely reported being negatively biased, and this was the case for both agentic and communal personality traits, indicating a general awareness of both egoistic and moralistic biases (Paulhus & John, 1998). How is it that people are able to accurately report their biases? Here I present three possible explanations of this effect, each of which has important implications for our understanding of self-knowledge.

First, as already discussed, one possible explanation for how people are able to accurately recognize their bias is that they are considering how they believe others see them (i.e., their meta-perceptions). In determining self-bias, people may be considering the discrepancy between how they view themselves and how they believe they are viewed by others. The analyses that included meta-perceptions do indicate that awareness of bias in self-perceptions is at least in part due to knowing the discrepancy between self- and meta-perceptions. Recall that I did not specify a criterion when asking people to report their perceived bias, and participants did not know that I would be using informant reports as a criterion (and this was not especially likely to occur to them, particularly in Study 2 when the informant nominations were collected nine weeks before the self-ratings and perceived bias ratings). Thus, considering that people are at least in part using their meta-perceptions to determine how biased their self-perceptions are, they must be doing so because they believe their meta-perceptions are more accurate. This explanation would suggest that, despite believing their meta-perceptions are more accurate than their self-perceptions, people nevertheless choose to hang on to their biased self-perceptions—a phenomenon consistent with my definition of self-deception.

Second, it is possible that people are using heuristics to estimate their bias. For example, if a person initially gave herself a very positive score, she could simply assume she was likely too extreme in her original self-perception and therefore rate herself as positively biased. Consistent with this explanation, I did find that perceptions of bias were positively correlated with self-perceptions (see Table 2), indicating that people who rated themselves more positively tended to rate themselves as positively biased. However, these correlations were moderate in size and indicate some variability in bias scores even among those with very positive or very negative self-perceptions. Alternatively, people may be using slightly more idiosyncratic heuristics. That is, they may have self-views that are more like ranges than point estimates, and they may be aware that they tend to “aim high” or “aim low” within their own range of possible self-views. This is consistent with the finding that narcissists and self-enhancers are aware that they tend to exaggerate their skills and abilities (Carlson et al., 2011). This type of self-awareness is based on the use of accurate heuristics or self-schemas, and, consistent with my definition of self-deception, it entails people being aware of their biases but choosing not to update their personality self-views accordingly.

A third possible explanation for people’s ability to accurately report their biases is that people are able to consciously toggle between two coexisting self-views—one that is more realistic and another that is positively or negatively biased. The fact that the more biased self-view is typically the one that is reported in traditional self-reports suggests that it may be the ‘default’ self-view—the one that people prefer to operate with on a day-to-day basis. The more realistic self-view may only be accessed when people deem

it necessary or beneficial, and may require that people are explicitly motivated to be accurate and to provide a more deliberate and realistic self-evaluation. This explanation is interesting because it raises the question of what function self-perceptions serve. As discussed in the introduction, self-views are influenced by many motivational drives (Sedikides & Strube, 1995), and it is reasonable for people to alter their self-perceptions according to their goals and what is functional in a given situation. Thus, it is possible that in most situations in which participants complete personality questionnaires, other goals or motives are more important than accuracy, and so participants are not using their most realistic self-views to complete the questionnaires. Indeed, it may be rare in everyday life for the realistic self-view to be the most functional one. Biased self-views may be more functional for satisfying fundamental needs like the need to belong or the need for positive self-regard (Baumeister & Leary, 1995; Sedikides, 1993).

All of these possibilities raise important implications for the use of self-reports. People may know more about themselves than what they convey in traditional self-reports, and if asked in a particular way, people may be able to provide more valid self-perceptions. This has important implications for all researchers and practitioners who rely on self-reports to predict important outcomes such as health, relationships, occupational success, and well-being. Although behavioral measures and informant reports provide valuable additional information, when these sources are not available, it may be possible to improve the validity of self-reports by altering their instructions.

What role might knowledge of bias play in improving self-knowledge? If people are able to recognize how their self-views are affected by bias, and to hold multiple self-

views simultaneously, they may be more receptive to information that is counter to their ‘default’ self-view. Recognizing bias—the discrepancy between self-views and reality—is likely the first step toward changing inaccurate self-views. Further, the most effective way to improve self-knowledge may be for individuals to learn which of their “selves” is most accurate. Given the role of self-knowledge in interpersonal relations (Kurt & Paulhus, 2008; Tenney, Vazire, & Mehl, 2012), health, and occupational success (Dunning et al., 2004), more research is needed about how self-knowledge could be improved, and how we can capitalize on people’s awareness of their bias to increase self-knowledge.

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Table 1

Means for Self-, Meta-, Other-, and Bias-Perceptions for Study 1

Trait	Self-perceptions		Meta-perceptions		Other-perceptions		Perceived bias	
	<i>N</i> = 65		<i>N</i> = 65		<i>N</i> = 65		<i>N</i> = 65	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Extraverted, enthusiastic	9.71	3.42	10.35	3.43	11.09	2.62	.32	1.13
Dependable, self-disciplined	10.16	3.64	10.89	3.12	11.50	2.76	.05	1.39
Open to new experiences, complex	11.29	3.00	10.40	2.88	11.53	2.21	.30	1.12
Sympathetic, warm	10.86	3.36	10.85	2.88	11.18	2.09	.12	1.17
Calm, emotionally stable	10.55	3.26	9.82	3.15	10.27	2.48	-.03	1.08
Intelligent	11.28	2.29	11.66	1.87	13.10	1.48	.27	1.07
Funny	10.43	2.75	11.17	2.05	12.22	1.68	.16	1.11
Likeable	11.66	2.41	12.28	1.81	13.28	1.54	.23	1.01
Physically attractive	9.63	2.70	9.98	2.21	11.23	2.33	.06	1.09
High status	8.78	3.31	9.51	2.76	10.22	1.94	-.05	.86

Note. Self-perceptions and aggregated other-perceptions were completed on 15-point scales and the perceived bias self-report measure was completed on a 9-point scale (from -4 to +4).

Table 2

Intercorrelations among Self-, Meta-, Other-, and Bias-Perception Averaged across 10

Traits

Measure	1	2	3	4
1. Self-perception	-	.69**	.23 [†]	.45**
2. Meta-perception	.70**	-	.29*	.26*
3. Other-perception	.23 [†]	.26*	-	.03
4. Perceived bias	.47**	.28*	.08	-

Note. [†] $p < .10$, ** $p < .001$. These correlations were calculated using Fisher's r -to- z transformation to compute the average across traits, which was then transformed back to a correlation. Study 1 ($N = 65$) correlations are above the diagonal and Study 2 ($N = 65$) correlations are below the diagonal. Significance for correlations was based on estimated sample significance levels of $p < .10$ for $r_s \geq .20$, $p < .05$ for $r_s \geq .24$, and $p < .001$ for $r_s \geq .43$.

Table 3

Self-Other, Self-Meta, and Meta-Other Discrepancy Scores Correlated with Bias-Perceptions for Study 1 and Study 2

Trait	Study 1			Study 2		
	Self-other residual	Self-meta residual	Meta-other residual	Self-other residual	Self-meta residual	Meta-other residual
	<i>N</i> = 65	<i>N</i> = 65	<i>N</i> = 65	<i>N</i> = 65	<i>N</i> = 65	<i>N</i> = 65
Extraverted, enthusiastic	.32**	.30*	.15	.38*	.25*	.30*
Dependable, self-disciplined	.55**	.43**	.35**	.36**	.20	.30*
Open to new experiences, complex	.39**	.30*	.25*	.41*	.29*	.24 [†]
Sympathetic, warm	.55**	.45**	.36**	.45**	.46**	.17
Calm, emotionally stable	.64**	.62**	.21 [†]	.65**	.41**	.49**
Intelligent	.40**	.30*	.25*	.34*	.31*	.15
Funny	.54**	.52**	.20	.52**	.36**	.30*
Likeable	.30*	.25*	.18	.54**	.44**	.14
Physically attractive	.41**	.23 [†]	.34**	.53**	.49**	.26*
High status	.35**	.28*	.21 [†]	.46**	.33**	.34**

Note. [†] $p < .10$, * $p < .05$, ** $p < .001$. Self-other residuals are standardized residuals that were formed by regressing self-reports onto informant reports. Self-meta residuals are standardized residuals that were formed by regressing self-reports onto meta-perceptions. Meta-other residuals are standardized residuals that were formed by regressing meta-perceptions onto informant reports.

Table 4

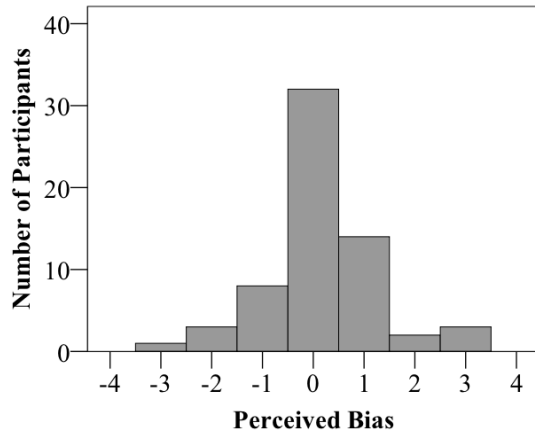
Means for Self-, Meta-, Other-, and Bias-Perceptions for Study 2

Trait	Self-perceptions		Meta-perceptions		Other-perceptions		Perceived bias	
	<i>N</i> = 65		<i>N</i> = 65		<i>N</i> = 65		<i>N</i> = 65	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Extraverted, enthusiastic	10.62	3.06	10.51	2.84	11.33	2.35	.22	.96
Dependable, self-disciplined	11.42	2.79	11.86	2.23	11.95	2.83	.32	1.13
Open to new experiences, complex	11.28	2.93	10.51	2.57	10.89	2.94	.43	1.03
Sympathetic, warm	11.48	3.04	11.47	2.51	11.67	2.68	.26	1.04
Calm, emotionally stable	10.37	3.69	10.60	2.70	10.48	3.46	.02	1.11
Intelligent	12.06	1.49	12.24	1.44	13.24	1.66	.03	1.09
Funny	10.83	2.71	11.27	2.16	12.03	2.23	.32	1.00
Likeable	11.97	2.15	12.49	1.51	13.42	2.12	.12	1.02
Physically attractive	10.48	2.36	11.16	1.65	11.31	2.83	-.03	1.13
High status	9.32	2.86	11.08	2.33	11.71	2.66	.00	.98

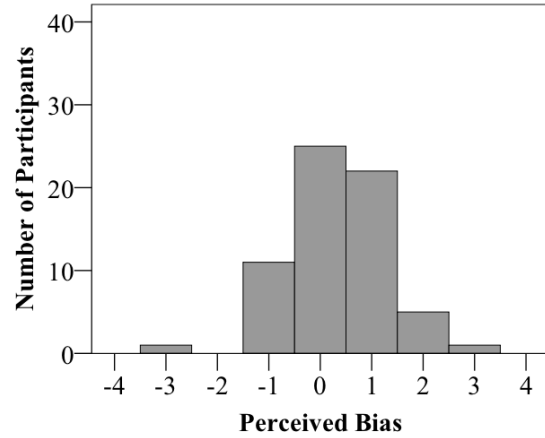
Note. Self-perceptions and aggregated other-perceptions were completed on 15-point scales and the perceived bias self-report measure was completed on a 9-point scale (from -4 to +4).

Figure 1. Histograms of Perceived Bias (Panels A and B) and Actual Bias (Panels C and D) for the Trait ‘Funny’ in Study 1 and Study 2

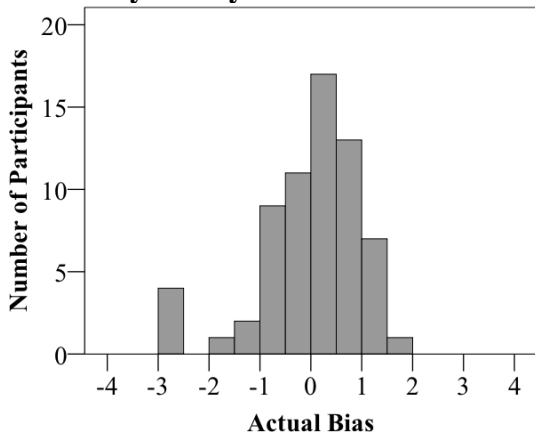
A. Funny: Study 1



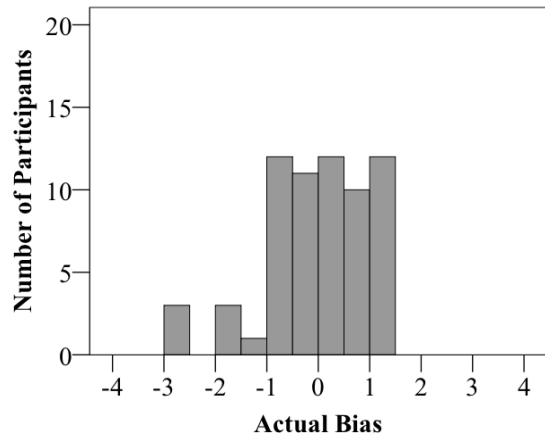
B. Funny: Study 2



C. Funny: Study 1



D. Funny: Study 2



Note. The histograms of perceived bias scores (Panels A and B) consist of participants’ responses on the 9-point perceived bias measure for the trait ‘funny’. The histograms of actual bias scores (Panels C and D) consist of standardized residuals created by regressing self-ratings on aggregated informant-ratings. Sample size varied slightly by trait and only included participants who had completed traditional self-perceptions and perceived bias reports, and had at least one informant respond.