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Do People Know How Others View Them? An Empirical and Theoretical Account

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Meta-accuracy is the extent to which people know how others see them. Following D. A. Kenny and L. Albright (1987), we show how the social relations model (SRM) can be used to investigate meta-accuracy. The results from 8 SRM studies involving 569 subjects are reviewed. We argue that people determine how others view them not from the feedback that they receive from others but from their own self-perceptions. Consistent with this argument are the findings that (a) people overestimate the degree of consistency in the ways that different targets view them and (b) people are better at understanding how others generally view them than how they are uniquely viewed by specific individuals.

What do others think of us? How do we know? When we form a judgment of what others think of us, are we likely to be right? Questions such as these have interested scholars from many disciplines, and in this article we attempt to address them. We begin by reviewing previous research evidence and theoretical positions. Next, we describe the design characteristics necessary to address the question of how people know how others view them. We review eight recent studies that meet those requirements. From those results, we draw several counterintuitive conclusions about the process of discerning what people think of each other.

Theoretical Overview

The View From Different Disciplines

The question of whether people know how others view them has held a position of prominence in many disciplines.

Sociology. The symbolic interactionist position (Cooley, 1902; Mead, 1934) states that people's self-perceptions are a product of their perceptions of how others view them (Shrauger & Schoeneman, 1979). Cooley's (1902) "looking-glass self" describes the process whereby people look into the eyes and minds of others and imagine how they are viewed; the judgment that people embrace engenders emotional reactions, such as feelings of pride or mortification. The symbolic interactionists assume that people's perceptions of how they are viewed by others (which they call "reflected appraisals") are usually accurate (Kinch, 1963). It is one of the purposes of this review to evaluate that assumption empirically.

In 1979, Shrauger and Schoeneman published a review of research on the symbolic interactionist perspective that has since been widely cited. They were interested primarily in the self-concept: Is it related to other people's impressions and is it related to perceptions of other people's impressions? The question of the relationship between perceptions of others' impressions and others' actual impressions (i.e., the question of accuracy) was of interest only as it clarified self-processes. In this review, it is the accuracy question that is central. We want to know whether people's beliefs about how others view them correspond to the ways in which others really do view them. The relationships to self-perceptions of people's actual views of one another, and the individual's perceptions of their views, are important only insofar as they illuminate the process or the product of trying to discern how people view one another.

Clinical psychology. In clinical psychology, the question of whether people know how others view them has been deemed important partly because of the assumption that often people do not know (e.g., Smith, 1966). For example, are depressed people needlessly pessimistic in their beliefs about what others think of them (e.g., Beck, 1967) or are they accurate? At the heart of this debate about "depressive realism" (e.g., Alloy & Abramson, 1988; Campbell & Fehr, 1990; Dunning & Story, 1991; Lewinsohn, Mischel, Chaplin, & Barton, 1980) are issues we address in this review: How should researchers measure accuracy and how do laypeople attain it?

Personality psychology. Socially anxious people, who strongly wish to convey particular impressions of themselves to others but are insecure about their ability to do so (e.g., Leary, 1983; Schlenker & Leary, 1982), think that others take an especially dim view of them even in experimental research in which the feedback they receive is identical to that received by individuals who are not socially anxious (Pozo, Carver, Wellens, &

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Scheier, 1991). People high in need for approval are also highly motivated to be viewed favorably by others (Crowne & Marlowe, 1964) and describe themselves in glowing terms. Such self-descriptions, however, may be more defensive than accurate. Both of these individual differences may be important predictors of the ways in which people think they are viewed by others.

Social psychology. The question of whether people know how they are viewed by others has been central to at least two traditions: the accuracy of person perception and self-presentation. Self-presentational perspectives assume that people often try to convey particular impressions of themselves to others (e.g., Baumeister, 1982; DePaulo, 1992; Goffman, 1959; E. E. Jones, 1964; Schlenker, 1980, 1985; Snyder, 1979; Tedeschi, 1981). The success of these attempts may depend on the skillful monitoring of the reactions of others. If it appears that others are forming an impression other than the desired one, then self-presentational efforts and strategies can be modified accordingly.

Much of the work in the accuracy tradition (e.g., Funder, 1987; E. E. Jones, 1990; Kenny & Albright, 1987) has been concerned with other-perceptions, which are the judgments people make about the attributes of other people. A key question was whether people could predict how others described themselves (e.g., does Jack know how Jill sees herself?). However, questions about *metaperceptions* (Laing, Phillipson, & Lee, 1966)—judgments of how people view one another—have been important too, and they are the focus of our review.

When Are Metaperceptions Accurate?

When people believe that their outcomes will be determined by another person's impression of them, they should be highly motivated to discern, monitor, and control that impression. People of low status or power, then, may be more invested in metaperceiving their high-status interaction partners than vice versa (e.g., Snodgrass, 1985, 1992). Motivation alone, however, does not guarantee that metaperceptions will be accurate (Kruglanski, 1989). To learn something about a person's view of another person by looking into his or her eyes, there must be something there that is not misleading and not so subtle that it is likely to be missed. Are there valid cues to others' impressions in everyday face-to-face social interactions? Are people likely to be able to read those cues?

Studies of nonverbal communication, typically involving standardized stimulus materials, clearly indicate that people *can* understand nonverbal cues under particular circumstances (e.g., Buck, 1984; DePaulo & Rosenthal, 1982; Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979; Sternberg & Smith, 1985). However, the kinds of nonverbal behaviors that occur in everyday social life are typically much less clear than those that constitute standardized stimulus materials. Furthermore, many cues are available in social interactions other than nonverbal ones, and interactants have a variety of tasks to contend with other than monitoring each other's nonverbal behaviors (e.g., planning their own performances). This cognitive busyness fosters a bit of naïveté, and so people with many tasks may be especially likely to take what they hear at face value (Gilbert, 1991).

Moreover, people are probably only rarely entirely straightforward about how they feel about each other. In addition to instances of outright deception, there is also much omission. People are clearly reluctant to convey bad news (Swann, Stein-Seroussi, & McNulty, 1992; Tesser & Rosen, 1975), and they are even reluctant to convey good news when it is in the form of explicit evaluations of each other's personalities (e.g., Blumberg, 1972; Felson, 1980).

The information that is available to people, then, about what others think of them may not be all that plentiful or clear. Even if people cared deeply about discerning others' *true* impressions of them, the task could be challenging (DePaulo, Stone, & Lassiter, 1985). However, people may more often wish to see in the mirror of others' eyes a reflection that makes them feel good about themselves or one that confirms what they already feel is true (e.g., Swann, 1990).

The question of interest is whether people attend to, and process insightfully and evenhandedly, information about how others view them that is available during ongoing social interactions. Because natural and spontaneous interactions are of interest, the strategy of experimentally manipulating the cues that are available to people to determine how they use such cues (e.g., DePaulo, Rosenthal, Eisenstat, Rogers, & Finkelstein, 1978) is not entirely serviceable in the initial stages of this research. Instead, the evidence comes from more indirect patterns of findings. For example, if people are attending carefully to cues from others about the kinds of impressions that they are conveying, then they are likely to think that they convey different impressions to different people, particularly if they interact with each of those different people separately and at different times. They may also notice that particular people form unique impressions of them. For instance, Jack may notice that Jill sees him differently from how she sees anyone else and that he is seen differently by Jill from how he is seen by anyone else. Furthermore, if people are attending faithfully to other people's cues, then their metaperceptions of how others view them should match how others say they really do view them. That is, their metaperceptions should be accurate. In addition, they should be accurate not just in the general sense (e.g., popular people know they are popular) but also in the more differentiated sense (i.e., they know which particular people find them particularly lovable).

Processes that occur on-line during social interactions are especially interesting because they are the raw data of social life. However, people interested in how others view them sometimes have other kinds of information available to them too. For example, there are third-person communications: John can tell Jack how much Jill likes him (Felson, 1980). Alternatively, if John does not volunteer this information, Jack can send Frank out as a "spy" to try to find out what Jill thinks of Jack (Felson, 1980). Of course, there are many cues available from the partners themselves. Jill, for instance, may or may not ask Jack to take a walk up the hill with her or tumble after him if he falls down the hill.

Metaperception as Self-Perception

People can, without looking at the behaviors or the reactions of others, examine their own behavior and imagine how the

other person may view it. This is akin to the self-perception process (Bem, 1967), whereby perceivers observe their overt behavior in order to infer their own internal states, such as their opinions and preferences. In the version that we are proposing here, people observe their own behavior in order to discern what others may be thinking of them.

As Felson (1981, 1992) has noted, the process could be more complicated than that. People may observe their own behavior and form their own judgments (self-perceptions) of that behavior. They may then assume that others would judge their behavior as they do. Instead of inferring directly from their own behavior how others view them (as in the simple model), they form their own impressions first, then assume that other people's impressions would be similar. We consider both models, as well as a model in which self-perceptions are based solely on self-theories, in the light of the data that we review.

Research Evidence

The Social Relations Model (SRM)

To learn whether people know what kinds of impressions they make on others, and how they make these determinations, we need to examine metaperception processes as they occur across a variety of interaction partners. For example, if one looks only at Jack and Jill and finds that Jack *can* tell how Jill perceives him, one cannot know on that basis alone *why* Jack's metaperception was similar to Jill's actual perception. Perhaps Jack thinks that he always makes the same impression (i.e., his metaperception may have nothing to do with Jill in particular). Perhaps Jill is the sort of person who makes everyone feel loved, in which case Jack's feeling of being loved may have nothing to do with him in particular. Or perhaps there really is something special about the particular way that Jill perceives Jack, and Jack does indeed know this.

An important feature of the research design, then, is that each person interacts with and is judged by multiple partners. Each person serves as both subject and partner; thus, the interactions are characterized by the mutuality and interdependence that typifies social life. These kinds of studies are extremely labor intensive, and the social relations analysis that is so well suited to this type of investigation has only recently been developed (Kenny & La Voie, 1984). Therefore, this article is a review that could not have been written just a few years ago.

We use the SRM (Kenny, 1988; Kenny & La Voie, 1984) to analyze perceptions and metaperceptions. Like Cronbach's (1955) model of person perception, the SRM partitions a rating into components. Our example is one in which Jack and Jill interact. Jill forms an impression of Jack, and Jack then attempts to infer Jill's impression of him. According to the SRM, Jill's impression of Jack (which is an *other-perception* of him, not a metaperception) is a function of the following three components: (a) actor—how Jill views people in general; (b) partner—how Jack is generally viewed by others; and (c) relationship—how Jill uniquely views Jack. The *metaperception* of how Jack thinks that Jill views him can be correspondingly decomposed as follows: (d) actor—how Jack thinks others see him; (e) partner—how others think that Jill views people; and (f) relationship—how Jack thinks Jill uniquely views him.

Within the SRM, there are two different types of meta-accuracy. *Generalized meta-accuracy* (referred to as "individual accuracy" in Kenny & Albright, 1987, and DePaulo, Kenny, Hoover, Webb, & Oliver, 1987) describes people's ability to understand how they are generally viewed by others. It is their sensitivity to the ways in which they are regarded by a group of people as a whole, apart from the ways in which they may be viewed differently by different members of the group. Generalized accuracy is the correlation of the partner effect in the impression or other-perception (e.g., how Jack is viewed by others) with the actor effect of the metaperception (e.g., how Jack thinks that he is viewed by others). Thus, it is the correlation between Components b and d in the previous paragraph. Generalized meta-accuracy is then a correlation across persons.

Dyadic meta-accuracy describes people's ability to know how they are differentially regarded by particular other people. Dyadic accuracy implies that people can tell which particular other people have especially favorable or unfavorable impressions of them. It is the correlation between the relationship effects of both variables or the correlation between Components c and f. Therefore, dyadic accuracy is a correlation across relationships. In studies in which there were multiple replications (i.e., the judge was rated by the target on two or more variables or at two or more times), it is possible to separate an unstable or time-specific effect from a stable relationship effect. For those studies, we present the effect attributable to relationship with the unstable effect removed ("dyadic adjusted").

The SRM is a two-way (actor and partner) random-effects analysis of variance model. However, its estimation requires specialized approaches because of missing data (people may not rate themselves) and nonindependence (how Jack sees Jill may be related to how Jill sees Jack).

The Studies

The Appendix contains a brief description of the eight studies that we review. In two of the studies (Anderson, 1984; Malloy & Albright, 1990), same-sex subjects were living together and therefore already knew each other. In the Anderson (1984) study, described in Kenny and Albright (1987), the subjects were members of five fraternities or sororities. They rank ordered each other on the four traits listed in the Appendix and estimated the rankings that they received from others. The subjects in Malloy and Albright (1990) lived in 4-person groups in dormitories and on the average had known each other for 14 months. Within each of the 21 groups, subjects rated each other on five traits and postdicted the ratings that they would receive on those traits.

The initially unacquainted college students in the Curry and Emerson (1970) study lived in six groups of 8-person clusters. The students stated on 100-point scales how much they liked their living mates and predicted how much they were liked by them at five time points: 1 week, 2 weeks, 4 weeks, 6 weeks, and 8 weeks. These data were analyzed by SRM analyses in Kenny and Nasby (1980) and Kenny and La Voie (1982).

Three of the eight studies (DePaulo et al., 1987; Oliver, 1988; Reno & Kenny, 1992) involved one-on-one interactions of sub-

jects who were unacquainted with each other. In two of these studies (DePaulo et al., 1987; Reno & Kenny, 1992), the subjects were all women. In DePaulo et al. (1987), each woman interacted with 3 other women, one at a time, on four different tasks: a teaching task, a competitive task, a cooperative task, and a discussion task in which the subjects had to come to an agreement with each other. After each interaction, they reported their impressions of the person's likability and competence, and their metaperceptions of how the other person perceived them on the same dimensions. In the analyses in this article, we did not control for task effects. In Reno and Kenny (1992), each woman attempted to get acquainted with each of 3, 4, or 5 partners during 10-min interactions. Afterward, they recorded their perceptions and metaperceptions of five attributes.

In the Oliver (1988) study, subjects participated in mock dates in which they imagined that they were at a restaurant. There were 14 groups of 4 subjects, each consisting of 2 men and 2 women. Each man interacted with each woman, so there was a total of four interactions per group. Afterward, the participants rated themselves and their partner on semantic differential items and guessed how their partner rated them. From factor analyses, two factors emerged: an Activity factor (dominant, confident, outgoing, and imaginative) and an Evaluation factor (liked, mature, intelligent, friendly, logical, and sincere).

One of the studies (Malloy & Janowski, 1992) involved group interactions. Sixty-eight subjects participated in 1 of 10 mixed-sex groups ranging in size from 6 to 8 members. During their 20-min interactions, they answered four risky-shift items. After the interactions, the members rated each other and predicted how the others would rate them on leadership and quality of ideas.

Because Kenny and DePaulo's (1990) study is unpublished, we detail its procedure. Subjects were 48 unacquainted undergraduates who signed up for a study described as an investigation of the interviewing procedures used in selecting resident advisors. Subjects participated in groups of 6 (3 men and 3 women) in 2-hr sessions. In the first round of interviews, the 3 men (or women) were the interviewers and the 3 women (or men) were the applicants. Applicants were interviewed one at a time by a panel of three interviewers. Each applicant was interviewed by the panel three times. During each time period, interviewers asked questions about a different topic. Interviewers were assigned specific questions to ask the applicants about each topic. Each interviewer, in turn, asked the applicant a question about the topic. After the applicant answered the questions posed by each of the three interviewers, the applicant left the room, and the applicant and interviewers completed the measures (described next). Subsequently, the second applicant, then the third, entered the room and was asked the questions on the first topic. After all three applicants had answered the interviewers' questions about the first topic, the procedure was repeated for the second and third topics. The applicants and interviewers then switched roles.

After answering all three questions on a given topic, applicants reported their impressions of each of the three interviewers (other-perceptions), their metaperceptions of how they believed each of the three interviewers perceived them, and their self-perceptions. All of these perceptions were reported on 20-point scales selected to represent the two basic dimensions of person perception (Rosenberg & Sedlak, 1972): social good–bad (friendly, sincere, and liking) and intellectual good–bad (dominant, confident, and intelligent). Analogously, the interviewers reported their impressions of each of the three applicants, their metaperceptions of how the applicants perceived them, and their self-perceptions on the same scales.

For each study, we separated the measures into types: trait and affect (usually liking and disliking). If there were multiple measures, we averaged the correlations.

Variance Partitioning.

Traits. When Jill sees Jack as good-natured and smart, to what extent would she do so because she tends to see everyone as good-natured and smart? These actor effects in perceptions of traits are presented in Table 1, and they are substantial. Across studies, subjects seemed to view others in consistent ways (e.g., they saw all people as good-natured and smart). There was also substantial actor variance across studies in metaperceptions. That is, subjects thought they made a consistent impression on all of the targets (e.g., they thought that the targets generally viewed them as good-natured and smart).

Comparing actor variances, there was a strong tendency for actor variances to be much larger for metaperceptions than for trait perceptions. In all seven of the possible comparisons, the actor variance was larger for metaperception than for the direct or trait perception. On average, across the studies, 29% more actor variance was attributable to the actor for metaperception than for trait perceptions, and the mean level of actor variance for metaperceptions was 55%. These results indicate that subjects tended to see others in certain consistent ways (e.g., as generally good-natured or smart). However, there was even more consistency in the ways that they thought they were viewed by other people (e.g., they might have thought that they generally conveyed an impression of kindness or competence to the many different kinds of people with whom they interacted). This belief existed across all levels of acquaintance. It was true in studies in which Jack and Jill and Jack's many other friends had lived together for weeks or even months, and it was also true for the studies in which Jack and each of his Jills had scaled the hill for the first time.

If Jack thinks that Jill sees him as good-natured and smart, could that be in part attributable to the fact that Jill seems to see everyone that way? Interestingly, there was little partner variance in metaperceptions. The median proportion across studies was only .03. Only the Oliver (1988) study showed evidence of partner variance. The failure to find partner variance in metaperceptions indicates that there was no consistent tendency for certain targets to be seen as harsh evaluators and others as lenient. However, we know from the substantial actor effects in trait perceptions that certain people really are consistently harsh or lenient in their appraisals of others. In contrast to the metaperception data, there *was* evidence of partner variance in other-perceptions. This indicates that particular targets were viewed in consistent ways by different perceivers.

Is there something special about the way that Jill views Jack, something unique to her perceptions of Jack? Is there something special about the way Jack thinks that he is viewed by Jill? The answers to these questions can be found in the relationship

Table 1
Variance Partitioning of Trait Studies

Study and variable	Actor	Partner	Relat	Error	Rel plus error
Anderson (1984)					
Trait		.33			.67
Metaperception	.40	.03			.57
DePaulo et al. (1987)					
Trait	.37	.07	.18	.38	
Metaperception	.54	.03	.09	.34	
Kenny & DePaulo (1990)					
Applicant					
Trait	.19	.35	.15	.30	
Metaperception	.69	.01	.03	.28	
Interviewer					
Trait	.58	.06	.05	.31	
Metaperception	.75	.00	.01	.24	
Malloy & Albright (1990)					
Trait	.21	.34			.45
Metaperception	.68	.03			.29
Malloy & Janowski (1992)					
Trait	.06	.45	.24	.25	
Metaperception	.37	.01	.28	.35	
Oliver (1988)					
Trait	.13	.62			.24
Metaperception	.56	.21			.23
Reno & Kenny (1992)					
Trait	.30	.12			.57
Metaperception	.44	.02			.55
M					
Trait	.26	.29	.16	.31	.48
Metaperception	.55	.04	.10	.30	.41

Note. For the Kenny and DePaulo (1990) study, the Trait entries under the Applicant row heading refer to the interviewers' impressions of the applicant's traits. The Metaperception entries indicate the applicants' beliefs about how they were viewed by others. Similarly, the Trait entries under the Interviewer row heading indicate the applicants' impressions of the interviewers, and the Metaperception entries indicate the interviewers' beliefs about how they were perceived by the applicants. DePaulo et al. (1987) refers to DePaulo, Kenny, Hoover, Webb, and Oliver (1987).

variance. Relationship variance in other-perceptions occurs when subjects form unique impressions of particular others. Relationship variance in metaperceptions occurs when people think that they are viewed differently by different people. In four of the studies (all involving short-term acquaintances), relationship can be separated from error variance. There was some tendency for subjects to form unique impressions of particular other people. The amount of relationship variance in metaperceptions was miniscule. In three of the four comparisons, there was less relationship variance for metaperceptions than for perceptions. This bolsters the conclusion that metaperceptions are not well differentiated. That is, subjects believed that all targets saw them in the same way. In sum, there was a hint of uniqueness in the way Jill saw Jack's personality, but there was virtually no uniqueness in the way that Jack thought Jill in particular saw him.

These data on trait perceptions provide some suggestions about the ways in which social roles may affect social perceptions. First, actor variances in trait perceptions were largest for the applicants' perceptions of the interviewers in the Kenny and DePaulo (1990) study. In the same study, the actor effects were relatively small for the interviewers' perceptions of the applicants. This means that the interviewers were much less likely to view all of the applicants similarly than the applicants were to view the interviewers similarly. This could have occurred because the interviewers were in fact more similar to each other in the way they behaved than were the applicants: They were told exactly what to ask the applicants, whereas the applicants were not told what to say in response. However, more interestingly, it could have also occurred because the interviewers saw it as their role to make discriminations among the applicants. Experimental studies in which role is not confounded with other variables could be designed to address this issue more directly.

It is also noteworthy that the three biggest estimates of partner variance in trait perceptions were found in the studies that involved mixed-sex interactions (Kenny & DePaulo, 1990; Malloy & Janowski, 1992; Oliver, 1988). Large partner variances indicate that different people agreed with each other in their appraisals of the traits of a given person. Perhaps this occurred most in the mixed-sex groupings because perceivers were using sex-based stereotypes.

Affect. The variance partitioning for affect was somewhat similar to that for traits (see Table 2). There was substantial actor variance for both other-perceptions and metaperceptions. There was some consistency in Jill's tendency to like Jack and

Table 2
Variance Partitioning of Affect Studies

Study and variable	Actor	Partner	Relat	Error	Rel plus error
Curry & Emerson (1970)					
Week 1					
Liking	.19	.15			.66
Metaperception	.42	.10			.48
Week 8					
Liking	.22	.27			.50
Metaperception	.39	.09			.53
DePaulo et al. (1987)					
Liking	.37	.05	.28	.30	
Metaperception	.64	.00	.15	.21	
Kenny & DePaulo (1990)					
Applicant					
Liking	.25	.12	.32	.30	
Metaperception	.71	.01	.04	.24	
Interviewer					
Liking	.54	.03	.14	.29	
Metaperception	.61	.01	.10	.27	
Oliver (1988)					
Liking	.03	.16			.81
Metaperception	.59	.00			.41
Reno & Kenny (1992)					
Trait	.22	.18			.59
Metaperception	.50	.04			.46
M					
Liking	.26	.14	.25	.30	.64
Metaperception	.55	.04	.10	.24	.47

Note. For the Kenny and DePaulo (1990) study, the Liking entries under the Applicant row heading refer to the interviewers' impressions of the applicants' traits. The Metaperception entries indicate the applicants' beliefs about how they were viewed by others. Similarly, the Liking entries under the Interviewer row heading indicate the applicants' impressions of the interviewers, and the Metaperception entries indicate the interviewers' beliefs about how they were perceived by the applicants. DePaulo et al. (1987) refers to DePaulo, Kenny, Hoover, Webb, and Oliver (1987).

all of the other people she meets, and there was consistency in Jack's tendency to think that he is liked by Jill and others too. Like the trait results, there was much more actor variance for metaperceptions than for other-impressions. Averaging across the five studies, there was 29% more actor variance in metaperceptions than other perceptions, and the mean level of actor variance for metaperceptions was 55%. Therefore, subjects seemed to think that all of the targets either liked or disliked them to the same degree. There was less consistency in the degree to which subjects liked or disliked the different targets.

Does Jack think that Jill likes him because Jill makes everyone feel liked? Probably not. As with the traits, there was little partner variance in metaperceptions of affect. On average, only 4% of the variance was attributable to partner. This indicates that there was not a consistent tendency for certain targets to be seen as "likers" (people who like everyone) and others as dislikers. However, we know from the nontrivial actor variance in other-perceptions that some people really are likers and others are dislikers.

Intuitively, it would seem odd that there was so little partner variance in metaperceptions. It is easy to think of people who seem to be stern evaluators (e.g., Professor Kingsfield of the "Paper Chase") and others who seem to be more sympathetic (e.g., Mr. Rogers). Furthermore, we would expect others would second our nominations of the people in each of these categories. Why, then, are the data at odds with our intuitions? As always, it is possible that our intuitions are simply wrong (cf. Nisbett & Wilson, 1977). A second possibility, one we tend to favor, is that these metaperceptions are clouded by self-relevance. Each subject was asked to indicate not what the target thought of other people but only what the target thought of the subject himself or herself. So, even though Jack, like others, may realize that Jill is no pushover, he may still persist in believing that in her otherwise hard heart, she has a soft spot for him. To test this hypothesis would require subjects to indicate how they think the target views others as well as themselves.

Comparing the trait results from Table 1 to the affect results indicates that there was about twice as much partner variance in the impressions of traits than in judgments (not metaperceptions) of affect. Thus, there was some agreement among subjects in the traits they attributed to others. However, there was not much agreement about affect (i.e., who they liked and who they disliked; Kenny, in press). Simply put, affective judgments appear to be more relational than trait judgments.

Again, this "specialness" in Jill's liking for Jack and Jack's feeling of being liked by Jill was captured by the relationship component in the variance decomposition. Unfortunately, there were only two studies of affect (both short-term acquaintance studies) from which relationship variance could be separated from error variance. Therefore, all of our conclusions

about relationship variance should be regarded as suggestive and in need of replication. The results from the studies tentatively suggest that there is some specialness in Jill's liking for Jack. To some degree, Jill does like Jack in a special way that is different from how much she likes others and how much other people like Jack. That is, there is some relationship variance in other-perceptions of affect. There is also more relationship variance in perceptions of affect than in perceptions of traits. This means that there is more differentiation in the degree to which people like particular other people than in the degree to which they view particular others as, say, kind or competent.

Although there is some specialness in Jill's liking for Jack, Jack persists in thinking that everyone likes him, and to about the same degree. That is, there is little relationship variance in metaperceptions of affect.

Accuracy

It is interesting to learn whether Jack thinks that he makes the same impression on Jill that he does on everyone else or whether he thinks that there is something special about the way that Jill views him. In addition, it is at least as interesting to learn whether he is right. We now address this issue of accuracy.

Traits. Table 3 shows the accuracy correlations. Generalized accuracy (the ability to predict how others in general view oneself) was fairly high. In the two high-acquaintance studies (Anderson, 1984; Malloy & Albright, 1990), the level of generalized accuracy averaged .51. The study in which the interactions took place in a group (Malloy & Janowski, 1992) showed the highest level of generalized accuracy. The remaining studies were one-on-one interactions between strangers, and the level of generalized accuracy for these studies, although variable, was always positive. (In two cases, generalized meta-accuracy could not be computed because there was insufficient partner variance in the impressions. That is, the targets did not agree with each other in their impressions of the subject; therefore, there was no valid criterion for assessing the accuracy of subjects' estimates of how they were generally viewed by others.) Overall, the level of generalized meta-accuracy for traits was substantial. Therefore, Jack's belief that others generally see him as good-natured and smart is likely to be right.

People's beliefs about how others see them tend to be undifferentiated. Jack, for example, thinks that the many different people that he meets all tend to see his personality in about the same way. Because of this, it is unlikely that people will be accurate at discerning which particular targets see them as especially high or low on a trait (dyadic accuracy).

Although seven of the eight dyadic accuracy correlations were positive (see Table 3), they were all weak. The largest correlation was found in the DePaulo et al. (1987) study. Because these correlations contain error variance, they may be attenuated because of measurement error. However, the disattenuated correlations (dyadic adjusted) were not much larger. Therefore, people seem to have just a tiny glimmer of insight into how they are uniquely viewed by particular other people.

Affect. We have seen that people are accurate at knowing how others generally view their personalities. Are they also accurate at knowing how much others generally like them? That is, do they know if they are popular? Table 4 shows the accuracy correlations for affect. For all five studies, generalized accuracy was positive and for some of them, it was substantial.

Dyadic accuracy for affect indicates whether people know which particular other people especially like them. The results for relationship effects, reviewed earlier, suggest that there is some differentiation in the degree to which other people like a particular person. Jill's liking for Jack, for example, is to some extent, unique to Jack. Furthermore, there was more differentiation in these perceptions of liking than there was for perceptions of traits. Therefore, it should be easier for people to know who uniquely likes them than it is for them to know who sees them as especially good-natured or intelligent. Table 4 shows the dyadic accuracy correlations for affect. These correlations were positive for all, except in the Kenny and DePaulo (1990) study. Although they were only small or moderate in magnitude, they were, as expected, somewhat larger than the analogous dyadic correlations for traits.

Correlates of the Actor Effect in Metaperceptions

As shown in Tables 1 and 2, people believe that they make either consistently good or bad impressions on others. Although there is some degree of validity to these perceptions,

Table 3
Accuracy for the Trait Studies

Study and variable	Generalized	Dyadic	Dyadic adjusted
Anderson (1984)	.57	.17	xx
DePaulo et al. (1987)	—	.35	.47
Kenny & DePaulo (1990)			
Applicant	.22	−.07	—
Interviewer	—	.04	—
Malloy & Albright (1990)	.59	.10	xx
Malloy & Janowski (1992)	.73	.10	.14
Oliver (1988)	.69	.19	xx
Reno & Kenny (1992)	.26	.16	xx
M	.51	.13	

Note. Dashes indicate less than 5% of the variance, correlation not computed. Double "exes" indicate single replication, adjustment not possible. DePaulo et al. (1987) refers to DePaulo, Kenny, Hoover, Webb, and Oliver (1987).

Table 4
Accuracy in the Affect Studies

Study and variable	Generalized	Dyadic	Dyadic adjusted
Curry & Emerson (1970)			
Week 1	.40	.35	xx
Week 8	.21	.43	xx
DePaulo et al. (1987)	—	.20	.17
Kenny & DePaulo (1990)			
Applicant	.47	−.17	—
Interviewer	—	−.04	—
Oliver (1988)	1.00	.37	xx
Reno & Kenny (1992)	.29	.09	xx
M	.47	.18	

Note. Dashes indicate less than 5% of the variance, correlation not computed. Double "exes" indicate single replication, adjustment not possible. DePaulo et al. (1987) refers to DePaulo, Kenny, Hoover, Webb, and Oliver (1987).

this perceived consistency may also reflect some underlying psychological disposition. For example, are people who are especially dependent on the approval of others particularly likely to think that others generally think well of them? Data relevant to this hypothesis are available from the studies in which individual differences were assessed.

We consider only the individual differences measured in two or more studies: private and public self-consciousness, social anxiety (Fenigstein, Scheier, & Buss, 1975), self-monitoring (Snyder, 1979), and need for social approval (Crowne & Marlowe, 1964). The correlations between these individual-differences variables and the actor effect in metaperceptions (how people think they are generally viewed by others) are shown in Table 5.

Private self-consciousness was not related to metaperceptions. Public self-consciousness was correlated with metaperceptions only in the Reno and Kenny (1992) study. Self-monitoring effects were weak, except in the Oliver (1988) study. For social anxiety, five of the six correlations were negative, and they were particularly strong in the DePaulo et al. (1987) study. Socially anxious people, then, generally think that they convey unflattering impressions of themselves to others. This finding has also been reported in studies of social anxiety using different methodologies (e.g., Crozier, 1979; W. H. Jones & Briggs, 1984; Teglasi & Hoffman, 1982). The correlations for social approval were always positive; thus, subjects who were high in need for approval said that they generally made positive impressions on others.[1]

Whether there is any validity to the beliefs of socially anxious or approval-dependent people can be addressed by correlating their personality scores with the impressions that others generally form of them (i.e., partner variance in other-perceptions, when this variance is nontrivial). For need for approval, there were two relevant correlations, both from the Oliver (1988) study. Subjects high in need for approval were in fact generally liked more by others ($r = .34$), just as they believed they were, and they were also seen as being more active ($r = .31$). There were also two estimates for social anxiety (Malloy & Albright, 1990; Malloy & Janowski, 1992), and they, too, were in the expected direction (both −.32). Socially anxious people, who think they make poor impressions on others, were in fact evaluated harshly by others.

As we discuss shortly, these data provide suggestive evidence for the argument that when people attain accuracy at determining how others view them, they can do so without paying much attention to the ways in which those people are reacting to them. Socially anxious people bring to their social interactions an expectation that they will not make a good impression. Often, others really do take a dim view of them. If socially anxious people simply stand by their predictions, without bothering to check their validity against the data of the ongoing interaction, they will often be right about how they are viewed by others. They can be right not because they have observed and understood the reactions of others but because they understand themselves.

Self-Perception and Metaperception

The relationship between the ways that people view themselves and the ways that they believe they are viewed by others can be directly assessed by simply correlating self-perceptions with metaperceptions. As usual, we can evaluate this relationship in two different ways. First, we can ask whether people who generally rate themselves positively believe that they are generally viewed positively by others. When subjects in a study state only their general self-perceptions (as in Anderson, 1984; Malloy & Albright, 1990; Malloy & Janowski, 1992; Reno & Kenny, 1992), this correlation between self-perceptions and actor effects in metaperceptions is the only kind that can be computed. Instead, for *each* of their interactions, when subjects rate themselves and also indicate the impressions they thought they made on their partners (as in Kenny & DePaulo, 1990; Oliver, 1988), self-perceptions can be correlated with both the actor and relationship effects in metaperceptions. The correlations with relationship effects indicate whether people who rate

[1] The correlation between social anxiety and need for social approval was zero in the DePaulo, Kenny, Hoover, Webb, and Oliver (1987) study.

Table 5
Personality Correlations With the Actor Effect in Metaperceptions Scale and Study

Scale and study	Trait	Affect
Self-consciousness		
Private self-consciousness		
DePaulo et al. (1987)	−.09	−.09
Malloy & Albright (1990)	.01	
Malloy & Janowski (1992)	.12	
Reno & Kenny (1992)	−.04	−.12
Public self-consciousness		
DePaulo et al. (1987)	−.08	.00
Malloy & Albright (1990)	.07	
Malloy & Janowski (1992)	−.09	
Reno & Kenny (1992)	.27	.24
Social anxiety		
DePaulo et al. (1987)	−.56	−.49
Malloy & Albright (1990)	−.24	
Malloy & Janowski (1992)	−.22	
Reno & Kenny (1992)	.06	−.14
Need for social approval		
DePaulo et al. (1987)	.14	.39
Oliver (1988)	.54	.52
Self-monitoring		
DePaulo et al. (1987)	.24	.11
Malloy & Albright (1990)	−.04	
Malloy & Janowski (1992)	−.12	
Reno & Kenny (1992)	−.31	−.43

Note. DePaulo et al. (1987) refers to DePaulo, Kenny, Hoover, Webb, and Oliver (1987).

themselves differently during different interactions also think that they are rated differently by others during those different interactions.

For the generalized level, there was a strong correlation between how the subjects viewed themselves and how they thought that others saw them (see Table 6). The "weakest" correlation was .51. (All of these correlations were corrected for measurement error in the actor effect of the metaperceptions. For Kenny & DePaulo, 1990, and Oliver, 1988, the correlations were also corrected for measurement error in the self-perceptions. This means that the correlations were larger than ordinary correlations; these disattenuated correlations are inferred correlations that estimate what the correlation would be if there were no errors of measurement.) In the two residential studies (Anderson, 1984; Malloy & Albright, 1990), which had the lowest correlations, the self-perception was a general perception, not a perception of self in the context of the study.

At the dyadic level, there were also impressive correlations between self- and metaperceptions (see Table 6). Therefore, if people see themselves as acting differently with different people, they think that the different targets see them differently too.

In their review, Shrauger and Schoeneman (1979) raised the question that we have addressed here: Are self-perceptions correlated with metaperceptions? They noted that for studies of naturalistic social interaction, there is substantial agreement between people's self-perceptions and the ways in which they think they are viewed by others. Our own results strengthen that conclusion. Shrauger and Schoeneman (1979) also asked whether self-ratings are more strongly related to the perceived impressions (metaperceptions) of specific other people or to perceived impressions of the generalized other. They concluded that the evidence was contradictory. In the studies that we have reviewed, the evidence is entirely consistent. In every comparison, subjects' self-perceptions were more strongly related to their metaperceptions of how others generally viewed them than to their metaperceptions of how specific others viewed them.

The large magnitude of the correlations between self-perceptions and other-perceptions at both the generalized and dyadic level raises the question of whether the correlations are as big as

Table 6
Self- and Metaperception Correlations

Study and variable	Generalized	Dyadic	Dyadic adjusted
Kenny & DePaulo (1990)			
Trait			
Applicant	.99	.49	.29
Interviewer	.98	.66	—
Affect			
Applicant	.96	.66	—
Interviewer	.97	.70	—
Oliver (1988)			
Trait	.97	.64	xx
Affect	1.00	.47	xx
Anderson (1984)	.51	##	##
Malloy & Albright (1990)	.66	##	##
Malloy & Janowski (1992)	1.00	##	##
Reno & Kenny (1992)			
Trait	.75	##	##
Affect	.80	##	##
M	.87	.60	

Note. Dashes indicate less than 5% of the variance, correlation not computed. Double "exes" indicate single replication, adjustment not possible. Double pound signs indicate self-perceptions not measured for each partner.

they are because of shared method variance. Both self-perceptions and metaperceptions are self-report measures involving analogous rating scales. However, this argument is weakened by the fact that every correlation in Table 6, with only one exception, is greater than the corresponding correlation between the actor effect in other-impressions with self-rating. If shared method variance brought about the correlations between self-perception and metaperception, then it should produce equally large correlations between self-perception and other-perception.

Further evidence for the discriminant validity of self-perceptions and metaperceptions comes from studies in which the mean level of subjects' self-perceptions differed from the mean level of their metaperceptions. For example, Campbell and Fehr (1990) documented such differences between self-perceptions and meta-perceptions and also showed that those discrepancies varied with subjects' level of self-esteem. There is also evidence that self-perceptions and metaperceptions were differentially affected by evaluative feedback (Wyer, Henninger, & Wolfson, 1975).

Reciprocity and Perceived Reciprocity: Attaining Accuracy by Assuming Reciprocity

It would be possible for people to be accurate in their assessments of how others view them without attending to feedback if (a) they assume that there is reciprocity in people's liking for each other and in their evaluation of each other's traits and (b) their assumption is correct. If Jack sees Jill as kind, he may just assume that Jill will also see him as kind. He may do so without even bothering to look to Jill to see whether she seems to be regarding him as kind. If Jack's theory is right—if perceptions of traits really are reciprocated—then his belief that Jill will see him as kind will also be right.

To evaluate the hypothesis that people may attain accuracy by assuming reciprocity (Kenny & Albright, 1987), we needed to determine whether subjects really do assume reciprocity and whether reciprocity does in fact exist. Table 7 shows the actual reciprocities of impressions (i.e., If Jack sees Jill as sociable, does Jill see Jack as sociable?) and the perceived reciprocities between metaperception and the impression (i.e., If Jack sees Jill as sociable, does he think that Jill sees him as sociable?). All of the correlations are at the dyadic level.

For the trait studies (see the top of Table 7), with hardly any exception, neither type of reciprocity was strong. Therefore, if Jack sees Jill as kind or intelligent, Jill does not necessarily see Jack in those ways. Furthermore, Jack does not necessarily assume that Jill sees his kindness or his intelligence in the same way that he sees hers. For six of the eight comparisons, perceptions of reciprocity were stronger than actual reciprocity, but the levels of perceived reciprocity were not high.

For affect (see the bottom of Table 7), both types of reciprocity were higher than the corresponding reciprocities for traits. Therefore, for affect, there was both actual reciprocity (i.e., If Jack likes Jill, Jill likes Jack) and perceived reciprocity (i.e., If Jack likes Jill, he thinks that Jill likes him). There may be more actual reciprocity for liking than there is for traits because people are likely to feel positively toward a person who feels positively toward them; it is less likely that people will think that a person is witty just because they think that they are witty.

In six of the seven comparisons, subjects assumed more reciprocity of liking—sometimes much more—than actually existed. Perceived reciprocity of liking was substantial in virtually every study; the median for the seven studies was .61.

When will subjects be accurate in their beliefs about who likes them? These data suggest that they will be accurate when their assumption of reciprocity is in fact true. People generally assume that people they like will like them in return. That assumption did not vary much from subject to subject or from study to study. What does matter, then, in determining whether subjects' metaperceptions are accurate, is whether reciprocity of liking really does exist. If people believe that their liking will be reciprocated and it really is, then their beliefs about who does and does not like them will be correct.

Theoretical Integration

The Basis of Metaperceptions: Self-Perceptions, Not Feedback From Others

How do people determine how others view them? We think that the most obvious answer to this question—that people observe other people's reactions to their behavior and base their metaperceptions on that feedback—is the least likely to be correct. Instead, we think that people's beliefs about how others view them are based primarily on their perceptions of themselves.

Several lines of evidence support the self-perception explanation. First, in an absolute sense, the amount of variance accounted for by actor effects in metaperception was high. That is, there was a strong tendency for subjects to think that they made consistent impressions on the various targets with whom they interacted. In fact, however, different targets often formed much different impressions of them, especially with regard to how much they liked them.

Second, actor effects were stronger for metaperceptions than for perceptions. This provides discriminant validity for the importance of actor effects in metaperceptions in that it indicates that not all actor effects were equally strong. It was when subjects were estimating the impressions that they conveyed to different target persons that they were especially likely to make consistent judgments. They were not nearly as consistent when they attributed a particular trait or affect to a variety of different target persons.

Third, the amount of relationship variance in metaperceptions was typically small in an absolute sense, and it was almost always smaller than the amount of relationship variance in other-perceptions. This means that subjects tended not to think that they were seen in unique ways by particular other people, as they might if they were noticing variations in the ways that different targets reacted to them. Sometimes they did see some uniqueness, but it was usually not as much uniqueness as they ascribed to particular other people in attributing traits or affects to them.

Fourth, generalized meta-accuracy was always greater than dyadic meta-accuracy (for all comparisons in which both scores were available) for traits; for affect it was greater in four of five

Table 7
Dyadic Reciprocities and Perceived Reciprocities

Study and variable	Unadjusted		Adjusted	
	Actual	Perceived	Actual	Perceived
Trait				
Anderson (1984)	.14	.17	xx	xx
DePaulo et al. (1987)	.12	.32	.25	.61
Kenny & DePaulo (1990)				
Applicant	−.01[a]	.09	—	—
Interviewer	−.01[a]	.12	—	—
Malloy & Albright (1990)	.11	.10	xx	xx
Malloy & Janowski (1992)	−.06	.10	−.08	.13
Oliver (1988)	.11	−.23	xx	xx
Reno & Kenny (1992)	.14	.42	xx	xx
M	.07	.14		
Affect				
Curry & Emerson (1970)				
Week 1	.40	.61	xx	xx
Week 8	.53	.74	xx	xx
DePaulo et al. (1987)	.27	.70	.19	.82
Kenny & DePaulo (1990)				
Applicant	−.11[a]	.67	−.13[a]	—
Interviewer	−.11[a]	.46	−.13[a]	.59
Oliver (1988)	.35	.29	xx	xx
Reno & Kenny (1992)	.12	.47	xx	xx
M	.21	.56		

Note. Dashes indicate less than 5% of the variance, correlation not computed. Double "exes" indicate single replication, adjustment not possible. DePaulo et al. (1987) refers to DePaulo, Kenny, Hoover, Webb, and Oliver (1987).
[a] Acutal reciprocity is the same for applicant and interviewer.

comparisons. This indicates that subjects' impressions of how they were generally viewed by others were more accurate than their differential impressions of how they were uniquely viewed by particular others. Again, if subjects were attuned to the feedback provided by targets during ongoing social interactions, they might have attained higher levels of dyadic accuracy.

Finally, and perhaps most compelling, the relationships between self-perceptions and metaperceptions were high. As can be seen in Table 6, there was a strong correspondence between how subjects saw themselves and how they thought that others saw them.

All of the data reviewed so far are, we think, more consistent with a self-perception explanation of metaperceptions than with a feedback explanation. The self-perception explanation can now be further articulated. We consider three different versions: self-theory, self-judgment, and direct observation.

The simplest of these is the self-theory version. According to this version, people have strongly held theories about their own personalities. When interacting with others, they believe that their own personalities, as they see them, will be immediately apparent to others, even during the course of relatively brief interactions with total strangers. People not only can disregard their partners' behavior in determining how their partners view them, but they can also disregard their own behavior.

The other two versions assume that people do observe their own behaviors when trying to determine how others view them. In one version, the self-judgment version (Felson, 1992), people observe their own behavior, make a judgment or self-perception about that behavior, and then assume that others will see that behavior the same way they do. The process begins with the observation of one's own behavior, which leads to a self-perception, which then leads to a metaperception. Jack observes himself frolicking merrily on the hill, judges himself to be a good-natured chap, and assumes that Jill will think so too.

In the direct observation version, a perception of one's own behavior leads directly to a metaperception. People observe their own behavior in an attempt to determine what impressions other people may be forming of them on the basis of that behavior. In this version, these observations do not necessarily change self-views. Jack observes himself frolicking merrily and thinks that Jill will see him as good-natured.

If people simply assumed that their personalities were immediately apparent to others, as the self-theory version predicts, we would have found many of the results that we did actually find. The large actor effects in metaperceptions, indicating that people think that different partners all tend to view them in the same way, follows easily from this formulation, as does the small degree of relationship effects (or specialness) in metaperceptions. The high degree of generalized accuracy that people attain can also be accommodated. If people's theories about themselves are correct, then their beliefs about how others generally view them will also be correct. Finally, the strong correlations between self-perceptions and metaperceptions were also highly consistent with the view that people simply assume that others see them as they already see themselves.

Most troubling to the self-theory version is the fact that subjects did achieve a measure of dyadic accuracy. If they really were paying no attention at all to their own or to their partners'

behaviors, then they would be unlikely to discern any real differences in the ways that different partners viewed them.

The nonnegligible levels of dyadic accuracy could be troubling to all of the versions of the self-perception perspective if dyadic accuracy could be attained only by attending to feedback from one's interaction partners. However, we think that it is possible to learn about differences in how different partners view each other simply by having them observe their own behavior. If people's behavior differs with partners who view them differently, then they can learn about those varying views of themselves simply by examining their own behavior.

When people interact with different people one at a time, then their behavior really will differ from partner to partner. However, when individuals interact with all of their partners at the same time, although each partner's reaction may differ, their own behavior remains the same. All of their partners have the same information about them. It follows from this analysis that if dyadic accuracy is based on observations of one's own behavior, it should be higher in studies in which people interact one-on-one (and their behavior therefore does vary from partner to partner) than in studies in which people interact in groups. Three of the trait studies involved one-on-one interactions: DePaulo et al. (1987), Oliver (1988), and Reno and Kenny (1992). Although none of those studies showed impressively high levels of dyadic meta-accuracy relative to the other studies, there was heightened meta-accuracy. Interestingly, the Reno and Kenny (1992) study, which included ratings that might have been among the most behavioral (e.g., amount of information conveyed), showed the narrowest gap between generalized and dyadic accuracy. These kinds of issues could be addressed more compellingly by experiments in which subjects are randomly assigned to group versus dyadic interactions and make metaperceptions along dimensions known to vary in visibility.

The finding that people do achieve some meta-accuracy, then, is consistent with both the self-judgment and the direct observation versions because in both, people observe their own behavior. That behavior can reveal to them differences in the ways they are responding to partners who have different views of them. One line of evidence that is especially supportive of the self-judgment version is the set of strong correlations between self-perceptions and metaperceptions. The self-judgment perspective insists that people observe their own behavior, make self-perceptions, and then assume that others will view them as they view themselves. If this is really how people figure out how others view them, then the correlations between self-perceptions and metaperceptions have to be high. Furthermore, any evidence that self-perceptions are not just correlated with metaperceptions but precede them temporally would also suit the self-judgment perspective well. We review that evidence in the next section.

The direct observation version of self-perception makes no such assumptions about the relationship between self-perceptions and other-perceptions. Instead, it argues that people simply observe their own behavior and try to determine what impressions their partner is likely to form of them on the basis of that behavior. This version credits people with perspective taking, which the self-judgment version denies. Any evidence, then, that people sometimes do think that others will view their behavior differently than they do is evidence that favors the direct observation perspective.

Several studies do provide just such data. In Wyer et al. (1975), women who received performance feedback in front of an observer believed that the feedback would affect the observer's view of them, but it did not affect their own self-views. Similarly, Felson (1992) found that subjects' performance directly affected the subjects' beliefs about how others viewed them, even when their own self-perceptions had been statistically controlled. Finally, Swann and Hill (1982) showed that when people's self-views were challenged, they worked to reaffirm them by behaving in a particularly self-congruent manner. This opportunity to refute the feedback behaviorally helped the subjects to maintain their self-views. Importantly, they stood by their self-views even when they believed that their partners remained unconvinced by their self-affirming efforts.

Among the three versions of the self-perception perspective, the direct observation model may have an edge. However, each of the versions is probably used at times, and each can be a road to accuracy.

Self-Perceptions to Metaperceptions or Vice Versa?

We are assuming that the causal direction is from self-perception to metaperception. This is the opposite of what the symbolic interactionists suggest. They argue that people's perceptions of themselves follow from their beliefs about how they are viewed by significant others; they are the reflections of themselves that they see in other people's eyes. There are several reasons why we instead think that self-perceptions are primary.

First, there are real differences in how different people view one another. We know this from the data from the eight studies we reviewed: Generally, different partners did indeed form different impressions of any given subject. This was especially true for how much they liked the subject. Yet, subjects were almost completely oblivious to these differences; they thought that they had made essentially the same impression on all of their partners.

The second source of evidence suggestive of a chain of causality from self-perception to metaperception rather than vice versa is our data on individual differences. From study to study, socially anxious individuals thought that others looked askance at them. By contrast, subjects high in need for approval consistently thought that others looked favorably on them. Subjects brought their social anxiety levels and their approval needs with them to these studies; they did not acquire those self-concepts from the ways that they thought they were viewed by their partners during the study. Yet, those self-qualities seemed to drive their perceptions of how others were reacting to them.

Similarly, in their study of the relationship between self-esteem and perceptions of popularity, Bohrnstedt and Felson (1983) showed that children who liked themselves assumed that other children also liked them. Models in which self-esteem affected metaperceptions of popularity fit the data better than did those in which the reverse or reciprocal effects were estimated.

Our individual-differences results are consistent with data reported by Felson (1981) in his study of high school football

players. Players' self-ratings on ambiguous attributes such as "football sense" and "mental toughness" correlated near-zero with the coaches' ratings of them. Therefore, the players were not discerning their coaches' actual assessments of them and internalizing those appraisals. However, their self-ratings were correlated with their own self-confidence, as rated both by themselves and their coaches. What the data suggest, as Felson (1981) noted, is that self-concept is not constructed in an impartial fashion from the data available in social life; instead, "persons see either what they expect or want to see" (p. 68).

Other research also underscores the strength of self-conceptions in shaping social interactions, social perceptions, and the views that people come to hold of one another. Most notably, Swann (e.g., 1984, 1990; Swann & Hill, 1982) has amassed a wealth of data indicating that people work to confirm their self-views, usually successfully. For example, in one study, subjects with certain or uncertain self-concepts interacted with partners with certain or uncertain views of the subject that were inconsistent with the subjects' self-views (Swann & Ely, 1984). Over the course of successive interactions, the subjects—particularly those who held their self-views with certainty—came to be viewed by their partner in the way that they viewed themselves. That is, the partners adopted the subjects' views of themselves rather than vice versa. The only exception to this pattern occurred when the targets were confident about their views of subjects who were unsure of their own self-concept.

What Are Subjects Doing With the Available Feedback From Their Interaction Partners?

If, as we have argued, the views that subjects think that others have of them are derived from observing their own behavior and from their own views of themselves, then are they paying any attention at all to the texture of their partners' behavior? We think that they are. Our evidence comes from the other-impression data. Actor variances were smaller for other-perceptions than they were for metaperceptions and relationship effects were larger. This suggests that people do see differences among the various people in their social worlds. Moreover, the differences that they see are not idiosyncratic. Other people concur, at least to some degree, in their assessments of a given target's traits, and they even show some agreement in their appraisals of the target's likability (as indicated by the nontrivial partner effects in other-perceptions). Therefore, when they were asked to assess qualities of their partners, subjects seemed able to attend to the available data and make an evaluation for which there was consensual validation. What they seemed unable to assess in a differentiated way were the variations in how these different partners saw the subjects themselves.

We think that there are many reasons for this insensitivity. First, because of people's reluctance to evaluate each other explicitly, the quality of the available data is poor. Second, people are personally invested in their self-concept (e.g., Swann, 1990) and are therefore also invested in the perceptions that others have of them. This concern about how others view them far exceeds any concern that they may have about how they view others. Third, in reading others' reactions, people often see what they expect to see. These expectations, in turn, come from many sources, including people's self-concepts, their knowledge of the kinds of impressions that they may be *trying* to convey, and their minitheories about the workings of social life (e.g., the expectation that liking will be reciprocated).

Limitations and Qualifications

Do self-perceptions always come first? By arguing that self-perceptions drive metaperceptions rather than vice-versa, we are not suggesting that people's beliefs about how others view them never affect their self-views. If, again and again, an individual is the last to be chosen when captains pick teams, and the only prince or princess without a date to the ball, it would be difficult not to form the impression that others find this person inept or unlovable and perhaps more difficult still to remain unscathed by this impression. Over the long run, then, the glare of others' mirrors may simply be too overpowering to ignore. The support of intimates who view people as they view themselves can help to deflect that glare, but when intimates disagree with their self-views, too, then the mirror will win again, perhaps even more triumphantly (Swann & Predmore, 1985).

Even in short-lived interactions with strangers, we think that there will be times when metaperceptions change self-perceptions. This may occur when people are outcome dependent on their interaction partners, as when the partners are powerful, influential, or attractive people. It may occur when others are evaluating one another on dimensions along which one's standing is a matter of great concern but little certainty. Also, it may also occur during transitions to new and unfamiliar life situations, such as going away to college or beginning one's first job.

Symbolic interactionism is a theory of development as well as a theory of social interaction, and we suspect that its developmental predictions may fare better than the other predictions that we have addressed in this article (Rosenberg, 1986). Over the course of development, children may indeed construct their self-concepts at least in part from their beliefs about how they are viewed by others. Moreover, parents may be more willing than peers or strangers to provide negative feedback to their children. There is some suggestive evidence that is consistent with this hypothesized developmental process (Felson, 1989; Rosengren, 1961). Felson's study showed, using longitudinal data, that appraisals of children by their parents affect children's subsequent metaperceptions. However, this important study has also shown that children think that both parents view them in the same way, a result consistent with our finding of large amounts of actor variance in metaperceptions.

A developmental perspective may also help to explain why adults sometimes seem so oblivious to the feedback available to them in ongoing social interactions. Perhaps they pay so little attention to that feedback in the present because they paid so much attention to it in the past. As children, perhaps they did look into other people's eyes to see inside their own psyches. Many thousands of looks later, they might have come to develop highly stable self-concepts. They may feel, as adults, that it is no longer necessary to take a fresh look into others' eyes

during each interaction. They have looked there many times before and know what to expect.

We think that a similar process may occur during the development of a close relationship (see also Swann & Predmore, 1985). At first, Jack cannot stop looking into Jill's eyes. Eventually, though, he thinks that he knows what he will see there, and his eyes will rest elsewhere. Sometimes, Jill's reaction to Jack will not be what Jack would have expected, but he will not know that because he is not paying much attention. If this sad sequence does in fact occur, one counterintuitive implication may be that dyadic meta-accuracy will not necessarily improve over time as relationships progress.

How far will our results generalize? It may be tempting to conclude that our results apply more to short-term interactions than to long-term ones. The argument would be that people rely primarily on their self-perceptions during brief interactions because there is not much else to go by. Yet, a recent review has indicated that even thin slices of expressive behavior (e.g., under 5 min) can be surprisingly informative (Ambady & Rosenthal, 1992).

Similarly, an intuitively appealing prediction would be that our results will not generalize to people in long-term intimate relationships. However, we just argued in the previous section that as relationships develop, partners may actually become less attuned to each other's feedback during ongoing social interactions because they think they already know what that feedback will be.

Another limitation of the studies that we have reviewed is that the subjects in all of them were undergraduates. Furthermore, the students always rated each other on positive traits. Perhaps work with other populations and other kinds of ratings will point to important qualifications of our conclusions. It is also possible that systematic manipulations of aspects of the social context and of subjects' social interaction goals will add further qualifications. (We have already discussed in previous sections how our results may be qualified by considerations of role, status, power, and sex composition of the social group.) However, we also think that extensions of our work will serve to underscore some of our more robust findings. There are already hints that this will be the case. For example, we have found that people are good at understanding how they are generally viewed by others but that they are much less adept at discerning how they are uniquely viewed by particular others. In a series of studies of populations other than college students, Felson (1980, 1981, 1989) reported highly similar effects.

Our purpose is not to deny the possible limitations of our results but to encourage open-minded investigations of them. In our opinion, the major limitations of the studies that we have reviewed are that none of them (a) measured the behaviors of either interactant or (b) experimentally manipulated the key constructs such as partner feedback. We believe that the behavior of the person who makes the metaperception should better predict that person's metaperceptions than the feedback behavior of that person's interaction partner. Studies with such measurements and manipulations are difficult and time consuming, but they are necessary to illuminate the exact causal sequence.

Conclusion

In the study of person perception, there has been a concern with both the process of person perception (how people go about perceiving others) and the outcome (the degree to which people's perceptions are accurate). We reviewed these person perception questions as they apply to metaperceptions: people's perceptions of how others view them. Using Kenny's (1988) SRM, we assessed the components of metaperceptions, as well as the outcomes of the metaperception process, in studies in which subjects interacted with multiple partners.

When people interact with several other people and then indicate how they think each of those others viewed them, their metaperceptions are remarkably consistent. That is, people believe that they convey highly similar impressions to the various people with whom they interact. These impressions of consistency, however, seem to be seriously inflated. Particularly with regard to how much people like one another, other people are not nearly as consistent in how they view that person as they seem to think. Furthermore, there is some uniqueness in other people's liking for one another in that some people like one person especially more than they like other people and especially more than other people like that person. However, people's guesses about what other people think of them do not reflect much of this subtlety and differentiation.

It is not that people are completely undiscriminating as social perceivers, for when people make judgments of other people's traits, they do make some distinctions, and other perceivers often agree with them about those distinctions. It is when people attempt to discern what other people think of them that their perceptions seem so undifferentiated. Perhaps these data suggest an answer to the question of why people seem to see so much consistency in their own personalities: When other people form different impressions of a person, they do not always notice those differences. Instead, people persist in thinking that they have conveyed similar impressions to the various people who have met and interacted with them.

Because people's perceptions of how others view them are not highly differentiated, they have little chance of achieving substantial levels of dyadic accuracy. Perhaps this is why people's attempts at self-presentation sometimes go awry. Individuals' self-presentation strategies can be based on their metaperceptions of how specific others are viewing them during ongoing interactions; often, however, those metaperceptions are wrong.

With regard to generalized meta-accuracy, people do much better. People's views of how others generally see their traits, and their impressions of how much they generally like them, are substantially correct.

The first two lines of evidence (that people think they make more consistent impressions on others than they do in fact and that they are better at discerning what others generally think of them than at deciphering the unique ways that particular other people view them), together with the findings of high correlations between how people see themselves and how they think others view them led us to our first, highly counterintuitive answer to the question of how people know how others view them. People think that they rely little on feedback from others.

Instead, they directly observe their own behavior and infer from it what others think of them.

Our second and related conclusion may be a controversial one. We think the symbolic interactionists had the direction of causality exactly wrong, at least for adults. People's self-perceptions do not come from their beliefs about how others view them (metaperceptions); instead, their metaperceptions follow directly from their self-perceptions. When people observe their behavior to try to discern what others think of them, their theories about themselves (e.g., if they are socially anxious, they think that others do not like them) and about social life (e.g., liking will be reciprocated) are important in determining what people see. To the extent that these theories are correct, then people's understandings of how others generally view them will also be correct. In addition, they can be correct even if people pay no attention at all to how others really are responding to them.

If people relied only on their self-concepts and their theories to interpret the data of their behavior and others' reactions to it, then the best that people could achieve would be generalized accuracy. People could rarely figure out how they were differentially viewed by particular others. However, in fact, people are not totally oblivious to the responses of other people. Our third and final conclusion is that people do achieve some small degree of dyadic accuracy in their perceptions of how specific others view them. Occasionally, then, people do look to others for feedback and thereby catch a glimpse of how others really do view them.

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Appendix

Study Descriptions

Anderson (1984)
- Number of groups: 5 same sex
- Number of subjects: 121
- Task: Residential
- Acquaintance: Long term
- Variables: Humorous, intelligent, considerate, and defensive

Curry & Emerson (1970)
- Number of groups: 6 (4 all male and 2 all female)
- Number of subjects: 48
- Task: Residential
- Acquaintance: 1–8 weeks
- Variable: Affect

DePaulo, Kenny, Hoover, Webb, & Oliver (1987)
- Number of groups: 7
- Number of subjects: 42 women
- Task: One-on-one interactions
- Acquaintance: None
- Variables: Competence and affect

Kenny & DePaulo (1990)
- Number of groups: 8
- Number of subjects: 48
- Task: Three interviewers ask questions to an opposite-sex applicant for a residential assistant position
- Acquaintance: None
- Variables: Competence and affect

Malloy & Albright (1990)
- Number of groups: 21 same sex
- Number of subjects: 84
- Task: Residential
- Acquaintance: Long term
- Variables: Sociable, good-natured, responsible, calm, and intelligent

Malloy & Janowski (1992)
- Number of groups: 10 mixed sex
- Number of subjects: 68
- Task: Group discussions to consensus
- Acquaintance: None
- Variables: Leadership and quality of ideas

Oliver (1988)
- Number of groups: 14
- Number of subjects: 56
- Task: One-on-one, male–female first-date interactions
- Acquaintance: None
- Variables: Activity and affect

Reno & Kenny (1992)
- Number of groups: 20
- Number of subjects: 102
- Task: One-on-one interactions, all female
- Acquaintance: None
- Variables: Information conveyed, open, private, trust, and likable

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