SELF-OTHER BIASES IN JUDGMENTS OF AMBIGUOUS PERFORMANCE AND CORRESPONDING ABILITY

William M. P. KLEIN
University of Pittsburgh, USA

Justin T. BUCKINGHAM
Towson University, USA

People often are faced with ambiguous information about how they and others have performed in a domain. This ambiguity may stem from the need to collapse multiple pieces of performance information together into an overall evaluation, or perhaps from not having any available performance information. At other times, performance is easy to objectify, yet the inferences one can make from performance to native ability are themselves ambiguous. The presence of ambiguous performance information about self and others is likely to instigate two competing motives — a desire to see oneself in a positive light, and a goal of making rational and defensible judgments. In this paper, we review research on how people balance these two motives when faced with ambiguous performance information. We summarize evidence showing that distortions of ambiguous performance are more likely to occur in ratings of one’s own performance than in ratings of others’ performance, and that people willingly acknowledge poor comparative performance yet downplay the extent to which such performance unambiguously represents actual ability. These tendencies may be moderated by the identity of the social comparison target, individual differences, and the timing of feedback. Finally, we consider the functional implications of asymmetries in judgments of ambiguous performance.

How do people evaluate the performances and abilities of themselves and others? According to Festinger (1954), people evaluate themselves by comparing with others, and evidence suggests they do so on a daily basis (Wheeler & Miyake, 1992). Research also shows that people use themselves as a reference point for evaluating others (Dunning & Hayes, 1995). Thus, self and other evaluations, to some extent, involve social comparison. For Festinger, the goal of social comparison was accurate self-assessment. However, later work shows that people enter social comparisons with a vari-

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Correspondence concerning this article should be addressed to William Klein at Department of Psychology, 3105 Sennott Square, 210 South Bouquet Street, University of Pittsburgh, Pittsburgh, PA 15260, USA, E-mail: wmklein@pitt.edu or to Justin Buckingham at Department of Psychology, Towson University, 8000 York Road, Towson, MD 21252-0001, USA, E-mail: jbucking@towson.edu.
ety of disparate motives (Helgeson & Mickelson, 1995). One of those is to bolster a positive sense of self, or what many researchers have called "self-enhancement." This motive is inherent in Wills' (1981) downward comparison theory, where he argues that threats to the self may lead people to seek out social comparisons with individuals owning worse fates. Dunning (1999) has taken the argument one step further by arguing that people endeavor to engage in social comparison for the purpose of validating a positive sense of self.

Self-enhancement as a social comparison motive is evidenced by a wealth of literature showing that people rate themselves more positively than others in a number of domains such as academic ability (Goethals, Messick, & Allison, 1991), intelligence (Wylie, 1979), knowledge of social others (Pronin, Kruger, Savitsky, & Ross, 2001), and fairness (Messick, Bloom, Boldizar, & Samuelson, 1985). In this paper, we will refer to the tendency for people to view themselves more positively than others as "self-other bias." In one of the most comprehensive studies of self-other bias, Alicke (1985) had college students rate themselves and the average college student on a list of trait adjectives (e.g., friendly, sensitive, kind). For many traits, Alicke found a "better-than-average effect" in that most participants rated themselves higher than the average student even though in most cases this is statistically impossible.

People also have a more optimistic outlook regarding future events for themselves than for others. This was first demonstrated by Weinstein (1980), who had students rate the likelihood of positive and negative life events occurring to themselves in comparison with the average college student. Participants thought they were more likely than the average student to encounter positive life events (e.g., owning their own home) and less likely than the average student to encounter negative life events (e.g., having a drinking problem). Many studies have demonstrated this effect across a wide range of domains (see Helweg-Larsen & Shepperd, 2001, for review). Unrealistic optimism for future life events and the better-than-average effect show that people tend to view themselves in ways that maintain positive feelings about the self relative to others.

The degree of self-other bias is moderated by several factors (Helweg-Larsen & Shepperd, 2001). For example, people tend to be more self-serving on traits and events that are more desirable, such as kindness and sincerity (Alicke, 1985). Also, people show greater self-other bias on traits and events that are more controllable (Harris, 1996). For example, Weinstein (1980) found greater bias on more controllable negative events such as having a drinking problem or committing suicide than on less controllable negative events such as being a victim of mugging.

A third moderator of self-other bias, and the one on which we focus our
attention here, is the ambiguity of information upon which one makes a comparative judgment. For example, Dunning, Meyerowitz, & Holzberg (1989) had college students evaluate themselves in comparison to the average student on trait dimensions that had been pre-rated as high or low in ambiguity. They found that participants’ ratings of highly ambiguous traits (e.g., sophisticated) were significantly more favorable than their ratings of more concrete traits (e.g., mathematical). Furthermore, Dunning et al. found that supplying participants with specific criteria for evaluating an ambiguous trait reduced self-other bias. Goethals et al. (1991) also found that people hold greater self-other biases for general than for specific skills. Importantly, when traits are observable or verifiable (and therefore less ambiguous), people are less self-enhancing (Goethals et al., 1991; Gosling, John, Craik, & Robins, 1998).

Unlike Dunning et al., who manipulated the ambiguity of the trait dimension, Alicke, Klotsz, Breitenbecher, Yurak, & Vredenburg (1995) manipulated characteristics of the social comparison target. In most studies of self-other bias, participants are asked to rate themselves in comparison to the average person. Alicke et al. manipulated the ambiguity of the comparison target by having students rate themselves in comparison to the average student or a specific student. They found that participants showed less self-other bias when comparing with a specific, individuated person. Furthermore, by including conditions in which participants were exposed to the target via videotape, transcript, or live interaction, Alicke et al. demonstrated that greater personal contact with the target leads to less self-other bias.

The finding that people exhibit greater biases when verifiability is low and ambiguity is high is consistent with current models of self-enhancement. In this paper, we draw on Kunda’s (1990) observation that people continually balance two goals when making self-related judgments. On the one hand, they desire to hold positive views of themselves relative to others on many dimensions. However, people also desire to make reasoned judgments that they feel they could defend to a dispassionate observer. Consequently, people will arrive at the most favorable self-judgments when ambiguity is high and when verifiability is low. These are exactly the conditions under which most studies are conducted; in particular, participants rate themselves on somewhat ambiguous dimensions, and they do not expect their ratings to be verified with objective evidence. On the other hand, when people do not have such freedom, they are less self-serving (e.g., Shepperd, Ouellette, & Fernandez, 1996). Clearly, ambiguity and verifiability are tied together, because when ambiguity is low, people are likely to feel as if their judgments are more testable. For example, a student would find it easier to predict academic success (a general construct) than 4 A’s in the next semester (a much
more specific construct), given that the latter is easier to verify once the semester is over.

We thus use Kunda’s (1990) tension between ambiguity and verifiability as the conceptual basis in the current paper. Our focus here is on how people respond to performance information about themselves and others. When people make judgments about their own and others’ abilities, they are free to engage in self-serving distortions. However, when performance information is readily available, it may be more difficult to engage in such distortion and simultaneously satisfy the desire to appear rational and non-self-serving. If one has been clearly outperformed on a task, it is more difficult to assert superiority over the other performer(s). Yet even with performance information people can take advantage of ambiguity in two ways. First, if the performance information is itself ambiguous (for example, it may consist of several scores which must be culled together into an overall performance estimate), people may still come to see their own performance as superior to that of others. Second, there is inherent ambiguity in any performance with regard to how well it corresponds with actual ability. To the extent that comparative performance information is viewed as unfavorable, one can take advantage of this ambiguity by neglecting to make ability attributions for performance – instead basing ability judgments on more successful past performances.

It should be the case that performance information will diminish self-other asymmetries in ability evaluation, but less so when performance information is ambiguous and the performance/ability connection is concluded to be tenuous. As always, concerns about making unbiased judgments will also be present, preventing the recipient of seemingly ambiguous performance information from simply arriving at a favorable judgment willy-nilly. Instead, we should find that people take advantage of performance information carefully and strategically when judging how they have performed and determining how well the performance reflects their native abilities. Below we review research on how people respond to performance information for self and others, and discuss how the research aptly demonstrates tension between enhancement and accuracy motives.

Responses to Ambiguous Performance Feedback

Much of the feedback we receive in everyday life lacks the clarity of a single score on an experimental task. Employees may receive feedback on their performance in a variety of forms over an extended period of time, introducing the potential for bias when attempting to arrive at an overall judgment of how they have performed. Investors may incur both losses and
gains over a period of time, making it difficult to accurately assess the fitness of their investing strategies. For the same reasons, information about others to whom we might want to compare (such as fellow employees, and friends who also play the stock market) may possess a certain degree of ambiguity. There is also the possibility that performance information about ourselves or others (or both) may simply be unavailable, introducing another form of ambiguity. And even if performance is unambiguous (such as when people receive clear information about how they have performed) ambiguity may be introduced when attempting to make inferences about how well the performance represents actual ability.

In this section, then, we consider three related questions. First, when performance feedback about self and others is somewhat ambiguous, allowing room for distortion, are people more likely to be self-serving in their judgments of how well they have performed, and under what conditions? Second, when feedback is unavailable for self and/or others, does the implicit freedom to construct performance estimates elicit more self-serving judgments, and again, under what conditions? Third, when might people make the inferential leap from judgments of their performance to judgments of their native ability, and what role does ambiguity play in these inferences?

*Ambiguous Self and Other Performance Feedback*

Given the extent to which people use ambiguity strategically in order to arrive at self-serving conclusions, it stands to reason that performance feedback is more likely to be viewed in a self-serving manner when it is ambiguous. However, one must realize that, despite the inherent ambiguity in the feedback, it still may be possible for the information to be examined by a third party to arrive at an accurate evaluation. Thus, the motivation to make a defensible, unbiased judgment is also present when people try to evaluate their performance. The situation becomes even more complex when performance evaluation occurs in the context of a social comparison, where ambiguous (or unambiguous) information about performance about oneself and about others is present. Under what conditions, then, might we expect the most positively biased self-other differences in judgments of performance?

The easiest prediction might be that people will be most convinced that they have outperformed others when their own and others’ performances are both ambiguous. Indeed, in other domains people have been shown to take advantage of ambiguity on both sides of the self-other comparison. Distortion of others is commonly seen in research on false uniqueness and false consensus, where people underestimate the prevalence of positive
attributes and behaviors and overestimate the prevalence of negative attributes and behaviors (e.g., Campbell, 1986; Goethals et al., 1991). Distortion of self has received less attention, but is still seen in a number of studies. For example, in a study by Klein and Goethals (2002), college students upgraded their estimates of how many feats they could achieve (e.g., plan a good party, make the Dean’s List) in response to comparison feedback suggesting they were no more talented than their peers – presumably to maintain positive self-perceptions. In short, it seems reasonable to expect a combination of ambiguous self and ambiguous other performance feedback to elicit the most self-serving judgments.

However, one must remember that accuracy motives are also present here. When ambiguity is high on both sides of the self-other comparison, there is much room for error, an unpalatable situation when performance estimates can be verified. Instead, it may be the case that self-other biases are more likely when only one source of performance information (self or other) is ambiguous. Moreover, people usually have more information to work with when making self-judgments than when making other-judgments (because we know more about ourselves than about others), allowing people to feel as if they are making more defensible and rational judgments. Consistent with the above reasoning, Epley & Dunning (2000) found that biased self-other comparisons derive more from distorted positive beliefs about the self than from distorted negative beliefs about others (see also Rothman, Klein, & Weinstein, 1996). Importantly, anchoring on an unambiguous sense of where others stand – then drawing conclusions about where we stand – is the posited series of events in Festinger’s (1954) social comparison theory. We argue here that the same series of events occurs when attempting to arrive at a particular view of where we stand – namely a positive one. And, consistent with Festinger’s theory, people should be most likely to exhibit this pattern when comparing with similar others.

Klein (2001) conducted two studies to determine whether self-other biases would be most likely to emerge when participants possess ambiguous information about their own performance and unambiguous information about how similar others have performed. Participants were given their scores on 10 trials of a spelling task, and the scores were clustered very closely around the mean performance, or varied widely. Similarly, they were given average scores on the 10 trials ostensibly achieved by other students in the study, and again, the scores were or were not clustered around the mean. Participants then evaluated their performance relative to others. Importantly, mean performance was exactly the same for self and others. Thus, if participants estimated that they performed better (or worse) than others, their estimates were biased. Note that participants were not asked to rate their abilities – ratings which could be influenced by past success and other factors.
They were asked to estimate their specific performance, making it possible to determine whether they were biased.

The findings were consistent with predictions, and with our conceptual model. First, the overall levels of self-other differences were small; indeed, self ratings failed to exceed other ratings in most conditions – just as one would expect given that the performance estimates were verifiable. Second, when participants could easily determine others’ average performance on the ten trials (because the scores were highly clustered), and when they could easily distort their own average performance (because the scores were highly variable), they were most likely to be self-serving in their judgments of how well they compared with others (both on direct comparative judgments, and in separate judgments of how they and others performed – with greater bias in how well they had performed). So people only self-enhanced when only one source of performance information was ambiguous (namely their own), consistent with the idea that they were affected both by self-enhancement and accuracy motives.

Absence of Performance Feedback

The research discussed above addresses situations where people have performance information for themselves and others, performance that is or is not ambiguous. However, there are also many situations when performance information for self or others (or both) is simply unavailable, forcing the performer to construct performance estimates from very little information. In a sense, the absence of performance feedback represents another type of ambiguity. Consequently, one might make predictions very similar to those advanced above. In this case, the greatest bias can be expected when people know how others have performed, but do not know how they themselves have performed (allowing distortion of ambiguous self-performance).

In a test of this hypothesis, Klein (2001, Study 3) asked participants to complete a word task that ostensibly measured creativity, and upon completion, announced that the test would be scored by counting up the number of one-syllable words created on the task. Half of the participants were given their score, whereas the other half were not (and therefore were given latitude to construct distorted estimates). Moreover, half received the average participant’s score on the task, and half did not. Participants then evaluated their creative abilities. As predicted, ability ratings were highest when participants knew the average score but not their own. Thus, once again, ambiguity on the self end of a self-other comparison led to the most bias. In addition, Klein found that participants rated creativity as being most important to their self-definition under these conditions (see also Pilkington & Smith, 2000).
Similar findings were reported in a recent investigation by Carroll and Shepperd (2002). In this case, participants were asked not to estimate their past performance, but to predict future performance based on how they performed in the past. In Study 1, participants did or did not receive feedback about their performance (and about average performance) on five practice trials of a Stroop task. In the second study, students with a small or large amount of academic experience were given or not given the average GPA of other students from previous academic terms. Finally, in Study 3, graduate student instructors with low or high levels of teaching experience were given or not given the average instructor evaluation score achieved by instructors in two previous terms. Self-serving bias in predictions (about performance in the next trial of Study 1, GPA in Study 2, and instructor evaluations in Study 3) were most likely biased when people had low self knowledge, but high levels of knowledge about the average peer. These findings again highlight that ambiguity of self, but not others, leads to the most bias. More importantly, they show that people are not self-enhancing when ambiguity of both self and other is high – a situation where people are most concerned about making biased judgments.

Clearly, when social comparison is possible, one must take account of the ambiguity of both self and the comparison referent. In all of these studies, an additive model – whereby high ambiguity of both self and other leads to the most bias – failed to receive any support. Instead, bias was most apparent when other-performance was unambiguous, and when self-performance was unknown (and ambiguous). This set of conditions allows one to engage in self-serving distortion (by taking advantage of ambiguity) while also appearing to make a reasoned judgment (because other’s performance is unambiguous and not able to be distorted, and because more information is available regarding own ability).

Reacting to Unambiguous Performance Feedback

When people receive unambiguously negative feedback about their performance they can still employ a number of different strategies to maintain perceived competence. Here, people make use of the ambiguity of making trait inferences from individual behaviors. In particular, people seem to want to avoid attributing poor performance to a lack of ability. One way to avoid attributing performance to ability is to attribute one’s poor performance to impediments or bad luck (e.g., Snyder, Stephan, & Rosenfield, 1976; Stephan, Rosenfield, & Stephan, 1976). Situational attributions for failure may be bolstered by seeking consensus for poor performance: If many others failed, then one can avoid making a dispositional attribution for failure.
This phenomenon was demonstrated by Pyszczynski, Greenberg, and LaPrelle (1986), who gave participants success or failure feedback on a social sensitivity test. When participants failed, and when they had been led to believe that most other participants failed, they were interested in seeing significantly more of the other participants’ scores than when they were led to believe that most others had passed.

When unambiguously outperformed, people can avoid attributing the outperformance to their own low ability by exaggerating the ability of the outperformer (Alicke, LoSchiavo, Zerbst, & Zhang, 1997). This allows people to maintain favorable self-evaluations because if the outperformer’s ability is exceptionally high, then their own ability is not necessarily low. Alternatively, people can cope with unambiguous upward social comparisons by distancing themselves from the outperformer (Pleban & Tesser, 1981) or downgrading the importance of the ability (e.g., Gibbons, Benbow, & Gerrard, 1994; Tesser & Campbell, 1980). And if performance will occur again, people may provide a great deal of help to the comparison other – so that good performance can be attributed to the help, rather than to native ability (Gilbert & Silvera, 1996), or alternatively, go out of their way to be unhelpful to the other (Klein, in press).

In summary, a common theme among the strategies people use to maintain favorable self-views is that they all allow people to avoid inferring that their poor performance is due to low ability. In these cases, it is not performance itself that is ambiguous, but rather the extent to which one can make inferences about ability based on that performance. Once again, we might expect that people will take advantage of this ambiguity in order to arrive at favorable self-other comparisons. Recent research has made explicit the distinction between self-evaluations of specific performances and self-evaluations of more global abilities, allowing an examination of how ambiguity may play a role.

A recent set of studies by Buckingham and Alicke (in press) suggests that people selectively generalize from a specific performance to more global ability evaluations. Students in Studies 3 and 4 completed a test of lie detection ability while seated alone in a laboratory room or alongside another participant. After learning that they had performed above or below average on the test, participants rated their test performance and their lie detection ability. Overall, ratings of performance were significantly lower than ratings of lie detection ability. Furthermore, in the condition in which a co-actor was present (and presumably could negatively evaluate the performer), the performance feedback significantly affected ratings of test performance, but not ratings of lie detection ability. More specifically, whereas participants admitted lower performance after receiving worse than average feedback, their ratings of lie detection ability were just as favorable as if they had performed
better than average. Buckingham and Alicke theorized that the presence of a co-actor poses a threat that engages the self-protective strategy of not generalizing unfavorable performance feedback to more global self-evaluations. The ambiguity of ability ratings facilitates the use of this self-serving strategy. Presumably, participants getting this negative feedback were able to draw on their past experience and prior beliefs in order to deflect the negative implications of the feedback.

Buckingham and Alicke (in press) thus showed that a situational threat—the presence of another participant—leads to a failure to generalize unfavorable performance feedback to self-evaluations of ability. Sanbonmatsu, Harpster, Akimoto, and Moulin (1994) extended these findings to an individual difference by showing that dispositional self-esteem moderates generalizations from performance feedback. Participants with high and low self-esteem scores completed an anagram task and received positive (score in the 80th percentile), negative (score in the 20th percentile), or no feedback. Sanbonmatsu et al. found significant effects of positive and negative feedback on self-evaluations of anagram-solving ability regardless of self-esteem level. However, self-esteem moderated the effects of feedback on self-evaluations of general intelligence. High self-esteem but not low self-esteem participants perceived themselves to be more intelligent (relative to the no feedback control group) after receiving positive feedback about their anagram performance. In contrast, low self-esteem but not high self-esteem participants perceived themselves to be less intelligent after receiving negative feedback about their anagram performance. Thus, it appears that people are more likely to generalize from performance feedback that is consistent with their global self-conceptions. These findings also suggest that people with low self-esteem do not take advantage of ambiguous performance information in the ways discussed throughout this article, which is consistent with the finding that such individuals do not exhibit many of the self-serving comparative beliefs observed in the literature (Taylor & Brown, 1988), and instead self-verify their negative self-conceptions (La Ronde & Swann, 1993).

It is also interesting to note that both Sanbonmatsu et al. (Study 1, 1994) and Buckingham and Alicke (Study 2, in press) found that people are less likely to generalize feedback to global abilities when evaluating themselves than when evaluating others. Sanbonmatsu et al. gave actors positive, negative, or no feedback on a short-term memory task that was administered by another participant (the observer). Whereas the feedback significantly affected actors’ and observers’ ratings of the actor’s short-term memory ability, only observers generalized this feedback to ratings of general intelligence. In Buckingham and Alicke’s study, actors completed a test of lie detection ability while observers watched from the next room through a one-way mir-
ror. Both actors and observers were exposed to the actors’ score which was said to be better or worse than average. Similar to Sanbomatsu et al.’s findings, observers were more likely than actors to generalize feedback to more general abilities. Specifically, Buckingham and Alicke found that feedback significantly affected actors’ and observers’ ratings of the actor’s test performance, but only observers generalized to ratings of lie detection ability.

Actor-observer differences in generalization from feedback are consistent with the self-enhancement motive. As discussed earlier, people are motivated to preserve favorable self-evaluations, but they are also constrained by objective evidence. When rating a specific performance or a test-specific ability that is observable and verifiable, people are unlikely to self-enhance. However, when rating more global abilities, the ambiguity of such dimensions allows people more freedom to maintain their positive self-evaluations, perhaps by drawing on past successes and reducing the diagnostic implications of this one isolated failure. Given the breadth of self-knowledge, it is not surprising that self-ratings of ability are less affected by negative performance information than are observer ratings of ability.

A recent study by Smith LeBeau, Buckingham, Klein, Brenner, and Wheeler (2002) provides more direct evidence that the ambiguity of trait definitions is what allows people to maintain favorable self-evaluations of ability. Participants received unfavorable social comparison feedback on a test of social sensitivity and then rated their test performance and social sensitivity. Participants also listed the information they used to make their performance and ability ratings. Consistent with the previous evidence, Smith LeBeau et al. found that participants had more favorable self-evaluations of social sensitivity than performance. In addition, participants reported using different types of information to evaluate their performance versus ability. Specifically, 70% of participants reported using their test score and/or the feedback they received to evaluate their test performance, but only 26% of participants reported using this information to evaluate their social sensitivity. In contrast, 62% of participants reported using behavior in other situations (e.g., “how I act around my friends”) to evaluate their social sensitivity and only 9% reported using this information to evaluate their test performance. Furthermore, the type of information participants reported using was significantly correlated with their ratings. Reporting using the test score or feedback as a basis for self-evaluation was negatively related to self-evaluations of performance and ability. On the other hand, reporting using other behavior as a basis for self-evaluation was positively related to self-evaluations of ability. This study provides clear evidence that people are more likely to use idiosyncratic behavioral evidence when assessing global abilities rather than specific performances and that doing so allows them to maintain more favorable self-conceptions of ability.
Moderating Influences

The picture that emerges from the literature reviewed is one of a motivated tactician— one who attempts to arrive at self-favoring conclusions about relative performance and ability, but does so in a manner that might be considered rational and defensible. People take advantage of performance ambiguity in a careful and strategic manner that supports both the goals of enhancement and accuracy. Yet clearly the extent to which people do so must be moderated by situational and individual factors. We have noted already that people with low self-esteem may be less likely to take self-serving advantage of performance ambiguity. Below we consider three potential moderators of the tendencies reviewed here: the identity of the social comparison target, individual differences in self-evaluation, and the timing of the performance feedback.

Identity of Social Comparison Target

Social comparison targets vary in at least three important ways. Most obviously, social comparison targets differ in their direction (i.e., upward vs. downward). Social comparison targets also vary in physical and psychological closeness. As noted by Alicke et al. (1995), physical proximity is negatively correlated with ambiguity. Targets who are individuated and proximal are less ambiguous than targets such as the generic “average student” and therefore allow less room for self-enhancing social comparisons (Alicke et al., 1995). Although friends are often physically close, comparisons with psychologically close others such as teammates, friends, or similar others often yield less self-enhancing judgments (e.g., VanYperen, 1992). In this section, we discuss evidence for the importance of physical and psychological closeness when people receive feedback about their performance and ability.

When people find out they are better or worse than specific others or the average performer, the typical result is a contrast effect. People rate themselves more favorably when they are better than others and less favorably when they are worse than others. Buckingham and Alicke’s Studies 1 and 2 (in press), however, are among the first to directly compare the relative impact of individual social comparison versus aggregate social comparison (i.e., the average). Logically, aggregate social comparison should have greater impact on people’s self-evaluations than individual social comparison because the former is based on a larger sample. However, the ambiguity of the average may afford people greater flexibility in construing feedback in a self-serving way. That is, it would be difficult to distort or ignore the fact
that one has been directly outperformed by a specific individual, but it is easier to neglect or distort the relevance of information indicating that one is below average. In Buckingham and Alicke’s studies, pairs of participants took a test of lie detection ability and were informed that they had performed better or worse than their partner and better or worse than the average performer. Interestingly, ratings of lie detection ability were significantly affected by individual social comparison but not aggregate social comparison. That is, participants relied on comparison to the person sitting next to them rather than more diagnostic information about the average to evaluate their abilities.

A plausible explanation for the above finding is that the vivid individual comparison information simply overshadows the pallid statistical average. However, Buckingham and Alicke found no significant effect of aggregate comparison on self-evaluations of ability even in control conditions in which the average was the only comparative feedback given. This finding seems at first curious especially given that Klein (1997, in press), using similar procedures, found significant effects of aggregate comparison on self-evaluations. The discrepancy between Klein’s and Buckingham and Alicke’s findings is most likely due to the fact that Klein’s participants were run in individual rooms whereas Buckingham and Alicke’s always participated in pairs. In fact, Buckingham and Alicke supported this explanation by showing that people use the average to evaluate their abilities when they are alone, but not when a co-actor is present. Thus, at least in this set of studies, it was the presence of an individual social comparison target rather than information about this person’s performance that led people to minimize the impact of aggregate data. As mentioned earlier, the presence of a co-actor is thought to be a threat because performing and receiving feedback in the presence of others involves the possibility of embarrassment. This threat may be the cause of participants’ neglect of aggregate data, particularly when those data cast the self in an unfavorable light. Buckingham and Alicke’s studies show that when an individual comparison target is physically close, the effects of aggregate social comparison information can be minimized.

Psychological closeness to the target is also an important moderator of the effects of social comparison feedback on self-evaluations. Tesser (1988) has demonstrated that the effects of being outperformed depend on the closeness of the target and the self-relevance of the dimension on which one is comparing. When people are outperformed by friends on self-relevant tasks or by strangers on any task, they feel worse as a result of upward social comparison. However, when people are outperformed by friends on non-self-relevant tasks, they feel better as a result of reflecting on their friend’s positive qualities (e.g., Tesser, Millar, & Moore, 1988). Friendship does not appear to be necessary to produce the positive effects of being outperformed. Typically,
women feel less attractive after viewing images of highly attractive females (Cash, Cash, & Butters, 1983), but Brown, Novick, Lord, & Richards (1992) found that telling women they shared the same birthday as an attractive woman in a photograph was sufficient to produce an assimilation effect. That is, in the birthday-matched condition, women felt more attractive when the woman in the photograph was attractive than when she was unattractive. Similar effects have been found when people compare to ingroup versus outgroup targets (e.g., Blanton, Christie, & Dye, 2002; Brewer & Weber, 1994). Being outperformed by someone who shares the same group identification as oneself can be inspiring rather than detrimental.

**Individual Differences**

Clearly, the biases discussed in this paper are bound to vary in magnitude across individuals based on meaningful psychological differences. One important difference may be in a person’s general orientation toward social comparison information. Some people seek out and value such information more than others, and such differences can be captured by instruments such as the Iowa-Netherlands Comparison Orientation Measure (INCOM, Gibbons & Buunk, 1999). Might it be the case that ambiguity of other-performance information is less important to people low in social comparison orientation? Do such individuals search for self-enhancement opportunities other than social comparison? And if they do not pay as much attention to the performance of others, are they more attuned to other types of standards (which themselves may vary in ambiguity)?

Of course, social comparison tendencies vary not only across individuals but also across situations. Importantly, the motive behind those comparisons can vary a great deal (Helgeson & Mickelson, 1995). Ambiguous self-performance information in a novel domain, one where prior beliefs are absent and ego relevance is low, is unlikely to be distorted. In these cases, people are still likely to prefer unambiguous information about how others have performed, but for the purpose of disambiguating their own performance (as suggested by Festinger’s [1954] theory). One could also argue that highly ego-relevant domains will engage accurate self-evaluation motives rather than self-enhancement motives. If a domain is highly ego-relevant, it is likely that failure in the domain will be highly consequential, driving the performer to obtain unbiased information and to make accurate self-judgments. No studies have manipulated the ambiguity of self- and other-performance information in a design where the importance of the performance domain is also varied, and such a design would be able to address these questions directly.

Another individual difference that has received attention is the tendency
to hold narcissistic views. People high in narcissism are particularly likely to self-enhance after receiving performance feedback (Gosling, John, Craik, & Robins, 1998; John & Robins, 1994), so we might expect them to exhibit higher levels of the tendencies reviewed here. For example, when receiving ambiguous feedback about their own performance and unambiguous feedback about that of others, narcissists may be particularly self-serving. However, one study shows that narcissists are adverse to self-enhancement when doing so means comparing favorably with another person (Campbell, Reeder, Sedikides, & Elliot, 2000), suggesting that they may only self-enhance relative to others when the comparison target is a faceless, deindividuated individual such as “the average person.” This idea has not yet been tested because most studies do not vary the comparison target.

A related individual difference concerns depressive tendencies. Depressed people are likely to focus on the negative when faced with ambiguous self-related information. For example, depressed people told that their performance puts them in the 70th percentile might be more likely than non-depressed participants to focus on the 30% of individuals who performed better (e.g., McFarland & Miller, 1994). Thus, when possessing ambiguous social comparison information, it is likely that depressed individuals will exhibit biases in a negative direction. The same could be said for people who are shy or socially anxious (e.g., Cheek & Melchoir, 1990).

Temporal Considerations

In most of the studies reported here, most of which are laboratory experiments, timing of feedback is held constant. Participants receive feedback about both self and others at the same time, and must assess their relative performance immediately after that. However, there are a number of temporal variations that must be considered when making predictions about when ambiguous feedback will engender self-other biases. For example, if self-performance information is received first, and a delay ensues before other-performance is learned, participants are then faced with the prospect of evaluating their performance without having a standard with which to compare. The resulting fear of making wildly inaccurate estimates may distill any inclination toward self-enhancement.

Self-enhancement may also be reduced when other-performance is learned well before information about self-performance is made available. Schul and Shiff (1995) found that people were more satisfied with success (and less satisfied with failure) if they were given a performance standard following performance than if they knew the standard in advance. Given that performance by others can be defined as one type of standard, the implica-
tion of these findings is that knowing how well others have already performed may be less preferable (at least in terms of arriving at self-favoring conclusions) than finding out this information at the same time as one's own performance.

Finally, one must acknowledge differences between estimates of how one has performed in the past, and estimates of how one might perform in the future. The studies by Klein (2001) and by Carroll and Shepperd (2002) collectively show that predictions and postdictions are both likely to be more biased when people have ambiguous performance information about the self (and clear information about others), but the magnitude of bias is likely to differ because postdictions are usually more verifiable. Moreover, the magnitude of bias (whether for prediction or postdiction) is likely to vary depending on the temporal proximity of performance. Several studies show that people are less confident as proximity increases (either forward or backward in time toward the time of performance), suggesting that self-other differences may abate under such conditions (e.g., Shepperd et al., 1996). It is too early to tell whether these proximity effects would emerge under conditions where performance feedback is (or is expected to be) ambiguous.

Implications

The pattern of findings reviewed in this paper holds implications for at least two major theories in social psychology: social comparison theory (Festinger, 1954), and positive illusions theory (Taylor & Brown, 1988). We discuss each in turn.

Social Comparison Theory

We believe that Festinger had it right when identifying the conditions that inspire social comparison processes – namely, when people have unambiguous information about (similar) others' standing on a dimension, and ambiguous (or perhaps no) information about own standing on this dimension. However, in that theory, the principal goal was posited to be accurate self-evaluation. Later work has demonstrated that self-enhancement is also a common goal in social comparison, and we reviewed work here suggesting that self-enhancement is most likely under the very same conditions – unambiguous information about others, and ambiguous information about the self. Based on Kunda's (1990) conceptual framework, we have argued that people often desire to achieve two motives – making accurate defensible evaluations, and yet making evaluations that paint the self in a favorable light.
Festinger also focused more on ability evaluation, and had less to say about the important difference between performance evaluation and ability evaluation. Work reviewed here shows that when people receive performance information about self and others, their performance judgments may differ markedly from their ability judgments. In particular, individuals may be very willing to admit poor relative performance when faced with incontroversible evidence about how they and others performed, yet will be less willing to draw compatible conclusions about their native abilities particularly after a poor performance.

Importantly, the work discussed in this paper focuses almost exclusively on only one pole of the self-other comparison, in that we address work looking at how people make judgments about their own performance and ability vis-à-vis that of others. Such an approach reflects the focus on the self in most of the available literature, yet clearly we need to know more about judgments of others' performances and abilities (in the context of what is known about the self). For example, are judgments of others more negative, or perhaps more accurate? Some evidence suggests neither, demonstrating instead a positivity bias when rating others (Sears, 1983). A wealth of research on attribution speaks to our impressions of others' abilities and dispositions, but only recently have such judgments been linked back to self-evaluations (e.g., Dunning, 1999). When both poles of the self-other comparison are well-understood, social comparison theory will greatly benefit. Indeed, Festinger (1954) anticipated the importance of focusing on both self and other in social comparison by noting the role that comparison plays in groups, where impressions of others influence decision-making, group membership, and interpersonal relations.

Positive Illusions Theory

Discovering that people are sometimes biased in their comparative performance evaluations leads naturally to the question of whether such biases are associated with adaptive functioning. Taylor and Brown (1988) have argued that illusory beliefs about one's abilities, future, and control over important outcomes elicit positive mental health markers such as the ability to achieve life goals and care for others. This leads to the question of whether the strategic use of ambiguity (whether it be distorting ambiguous performance information or inferring ability from unambiguous performance in a self-favoring manner) might be said to be psychologically adaptive. On the one hand, seeing one's relative performances and abilities as better than they really are would seem to be counterproductive in that they might set up the person for future failure. For example, Robins and Beer
(2001) found that illusory self-enhancement of academic performance and ability can be associated with decreasing levels of self-esteem as well as increasing disengagement from academic pursuits. Klein and Kunda (1994) showed that when people overestimate their abilities in a domain (which is likely to happen when performance is continually overestimated), they are likely to make risky and counterproductive decisions that ultimately increase the chances of failure in that domain. Accurate performance assessment is likely to dissuade people from exploring careers requiring skills they may find difficult to develop.

However, it is also possible that these illusions can promote the very behaviors that will elicit better performance in the future. For example, believing that one has outperformed others may increase the relevance of the performance domain to the person's self-concept (Tesser, 1988), thereby encouraging greater attempts to improve future performance to achieve even higher standards. When people learn that they have been outperformed, they experience frustration and ultimately worse performance (Seta, Seta, & Donaldson, 1991); conversely, feeling as if one has outperformed others should promote positive feelings and greater motivation. A recent treatment of the positive illusions statement suggests that such illusions can become self-fulfilling prophecies—people expect to do well, and perhaps better than before, and this motivates them to try harder (e.g., Armor & Taylor, 1998; Buehler, Griffin, & Ross, 1994). In short, then, positive self-other evaluations might be functional.

Perhaps a reconciliation of these two points of view rests on the acknowledgment that people are more likely to engage in illusory self-enhancement when the stakes are low—that is, when verifiability, accountability, and importance are relatively low. In that case, positive feelings may be sustained without consequence. However, when accuracy concerns are as important as self-enhancement concerns, people may be more even-handed and may in turn engage in largely productive behavior. The literature discussed here is consistent with such a position, one that has also been taken in other evaluations of the positive illusions thesis (e.g., Armor & Taylor, 1998).

Conclusion

The body of work reviewed here is consistent with the growing recognition in social comparison research and in other areas of psychology that people often endeavor to maintain positive self-views. Many studies show that ambiguity, defined in various different ways, amplifies the extent to which people arrive at self-bolstering conclusions. The work on self-other dispari-
ties in performance judgment, however, demonstrates that the story may be more complex. The important nuances — especially the ambiguity of self information vis-à-vis ambiguity of information about others, and performance evaluation vis-à-vis ability evaluation — show that self-enhancement motives do not operate indiscriminately, and that they operate hand-in-hand with other motives such as the desire to make accurate, defensible judgments. Future work will be helpful in identifying exactly how people manage sometimes competing motives successfully in order to maintain positive self-conceptions while at the same time working on those performance domains that matter to them most.

References


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