

ON THE SOURCES OF SELF-KNOWLEDGE: THE PERCEIVED PRIMACY OF SELF-REFLECTION

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Four studies examined perceived sources of self-knowledge. In Study 1, participants asked to generate the sources of their self-knowledge reported most frequently that they acquire self-knowledge through self-reflection (e.g., thinking about the past, thinking about the future) and social mechanisms (i.e., social comparison and reflected appraisal). In Studies 2 and 3, participants ranked and rated the relative importance of these sources. The results indicated that, although social sources were perceived to have an influence on the self, self-reflection was perceived to be the more crucial determinant of self-knowledge. Study 4 found individual differences in ratings of source importance: Participants high in private self-consciousness rated self-reflection as more important to self-knowledge than participants low in private self-consciousness, whereas high self-monitors rated social sources as more important to self-knowledge than low self-monitors. Implications of these findings are discussed.

One of the most critical quests that confronts each person is the quest to understand who she or he is—the self. The perceived importance of this quest is reflected in the continued theoretical and empirical attention that the self has received throughout the history of psychology (Allport, 1955; Baumeister, 1990; Cooley, 1902; James, 1890; Kihlstrom & Cantor, 1984; Kihlstrom & Klein, 1994; Markus & Wurf, 1987; Rogers, 1951; Rosenberg, 1979; Snygg & Combs, 1949). The continuing research on this topic is partially driven by the idea that self-knowledge has notable consequences for thoughts, feelings, motivation, and behavior. Specifically, the self (defined for the purposes of this article as the cognitive repre-

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sentation of the kind of person we think we are) can: (a) force biases and distortions in autobiographical memories (Ross, 1989; Ross & Conway, 1986); (b) influence the ways people perceive and remember other people (Markus, Smith & Moreland, 1985; Sedikides & Skowronski, 1993); (c) lead people to defend themselves against threatening events and ideas (Brown, 1991; Sedikides, 1993); (d) elicit emotional responses when ideal or obligatory standards are not met (Higgins, 1987; Higgins, Vookles, & Tykocinski, 1992); (e) determine future plans (Markus & Nurius, 1986; Ruvolo & Markus, 1992) or other future-oriented thought (Staats & Skowronski, 1992); and (f) induce people to behave in a manner that is consistent with the content of the self-representation (Swann, 1990; Wicklund & Gollwitzer, 1982).

Because the self plays such a central role in human functioning, a great deal of effort has been focused on researching the sources of self-knowledge—that is, the people, events, behaviors, and characteristics that contribute significantly to self-understanding. The theoretical and empirical literature on the self (e.g., Rosenberg, 1979; Shaver, 1975; Wegner & Vallacher, 1977) has emphasized three primary sources of information.

The first of these sources comes from *social comparison*, perhaps best exemplified by social comparison theory (Festinger, 1954). Social comparison theory proposes that, in an attempt to evaluate their own attitudes, behaviors and abilities, people seek out and compare themselves to other people, especially similar others. This proposal has instigated a plethora of empirical investigations (see Latane, 1966; Suls & Wills, 1991), and the results of those investigations have led to important advances in our understanding of social comparison processes. For example, recent findings suggest that people sometimes do not select similar others as a social comparison standard (Kruglanski & Mayseless, 1990; Tesser, 1988) and engage in social comparison for self-enhancing reasons rather than in an attempt to gain objective self-knowledge (Wills, 1981; Wood, 1989). It has been proposed that social comparison processes are fundamental to self-knowledge acquisition, especially early in the life span. For example, children tend to describe themselves spontaneously in terms of how they differ from familiar others (McGuire, McGuire, Child, & Fujioka, 1978; McGuire & Padawer-Singer, 1976), and such descriptions are probably derived from social comparison processes.

The second source of self-knowledge comes from *reflected appraisal*: the “looking-glass self” of Cooley (1902; see also Mead, 1934). In reflected appraisal, people learn about themselves from the direct evaluative feedback provided by significant others or from the labels that the others provide. This notion has been supported by research in the tradition of symbolic interactionism and role theory (Stryker & Statham, 1985). The notion has also been bolstered by the results of several studies of chil-

dren's self-concepts (Felson, 1985, 1989). Even children as old as 11 years of age state that their parents know them better than the children know themselves (Rosenberg, 1979).

The third source of self-knowledge comes from *self-reflection*, a perspective relating behavioral self-perception, internal states, and (most importantly) inference processes. This perspective echoes early distinctions made by James (1890) and Mead (1934), and has modern counterparts in self-perception theory (Bem, 1967), objective self-awareness theory (Duval & Wicklund, 1972; Wicklund, 1975), and theories linking personality and social intelligence (Cantor & Kihlstrom, 1987). In general, this perspective emphasizes the active and self-initiated thinking that often occurs in an attempt to ascribe meaning to events, rather than the mindless compilation of facts related to the self (see K. Nelson, 1993). More specifically, this perspective suggests that people sometimes act as external observers and use the implications of their own behaviors to make self-inferences (Schlenker, 1982; Wicklund & Brehm, 1976). However, these behaviors are not interpreted in a void: people use a variety of external (Taylor & Fiske, 1975) and internal (Andersen, 1984; Andersen & Ross, 1984) context cues, as well as the implications of their behavior, in this process of self-reflection and self-inference. Furthermore, this perspective also suggests that people act sometimes as observers of their own internal states (e.g., feelings or thoughts; Schwarz & Clore, 1988) and also use the implications of these internal states to draw inferences about themselves.

As the aforementioned citations indicate, there is ample evidence that people can and do use each of the three informational sources to acquire self-knowledge. However, less is known about people's subjective perceptions of source use. Do social comparison, reflected appraisal, and self-reflection figure in participants' retrospective accounts of the sources of their own self-knowledge? Furthermore, what is the perceived relative importance of the sources? Research on actual self-knowledge sources (Kenny & DePaulo, 1993; Shrauger & Schoeneman, 1979) has pointed to the predominance of self-reflection over reflected appraisal. Would this pattern also emerge in peoples' own subjective reports of the sources of their self-knowledge?

It should be noted that retrospective accounts involve a considerable degree of reconstruction, and such reconstruction may distort participants' recollections of the sources of their self-knowledge (Ross, 1989). Furthermore, it is also the case that people may not even be aware of the sources or causes of the cognitive outcomes they subjectively experience (Nisbett & Wilson, 1977). The implication, of course, is that one should treat retrospective reports of the sources of self-knowledge cautiously, for such reports may not be entirely accurate.

Nevertheless, we believe that researching retrospective accounts of the perceived sources of self-knowledge can be informative, and we asked participants to provide such accounts in the present research. In part, the utility of such accounts is justified by recent work in the area of metacognition. One of the main themes in metacognition involves metacognitive monitoring, that is, individuals' ability to assess factors that affect their cognitive processes and products. Several studies now indicate that people do sometimes have insight into their own cognition (T. O. Nelson, 1992). Essentially, participants' retrospective reconstructions of the sources of self-knowledge is a metacognitive monitoring measure: participants are assessing the impact of various factors on their self-conceptions.

These metacognitions are of considerable theoretical interest. For example, participants' retrospective accounts of the sources of self-knowledge will reveal whether the three theory-based informational sources identified earlier (social comparison, reflected appraisal, self-reflection) adequately map on to peoples' subjective perceptions, and whether there are any informational sources, in addition to those three, that people perceive to influence the self-knowledge acquisition process. Furthermore, these retrospective accounts will reveal whether the relative importance of sources identified by some past research (e.g., Kenny & DePaulo's [1993] conclusion that what one thinks about oneself is more important than reflected appraisal) is related to perceived importance.

The results of a self-report study by Schoeneman (1981) already offer some insight into these issues. Participants in Schoeneman's study first endorsed self-descriptive adjectives taken from Gough and Heilbrun's (1965) list of 300 adjectives. Next, participants selected randomly six of the endorsed adjectives. For each of the six adjectives, participants completed the stem "I have come to know that I am a(n) _____ person from:_____." The first blank in the stem was filled with one of the six adjectives, and participants responded to the adjective with an open-ended paragraph. Finally, for each of the six adjectives, participants ranked the importance of three sources of information. These were described to the participants as: "(a) comparing my actions and opinions with those of other people, (b) noticing the direct and indirect feedback that others give to me and their reactions to me, (c) observing my own actions, thoughts, and feelings, and the situations in which they occur." In Schoeneman's view, option A assessed social comparison, option B assessed social feedback (our reflected appraisal), and option C assessed self-observation (our self-reflection). The open-ended descriptions were coded for the number of times participants mentioned each of the three information sources. The results indicated that self-reflection was mentioned most frequently in the open-ended protocols, and was ranked

higher than reflected appraisal, which in turn, was ranked higher than social comparison. Thus, these results converge with Kenny and DePaulo's (1993) conclusion that one's own ideas about the self are influenced more by the self than by others.

However, the methods used in Schoeneman's study raise several questions. First, the methods of Schoeneman's (1981) study were strongly theory-driven: that is, the choice of response categories in the rankings and in the free-response coding scheme was driven by an *a priori* theory, and not by the information sources that people might actually use. More importantly, because Schoeneman asked his participants to rank the information sources immediately after the generation of the free response, participants could have used the ease with which they generated sources to answer the ranking questions. In short, the procedure may have facilitated participants' use of an accessibility heuristic to make their rankings. Furthermore, writing the open-ended paragraphs could have served as an induction of self-consciousness or of self-focused attention, altering the ranks assigned to the sources.

The methods that we used in the studies reported in this paper avoid these problems. We did not provide any hints to our participants as to the types of knowledge that they should report. Instead, in Study 1, participants' open-ended responses reflected their own, essentially unprompted, choices about the sources of their self-knowledge. Furthermore, in our studies the open-ended responses (Study 1) and the ratings (Study 2) and rankings (Study 3) were derived from different samples. The use of these different samples precludes the possibility that the responses provided on the rating and ranking tasks were contaminated by the generation task, or vice versa.

Furthermore, the current investigation goes beyond Schoeneman's (1981) work in several ways. In addition to being data-driven, the content coding scheme that we developed and used (involving 11 specific categories) allowed a more fine-grained examination of self-knowledge sources than Schoneman's broad three-category scheme. Moreover, the fact that we obtained ratings (and not just rankings) of the importance of these categories to self-knowledge allowed us to conduct a factor analyses of these rating responses (Study 3). The results of this factor analysis allowed us to examine the relations among the 11 source categories, and to explore whether groupings of these source categories corresponded to the broad theoretical categories that have been postulated for the self. Finally, we assessed some of the individual differences that may be related to the relative importance of these different sources. In Studies 2 and 3, we investigated the possibility that the rankings and ratings of the categories of self-knowledge were related to gender. In Study 4, we explored the possibility that perceptions of the importance

of the sources of self-knowledge were related to the variables of private self-consciousness and self-monitoring. We hypothesized that participants high in private self-consciousness should perceive self-reflection as more important to self-knowledge than participants low in private self-consciousness, and that high self-monitors should perceive social sources to be more important sources of self-knowledge than low self-monitors.

STUDY 1

PARTICIPANTS, MATERIALS AND PROCEDURE

Participants were 32 male and 58 female students participating for extra credit in an introductory psychology course. The participants were simply asked to complete a short questionnaire. The instructions to this questionnaire asked participants to list the important means, ways, tactics, or strategies (referred to hereafter as *source items* or simply *items*) that they use in order to gain self-knowledge or increase self-understanding.

RESULTS AND DISCUSSION

Participants listed a total of 227 items, an average of 2.5 items per participant. Two undergraduate student coders (who were unfamiliar with the extant literature on the self) created a coding scheme to classify these items. They were instructed to “read carefully through the items and create as few or as many categories in which you perceive the items to fall.” We wish to emphasize that the categories constructed by the coders were not guided by any theoretical preconceptions. That is, the coders were not instructed to look for particular categories. Instead, the classification scheme is a “bottom-up” scheme that derived from the coders’ perceptions of the types of items listed by the participants.

For several reasons, we did not use extant theory to guide the category construction process. First, we wanted to find out whether the three sources of self-knowledge identified in the literature would be spontaneously created by the coders. Further, we were interested in the frequency with which each category (and ultimately each source) appeared. By providing the source categories to our coders in advance, they might have tried to “fit” marginal items into the categories, causing the frequency with which these items were listed by participants to be inflated. Finally, although we were interested in the three sources of self-knowledge, we did not wish to limit ourselves only to those sources. Instead, we wished to be as open as possible to alternative sources.

TABLE 1. Self-Knowledge Categories and Item Frequencies

Self-Knowledge Categories	Item Frequency
Remembering yourself (e.g., feelings, thoughts, behaviors and what happened to you) in past interactions with other people	44
Comparing yourself with the way you were in the past	41
Imagining yourself (e.g., your feelings, thoughts, behaviors, and what might happen to you) in future interactions with other people	27
Comparing yourself with other people	26
Thinking about the opinions that your acquaintances have about you	19
Using the way you feel in a certain situation to judge whether you like the situation or not (for example, if you have felt uncomfortable in large groups of people, this means that you are probably not an extraverted person)	17
Remembering yourself in past romantic relationships	15
Using other people's behavior in a past situation as the norm for your own behavior in a similar situation.	11
Thinking about the opinions that important others have about you	10
Considering the hobbies that you like and preferences that you have	10
Considering your physical appearance	7
Total	227

Coders initially agreed on nine categories, but upon discussion, mutually consented to 11 categories. The coders placed each of the 227 listed items into one of these 11 categories. The coders agreed on the classification of 193 of the 227 items (85%), and resolved disagreements through deliberation. The categories and the accompanying item frequencies are provided in Table 1.

The most frequently reported category was *remembering yourself in past interactions with other people*, closely followed by *comparing yourself with the way you were in the past*. Two other categories, *imagining yourself in future interactions with other people* and *comparing yourself with other people*, were also mentioned frequently, but not as often as the two leading categories. The least frequently reported categories were *thinking about the opinions that important others have about you*, *considering hobbies and preferences*, and *considering your physical appearance*.

It is clear that the category list in Table 1 represents all three sources of self-knowledge that appear in the literature. The impact of social comparison information on the self is indicated by the fact that two of the derived categories were *comparing yourself with other people* and *using*

other people's behavior in a past situation as the norm for your own behavior in a similar situation. The impact of reflected appraisal on the self is indicated by the fact that two of the derived categories were *thinking about the opinions that important others have about you* and *thinking about the opinions that your acquaintances have about you*. The source *considering your physical appearance* may also be indicative of these reflected appraisal processes.

The impact of self-reflective processes, however, seemed to be the most pervasive of the three, as indicated by categories such as *remembering yourself in past interactions with other people*, *comparing yourself with the way you were in the past*, *using the way you feel in a certain situation to judge whether you like the situation or not*, *remembering yourself in past romantic relationships*, and *considering the hobbies you like and preferences you have*. Collectively, these categories captured the majority of the items (134, or 59%).

One category, *imagining yourself in future interactions with other people*, does not fit well into the three-source typology. However, this category does fit in quite well with recent work on possible selves (Markus & Nurius, 1986; Markus & Ruvolo, 1989; Ruvolo & Markus, 1992) suggesting that people often think about themselves in a future context. In fact, the categories listed by our participants corroborate the findings of Markus and her colleagues, who noted that people think about either past behaviors or possible future behaviors in relation to the self.

One other aspect of these data that is quite striking is that self-knowledge sources appear to be highly social in nature. Given that two of the sources, social comparison and reflected appraisal, are overtly social, perhaps this should not be surprising. However, even in those circumstances in which participants were apparently acting as observers of their own behavior (or just imagining those behaviors), those behaviors frequently occurred in a social context. It was relatively rare for participants to list behaviors that were non-social in nature (e.g., *considering the hobbies that you like and the preferences that you have*). These data are congruent with those personality and self theories that emphasize the social nature of the self-understanding process (e.g., Caspi, Bem, & Elder, 1989; Horney, 1945; Markus & Cross, 1990).

STUDY 2

The results of Study 1 indicated that people do think that social comparison, reflected appraisal, and self-reflection contribute to self-understanding. Further, these three sources of self-knowledge are bolstered by imaginal processes—thinking about oneself in the future. The frequencies with which these sources were listed is one possible index of the importance of each source to the self. Hence, based on the frequencies,

one would infer that self-reflection, especially the categories of *remembering yourself in past interactions with other people* and *comparing yourself with the way you were in the past*, is the most important source of self-knowledge.

Although the frequency with which a particular category is mentioned can be a proxy for importance to the self, there are several factors that might cause these frequency estimates to be non-representative of importance. For example, it may be that behavior in interpersonal interactions is actually relatively unimportant to the self, but because of their recency and frequency of activation (Sedikides & Skowronski, 1991), these behaviors may be particularly accessible, and, therefore, frequently listed in the self-sources generation task. Instead, more infrequently occurring and less accessible (and hence, less frequently listed) events, such as overheard opinions, might tend to be "critical incidents" that generally have a profound impact on the self. In Study 2, we assessed more directly the perceived importance of the categories of self-knowledge by asking participants to comparatively rank the importance of the categories.

PARTICIPANTS AND PROCEDURE

One-hundred-and-fourteen male and 140 female participants were provided with a randomly ordered list of the self-knowledge categories generated by our coders in Study 1, and were instructed to "rank-order the categories in terms of how important each of the categories is to your self-knowledge." The rank of 1 defined the most important category, and the rank of 11 defined the least important category.

RESULTS AND DISCUSSION

The ranks that participants assigned to each category were entered into an 11 (Self-Knowledge Category) \times 2 (Gender) mixed analysis of variance (ANOVA). This analysis revealed a significant main effect for self-knowledge category, $F(10, 2520) = 42.48, p < .0001$. Inspection of the overall mean rankings, provided in Table 2, suggest that two categories were clearly ranked differently than the others: *remembering yourself in past interactions with other people* was ranked as the most important category (pairwise comparison with the adjacent category ranking was significant, $F(1, 253) = 40.01, p < .0001$), and *using other people's behavior in a past situation as a norm for your own behavior in a similar situation* was ranked as the least important category (pairwise comparison with the adjacent self-source ranking was significant, $F(1, 253) = 71.38, p < .0001$).

Three categories, *comparing yourself with the way you were in the past*,

TABLE 2. Self-Knowledge Categories: Importance Rankings

Self-Knowledge	General	Male Rank Order (N = 254)	Female Rank Order (N = 114)	t test Rank Order (N = 140)
Remembering yourself in past interactions with other people	3.58	3.82	3.34	1.40***
Comparing yourself with the way you were in the past	4.97	4.61	5.32	-1.92*
Using the way you feel in a certain situation to judge whether you like the situation or not	5.07	5.86	4.28	2.79***
Imagining yourself in future interactions with other people	5.27	5.68	4.86	2.26**
Thinking about the opinions that important others have about you	5.94	5.89	5.98	-.25
Considering the hobbies that you like and preferences that you have	6.02	6.18	5.86	.72
Remembering yourself in past romantic relationships	6.23	6.39	6.07	.90
Considering your physical appearance	6.59	6.57	6.61	-.10
Thinking about the opinions that your acquaintances have about you	6.68	6.45	6.91	-1.21
Comparing yourself with other people	6.69	6.31	7.07	-2.09**
Using other people's behavior in a past situation as the norm for your own behavior in a similar situation	8.53	8.29	8.77	-1.51

* $p < .10$. ** $p < .05$. *** $p < .01$.

using the way you feel in a certain situation to judge whether you like the situation or not, and imagining yourself in future interactions with other people, formed a "second tier"—below the category remembering yourself in past interactions with other people in ranked importance, but above the remainder of the categories (pairwise comparison between the lowest ranked of the three and the highest ranked of the remainder was significant, $F(1, 253) = 6.16, p < .01$).

Interestingly, there was moderate agreement between the rankings list and the frequency list in terms of the importance of categories: the correlation between category frequency and mean ranking was $r(9) =$

-.69, $p < .02$. However, there were some differences in the orderings provided by two measures. For example, although the top two categories are the same in both the frequency and in the rankings data, the frequency data would give the impression that the top two categories (*remembering yourself in past interactions with other people, comparing yourself with the way you were in the past*) were about equivalent in importance, whereas the rankings data indicate a single, clear top preference (*remembering yourself in past interactions with other people*), with the second-most-frequent category (*comparing yourself with the way you were in the past*) relegated to the "second tier" of importance. Nevertheless, despite these differences, the relatively high agreement between the direct rankings and the orderings based on category frequencies suggest that our original categorizations were meaningful to participants, and did represent adequately the self-knowledge categories that participants perceived.

As indicated by the inclusion of gender in our experimental design, we were interested in exploring the possibility that these categories of self-knowledge differed in perceived importance for males and females. Examination of the category orders generated by males and females indicated that the two genders were in general agreement about the ordering of the importance of the categories, $r(9) = .88, p < .001$. However, the significant interaction between category and gender yielded by the ANOVA, $F(10, 2520) = 2.51, p < .005$, indicated that there were some minor differences in how the genders perceive the importance of some of the categories.

The mean category importance rankings for males and females are presented in Table 2, along with the results of pairwise t -tests exploring the gender differences on a category-by-category basis. Examination of the means in this table reveals two gender differences. First, although both males and females included the same three categories in the "second tier," the relative importance of these categories differs by gender. Females' rankings indicated that their feelings and their imagined future interactions were more important to them than they were to males, whereas males' rankings indicated that comparisons to the past tended to be more important to them than they were to females. Second, a gender difference emerged for the category *comparing yourself with other people*; this category ranked higher in importance for males than for females.

STUDY 3

Although the data from Study 2 generally confirm and extend the results of Study 1, the findings still must be interpreted with caution. For example, it is possible that forcing participants to comparatively rank

the sources of self-knowledge may have artificially inflated the differences among the source categories. If source categories are actually very close to each other in importance, but one category is consistently ranked as more important than the other, then the researcher might be left with the impression that the categories are somewhat different in importance, when, in fact, they are quite similar.

To account for this problem and to provide further converging evidence on perceptions of self-knowledge sources, we asked participants to rate the importance of each of the source categories on a standard 7-point response scale. We also used factor analysis as a way to investigate whether participants' responses were meaningfully interdependent. That is, we were interested in whether the four factors that were seemingly represented in the 11 categories would emerge spontaneously as factors in a factor analysis, or whether an alternative factor structure would emerge.

PARTICIPANTS AND PROCEDURE

One-hundred-and-two male and 122 female participants were provided with a randomly ordered list of the categories generated in Study 1, and were asked to rate the categories in terms of their importance to self-understanding. Participants rated each category on a scale labeled as follows: 1 = *Extremely Unimportant*, 2 = *Moderately Unimportant*, 3 = *Slightly Unimportant*, 4 = *Neither Unimportant Nor Important*, 5 = *Slightly Important*, 6 = *Moderately Important*, and 7 = *Extremely Important*.

RESULTS AND DISCUSSION

RELATIVE CATEGORY IMPORTANCE

The ratings that participants assigned to each category were entered into an 11 (Self-Knowledge Category) \times 2 (Gender) mixed ANOVA. This analysis revealed a significant main effect for self-knowledge category, $F(10, 2200) = 41.03, p < .0001$. The overall mean ratings are provided in Table 3. Inspection of those ratings suggests that, as in the rankings data presented in Table 2, the most important category was *remembering yourself in past interactions with other people*. Although not as dramatic as in the rankings data, this category was again significantly different from the next most important category, $F(1, 221) = 6.64, p < .01$. Furthermore, as in the rankings data, the category *using other people's behavior in a past situation as a norm for your own behavior in a similar situation* was rated as less important than any of the other categories (pairwise comparison

TABLE 3. Self-Knowledge Categories: Importance Ratings

Self-Knowledge Categories	General	Male Importance Ratings (<i>N</i> = 224)	Female Importance Ratings (<i>N</i> = 102)	<i>t</i> test Importance Ratings (<i>N</i> = 122)
Remembering yourself in past interactions with other people	5.77	5.78	5.75	.21
Considering the hobbies that you like and preferences that you have	5.49	5.33	5.64	-1.64
Comparing yourself with the way you were in the past	5.33	5.30	5.36	-.29
Remembering yourself in past romantic relationships	5.27	5.24	5.29	-.23
Considering your physical appearance	5.25	5.32	5.1	.66
Imagining yourself in future interactions with other people	5.10	5.05	5.14	-.42
Thinking about the opinions that important others have about you	5.05	5.01	5.09	-.39
Using the way you feel in a certain situation to judge whether you like the situation or not	4.95	4.78	5.12	-1.63
Thinking about the opinions that your acquaintances have about you	4.86	4.71	5.00	-1.30
Comparing yourself with other people	4.53	4.52	4.53	-.02
Using other people's behavior in a past situation as the norm for your own behavior in a similar situation	3.52	3.32	3.71	-1.77

with the adjacent category was significant, $F(1, 221) = 56.64, p < .0001$). In addition, the second least important category, *comparing yourself with other people*, was also somewhat different from the next least important category, $F(1, 221) = 7.00, p < .01$.

There are no clear breaks in rated importance between the other categories, but, for reference purposes, differences between pairs of categories do not approach significance until the rated difference between categories becomes greater than about .25. For example, the

category *considering the hobbies that you like and preferences that you have* is not significantly different from other categories until one reaches the category *considering your physical appearance*, $F(1, 221) = 5.05, p < .03$; further, the category *comparing yourself with the way you were in the past* is not significantly different from other categories until one reaches the category *thinking about the opinions that important others have about you*, $F(1, 221) = 4.03, p < .05$.

In comparing the results of all three studies, it appears that there is again good agreement between alternative indices of category importance. The correlation between these category ratings and the category rankings from Study 2 was $r(9) = -.82, p < .01$, and the correlation between the ratings and the category frequencies from Study 1 was $r(9) = .36, p < .15$. The relatively high agreement between the different measures suggests that our original categorizations were meaningful to participants, and adequately represented the categories of self-knowledge that participants used.

The bottom two categories were the same in both the ratings and the rankings data, although the ratings data would give the impression that the bottom two categories (*comparing yourself with other people, using others' behavior in a past situation as the norm for your own behavior in a similar situation*) were somewhat separated in importance from the main body of self-knowledge categories, whereas the rankings data indicated a single, clear bottom preference (*using others' behavior*). Interestingly, all three measures indicated that the top category was *remembering yourself in past interactions with other people*, although the degree to which it differed from the other categories depended somewhat on the measure. It is also interesting to note that two of the categories, *thinking about the opinions that your acquaintances have about you* and *comparing yourself with other people* were mentioned frequently in Study 1, but were both ranked (in Study 2) and rated (in Study 3) as relatively low in importance. This difference could simply reflect the fact that people are unwilling to admit that their self-definition is influenced by others. We return to this issue in the General Discussion section.

The rankings data collected in Study 2 had indicated that there were some differences in females' and males' perceptions of the importance of the categories. The ratings data of Study 3 did not confirm this outcome. Neither the main effect of Gender, $F(1, 220) = 1.12, p < .29$, nor the Gender \times Category interaction, $F(10, 2200) = .91, p < .53$, was significant. This high correspondence between the female and male ratings in Study 3 is indicated by the strong correlation ($r(9) = .97, p < .001$) between the mean female and mean male ratings for each of the categories. It is thus unclear whether the gender differences obtained in Study 2 reflect

real differences between the genders, or whether these differences are somehow tied to the assessment method.

FACTOR ANALYSIS

The importance ratings allowed us to more fully explore the possible underlying relations among the 11 categories. We were particularly interested in examining the notion that these categories capture four perceived sources of self-knowledge: social comparison, reflected appraisal, self-reflection, and thinking about future behavior.

To investigate this issue, participants' ratings were entered into a principal components factor analysis using an orthogonal rotation. This factor analysis yielded a clear two-factor solution: the eigenvalues for the first two factors were 1.471 and 1.430, whereas the eigenvalue for the third factor was .656. The first factor clearly reflected a social factor. Categories loading highly on this factor were *thinking about the opinions that your acquaintances have about you* (rotated factor loading = .736), *thinking of the opinions that important others have about you* (.697), *considering your physical appearance* (.326), *comparing yourself with other people* (.398), and *using other people's behavior in a past situation as the norm for your own behavior in a similar situation* (.348). No other category had a loading of greater than .16 on this first factor.

The second factor clearly represented self-reflection processes. *Comparing yourself with the way you were in the past* (.744), *remembering yourself in past interactions with other people* (.704), *remembering yourself in past romantic relationships* (.319) and *imagining yourself in future interactions with other people* (.409) loaded highly on this factor. No other category had a loading of greater than .21 on this second factor.

Two categories, *using the way you feel to judge whether you like the situation or not* and *considering the hobbies and preferences you have* did not load on either of these two factors. However, the category *using the way you feel* did load (.544) on a third factor, a factor that appeared to reflect affect. The other category to load highly on this third factor was *remembering yourself in past romantic relationships* (.469). However, the low eigenvalue for this factor (.656) makes interpretation of this factor, or of any other subsequent factor, a dubious proposition.

The results of this factor analysis suggest that there are two primary perceived sources of self-knowledge: (1) social, which subsumes social comparison and reflected appraisal mechanisms, and (2) self-reflective, which includes thinking about the past, thinking about the future, and self-inferential processes. The fact that most of our constructed categories fell onto interpretable and sensible factors again suggests that the results of our content analysis captured nicely participants' perceptions

of the sources of self-knowledge, and gives further credence to the outcomes obtained in the rankings and ratings studies.¹

STUDY 4

In Study 4 we sought further validation of the argument that the two main perceived sources of self-knowledge are social and self-reflective. We reasoned that validation of the two factors requires demonstrating that these sources are used differentially by people who are known to have a dispositionally internal versus external orientation to processing self-relevant information.

Research in personality psychology already documents the existence of these personality types. People who are high in private self-consciousness (Fenigstein, Scheier & Buss, 1975) are known to have a dispositionally internal orientation to the world. That is, people high in private self-consciousness are thought to be chronically focused on the self, and hence, are more likely to be influenced by personal standards and values than people low in private self-consciousness. We hypothesized that people high in private self-consciousness would rate self-reflection sources as more important to self-knowledge than people low in private self-consciousness.

By comparison, high self-monitors (Snyder, 1974; Snyder & Gangestad, 1986) have a dispositionally external orientation. More specifically, high self-monitors are more highly attuned to, and responsive to, the demands of the social environment than low self-monitors. We hypothesized that high self-monitors would rate social sources of self-knowledge as more important to self-knowledge than low self-monitors.

PARTICIPANTS AND PROCEDURE

Fifty-seven females and 48 males served as participants. The procedure was similar to that used in Study 3, with two exceptions. First, participants rated nine categories instead of the 11 categories used in Study 3. Specifically, because they did not load on either of the two main factors derived from the data in Study 3, the categories *using the way you feel to judge whether you like the situation or not* and *considering the hobbies and preferences you have* were excluded from Study 4. Second, participants

1. We should note that the factor analysis was exploratory and does not exclude the possibility that other sources of self-knowledge might exist, or that the two sources (social, self-reflection) might be further subdivided into sub-categories. Given that factor analysis is sensitive to the exact variables entered, the factor breakdown might be different if other items were entered into the analysis.

filled out (in random order) the private self-consciousness scale and the self-monitoring scale. The private self-consciousness scale is a 10-item scale, with each item being rated on a 1 (*extremely uncharacteristic*) to 9 (*extremely characteristic*) continuum (two scale items are reverse-scored so that high scores imply high private self-consciousness). The self-monitoring scale is a 25-item true-false scale. Higher numbers of "trues" indicate higher self-monitoring.²

RESULTS AND DISCUSSION

RELATIVE SOURCE IMPORTANCE

Participants' category importance ratings were entered into a 9 (Category) \times 2 (Gender) mixed-design ANOVA. The pattern of results was similar to that obtained in Study 3. Neither the main effect of gender, $F(1, 103) = 1.24, p < .27$, nor the Gender \times Category interaction, $F(8, 824) = .81, p < .59$, was significant. This analysis revealed only a significant main effect for category, $F(8, 824) = 39.94, p < .0001$.

Inspection of the ratings provided for each category suggests that, as in prior studies, participants rated self-reflection categories (i.e., the categories rated 1, 2, 4, and 5—see below) as more important to self-knowledge than social categories. *Remembering yourself in past interactions with other people* ($M = 5.84$) was rated as the most important source, followed by *comparing yourself with the way you were in the past* ($M = 5.31$), *thinking of the opinions that important others have about you* ($M = 5.16$), *imagining yourself in future interactions with other people* ($M = 4.91$), *remembering yourself in past romantic relationships* ($M = 4.90$), *considering your physical appearance* ($M = 4.82$), *thinking about the opinions that your acquaintances have about you* ($M = 4.75$), *comparing yourself with other people* ($M = 4.12$), and *using other people's behavior in a past situation as the norm for your own behavior in a similar situation* ($M = 3.12$). For reference purposes, differences between pairs of categories do not approach statistical significance until the rated difference between categories exceeds about .30. For instance, the category *comparing yourself with the way you were in the past* is not significantly different from *thinking of the opinions that important others have about you*, but is significantly different from *imagining yourself in future interactions with other people*, $F(1, 104) = 4.33, p < .04$. As another example, the category *thinking about the opinions that important others have about you* is not significantly different from other sources until

2. Additional analyses using the 18-item self-monitoring scale (Snyder & Gangestad, 1986) produced identical results.

one reaches the category *considering your physical appearance*, $F(1, 104) = 5.18, p < .03$.

FACTOR ANALYSIS

We entered participants' ratings into a principal components factor analysis using an orthogonal rotation.³ The factor analysis yielded a two-factor solution: the eigenvalues for the two factors were 1.648 and 1.412. The first factor was a social factor, and categories loading highly on this factor were *thinking about the opinions that important others have about you* (rotated factor loading = .702), *comparing yourself with other people* (.646), *thinking about the opinions that your acquaintances have about you* (.645), *considering your physical appearance* (.503), and *using other people's behavior in a past situation as the norm for your own behavior in a similar situation* (.249). No other category had a loading of greater than .06 on this first factor.

The second factor was a self-reflection factor. All remaining categories loaded highly on this factor: *remembering yourself in past interactions with other people* (.697), *remembering yourself in past romantic relationships* (.513), *comparing yourself with the way you were in the past* (.472), and *imagining yourself in future interactions with other people* (.404). No other category had a loading of greater than .18 on this factor. In sum, the social and self-reflection sources emerged from this factor analysis, just as they had in Study 3.

PRIVATE SELF-CONSCIOUSNESS AND SOURCE IMPORTANCE

In Study 4 we attempted to further validate the two-factor solution derived from the Factor Analysis by testing the hypothesis that people high in private self-consciousness rate the categories associated with self-reflection as more important to self-knowledge than people low in private self-consciousness. We tested this hypothesis by first partitioning participants into high private self-consciousness and low private self-consciousness groups based on the results of a median split on the private self-consciousness scale (*Median* = 65, *min value* = 38, *max value* = 85, *SD* = 11.16). For each participant, we then calculated an average of importance ratings ascribed to the self-reflection categories (i.e., the average of *remembering yourself in past interactions with other people*, *comparing yourself with the way you were in the past*, *imagining yourself in future interactions with other people*, and *remembering yourself in past romantic*

3. A confirmatory factor analysis yielded a pattern very similar to the one reported here. We decided to present the exploratory factor analysis for reasons of expository continuity.

relationships) and an average of the importance ratings ascribed to the social categories (i.e., the average of *thinking about the opinions that important others have about you, considering your physical appearance, thinking about the opinions that your acquaintances have about you, comparing yourself with other people, and using other people's behavior in a past situation as the norm for your own behavior in a similar situation*). These averages were entered into a Private Self-Consciousness (high vs low) \times Gender \times Source (reflective, social) mixed ANOVA. The first two variables were between-subjects, and the third was within-subject.

The Private Self-Consciousness \times Source interaction was significant, $F(1, 101) = 5.38, p < .02$. Participants high in private self-consciousness ($M = 5.52$) rated self-reflection categories as more important than participants low in private self-consciousness ($M = 4.96$), $t(103) = 4.66, p < .0001$. Participants high in private self-consciousness ($M = 4.42$) and participants low in private self-consciousness ($M = 4.37$) did not differ in their rated importance of social categories, $t(103) = .28, p < .78$.

Two other main effects emerged from this analysis. Overall, participants rated self-reflection categories ($M = 5.24$) as more important than social categories ($M = 4.40$, $F(1, 101) = 62.85, p < .0001$, a finding that attests to the perceived primacy of self-reflective processes in self-knowledge. Also, participants high in private self-consciousness ($M = 4.97$) rated both types of categories as more important to self-knowledge than participants low in private self-consciousness ($M = 4.67$), $F(1, 101) = 8.57, p < .004$. However, interpretation of this second main effect is qualified by the Private Self-Consciousness \times Source interaction that we reported in the previous paragraph.

SELF-MONITORING AND SOURCE IMPORTANCE

In Study 4 we also attempted to further validate the two-factor solution derived from the Factor Analysis by testing the hypothesis that high self-monitors rate social categories as more important contributors to self-knowledge than low self-monitors. To examine this idea, we first performed a median split on the self-monitoring scale (*Median* = 14, *min value* = 7, *max value* = 21, *SD* = 3.16). Next, we entered each participant's average of the importance ratings ascribed to self-reflective categories and their average of the importance ratings ascribed to social categories into a Self-Monitoring (high vs low) \times Gender \times Source (reflective, social) mixed ANOVA.

The Self-Monitoring \times Source was significant, $F(1, 101) = 8.84, p < .004$. High self-monitors ($M = 4.60$) rated social categories as more important than low self-monitors ($M = 4.19$), $t(103) = 2.56, p < .01$. The ratings of self-reflection categories provided by the high self-monitors ($M = 5.13$)

and the low self-monitors ($M = 5.34$) were not significantly different, $t(103) = -1.52, p < .13$. The only other significant effect in this analysis was the expected main effect for source.

Overall, participants rated self-reflection categories ($M = 5.24$) as more important than social categories ($M = 4.40$), $F(1, 101) = 64.24, p < .0001$.

GENERAL DISCUSSION

SUMMARY OF FINDINGS

In general, the results of our research conceptually replicate and extend the results of Schoeneman's (1981) research. More specifically, the data obtained in the present studies indicate that processes of self-reflection are perceived by people to be most important to the acquisition of self-knowledge. Items in the category *remembering yourself in past interactions with other people* were generated more frequently than items in other categories, and this category was both significantly ranked and rated as more important than other categories. Items in other self-reflective categories, such as *comparing yourself with the way you were in the past*, *imagining yourself in future interactions with other people*, and *remembering yourself in past romantic relationships* were also spontaneously mentioned frequently, and were ranked and rated as high in importance.

However, participants do not perceive self-knowledge as being solely derived from self-reflection; they also perceive it as derived from social factors. In fact, these social factors are pervasive, and can take either of two forms. First, social events and behaviors often form the context for self-reflective processes. That is, if one examines the sources listed in the paragraph above, one should note that, even though all three sources are self-reflective, they all refer to either remembering or imagining behavior in a social context. Hence, social factors can influence the self by partially determining the events and behaviors that are the fodder for reflective processes.

Social factors are perceived to influence self-knowledge in a more direct fashion: by social comparison (*comparing yourself with other people*) and reflected appraisal (*thinking about the opinions that important others have about you*). However, participants perceive these direct social sources of self-knowledge to be less important than self-reflection: The results of all four studies reveal that these social comparison/reflected appraisal sources tend to cluster toward the bottom of the spontaneous frequency generations, the rankings, and the ratings.

In addition, the data reported in Study 4 validate the psychological reality of the self-reflective and social sources by demonstrating their differential use by persons who vary on the personality variables of

private self-consciousness and self-monitoring. Persons high in private self-consciousness perceive self-reflective categories to be more important to the self than persons low in private self-consciousness, whereas high self-monitors perceive the self to be more influenced by social categories than low self-monitors.

Two issues regarding these findings deserve mention. First, our main purpose was to provide additional validation for the two sources rather than to focus on the two personality variables. In fact, other personality variables, such as need for cognition (Cacioppo & Petty, 1982) or need for accuracy (e.g., in terms of an external criterion; Kruglanski, 1989) would probably have yielded informative outcomes. For example, people high in need for cognition and high in need for accuracy may be more likely than their counterparts to perceive self-reflection as more important. Second, an argument can be made that personality variables do not have their primary effects on participants' perceptions of sources of self-knowledge but rather on participants' ability or willingness to articulate those sources. Stated otherwise, the two personality scales may share method variance with the importance ratings. Although this possibility can not be excluded, we believe it is not highly plausible. Given the low degree of overlap between the items from the two personality scales on the one hand and source items on the other, the covariation between personality variables and importance ratings is likely to be meaningful.

ON THE RELATION BETWEEN ACTUAL AND PERCEIVED SOURCES OF SELF-KNOWLEDGE

Kenny and DePaulo (1993) reviewed the findings of several social interaction studies in which participants provided ratings of themselves, of a dyadic partner, and of how they thought the dyadic partner perceived them (i.e., metaperceptions). Kenny and DePaulo noted an intriguing trend in their data: as the result of interactions with others, people generally came to believe that others held the same opinions about themselves as they did. Kenny and DePaulo concluded that metaperceptions are more influenced by one's own self-conceptions than by the feedback provided by others. Other studies also demonstrate the importance of self-reflection to self-knowledge (Andersen & Williams, 1985; Andersen, Lazowski & Donisi, 1986; Felson, 1993; Johnson, 1987; Jones, Rhodewalt, Berglas, & Skelton, 1981; see also Shrauger & Schoeneman, 1979).

Our data complement the conclusions of Kenny and DePaulo (1993). More specifically, assuming that the Kenny and DePaulo studies reflect accurately the sources of self-influence, our data indicate that partici-

pants' theories are consistent with reality. Although the opinions of others might have an impact on the self, what people think about themselves is perceived to be the more important determinant of self-knowledge.

However, there are several noteworthy limitations to the studies reported in this article that should make one cautious about accepting unequivocally the idea that participants' perceptions of the importance of the sources of self-knowledge are accurate. First, research on reality monitoring suggests that, although memories for the source of information tend to be preserved relatively well, some confusions can occur. Thus, participants may not, in some cases, remember correctly whether an inference was externally obtained or internally generated, and may incorrectly attribute externally obtained inferences to self-reflective processes (Johnson, Hashtroudi & Lindsay, 1993; Johnson & Raye, 1981; Johnson & Sherman, 1990). Introspective processes influence and are influenced by social processes (Schlenker, Dlugolecki, & Doherty, 1994; Tice, 1992).

Second, retrospective reports may be influenced by self-presentational concerns (Baumeister, 1982; Jones & Pittman, 1982; Leary & Kowalski, 1990; Schlenker, 1980). For example, the relatively low ratings and rankings of such categories as *thinking about the opinions that your acquaintances have about you*, *comparing yourself with other people*, and *using other people's behavior in a past situation as a norm for your own behavior in a similar situation* may have been influenced by participants' unwillingness to admit that they conform to social pressures. Autonomy, control, personal causation, or perceived freedom are socially desirable concepts (for a review, see Weiner, 1989, pp. 247-271).

Third, because the present studies assessed only peoples' metacognitions—their subjective accounts and current perceptions of the sources of self-knowledge—the data obtained in these studies may not be sensitive to those sources of self-knowledge that exert their influence implicitly, or outside of conscious awareness, (e.g., Wilson, 1985). One such implicit factor affecting the self-concept may be the cultural values and ideas that are passively assimilated in one's formative years. Our studies used American college students, who were arguably espousing the American ideal of individualism. This ideal emphasizes the independence and uniqueness of the self, while underappreciating the force of social factors (Markus & Kitayama, 1991; Triandis, 1989). It is possible that the emphasis on self-reflective processes that we obtained is exclusive to the American (and, generally, western) culture.

Selection biases may also affect our results. For example, Suls (1986; Suls & Mullen, 1982) has proposed a developmental model of self-evaluation in which social comparison is most important in mid-life, whereas

temporal comparisons (a notion similar to the present use of the term self-reflective processes) is more important in the early and late life-stages. Thus, our use of a limited age range of participants may have tapped developmentally constrained processes, leading to an overemphasis of self-reflective processes in our data. Similarly, our samples were composed of students from psychology classes, and psychology students may have different theories about psychological matters (i.e., sources of self-knowledge) than students of other disciplines.

CONCLUDING COMMENTS

It has often been suggested that self-definition and the construction of the self-concept is one of the primary life-tasks. The data presented in the present paper suggest that, although there are personality differences, the primary means by which this task is accomplished is to think about oneself. We review our performance at the last tennis game, reflect on the moves we made (or failed to make), and, from that, evaluate our athletic prowess; we imagine writing the next great paper in psychology (the one after this one, no doubt) or reflect on the most exciting ideas we pondered recently, and from that, we strengthen our identification with the occupational category of research psychologist; we reflect on our thoughts, experiences, and feelings induced by a work of art, and, from that, we evaluate our aesthetic sensitivity; we think about our spouses and children, and from that, understand how we fit into the social fabric of our lives.

This conclusion may seem trite—after all, for many years, philosophers have speculated that thinking is central to self-understanding (e.g., “I think, therefore, I am”). However, the potential primacy of self-reflection over social sources of self-knowledge is both theoretically important and practically significant. By understanding how people construct the self, we can participate more effectively in that formative process and alter that process (e.g., in therapy) when it has gone amiss. It remains to future research to further test whether, and especially under what conditions, this primacy of self-reflection exists, and to document its importance and potential utility.

REFERENCES

- Allport, G. W. (1955). *Becoming*. New Haven: Yale University Press.
- Andersen, S. M. (1984). Self-knowledge and social inference II: The diagnosticity of cognitive/affective and behavioral data. *Journal of Personality and Social Psychology*, 46, 294-307.
- Andersen, S. M., Lazowski, L. E., & Donisi, M. (1986). Salience and self-inference: The role of biased recollections in self-inference processes. *Social Cognition*, 4, 75-93.

- Andersen, S. M., & Ross, L. (1984). Self-knowledge and social inference I: The impact of cognitive/affective & behavioral data. *Journal of Personality and Social Psychology*, *46*, 280-293.
- Andersen, S. M., & Williams, M. (1985). Cognitive/affective reactions in the improvement of self-esteem: When thoughts and feelings make a difference. *Journal of Personality and Social Psychology*, *49*, 1086-1097.
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*, *91*, 3-26.
- Baumeister, R. F. (1990). Suicide as escape from self. *Psychological Review*, *97*, 90-113.
- Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, *74*, 183-200.
- Brown, J. D. (1991). Accuracy and bias in self-knowledge. In C. R. Snyder & D. F. Forsyth (Eds.), *Handbook of social and clinical psychology: The health perspective* (pp. 158-178). New York: Pergamon Press.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology*, *42*, 116-131.
- Cantor, N., & Kihlstrom, J. F. (1987). *Personality and social intelligence*. Englewood Cliffs, NJ: Prentice-Hall.
- Caspi, A., Bem, D. J., & Elder, G. H., Jr. (1989). Continuities and consequences of interactional styles across the life course. *Journal of Personality*, *57*, 375-406.
- Cooley, C. H. (1902). *Human nature and the social order*. New York: Scribner's.
- Duval, S., & Wicklund, R. A. (1972). *A theory of objective self-awareness*. New York: Academic Press.
- Felson, R. B. (1985). Reflected appraisal and the development of self. *Social Psychology Quarterly*, *48*, 71-78.
- Felson, R. B. (1989). Parents and the reflected appraisal process: A longitudinal analysis. *Journal of Personality and Social Psychology*, *56*, 965-971.
- Felson, R. B. (1993). The (somewhat) social self: How others affect self-appraisals. In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 4, pp. 1-26). Hillsdale, NJ: Erlbaum.
- Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, *43*, 522-527.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117-140.
- Gough, H., & Heilbrun, A. B., Jr. (1965). *The adjective checklist manual*. Palo Alto, CA: Consulting Psychologists Press.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*, 319-340.
- Higgins, E. T., Vookles, J., & Tykocinski, O. (1992). Self and health: How "patterns" of self-beliefs predict types of emotional and physical problems. *Social Cognition*, *10*, 125-150.
- Horney, K. (1945). *Our inner conflict*. New York: Norton.
- James, W. (1890). *Principles of psychology*. New York: Holt.
- Johnson, J. T. (1987). The heart on the sleeve and the secret self: Estimations of hidden emotion in self and acquaintances. *Journal of Personality*, *55*, 563-582.
- Johnson, M. K., Hashtroudi, S., & Lindsay, D. S. (1993). Source monitoring. *Psychological Bulletin*, *114*, 3-26.
- Johnson, M. K., & Raye, C. L. (1981). Reality monitoring. *Psychological Review*, *88*, 67-85.
- Johnson, M. K., & Sherman, S. J. (1990). Constructing and reconstructing the past and the future in the present. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition* (Vol. 2, pp. 482-526). New York: Guilford Press.
- Jones, E. E., & Pittman, T. S. (1982). Toward a general theory of strategic self-presentation.

- In J. Suls & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (Vol. 1, pp. 231-262). Hillsdale, NJ: Erlbaum.
- Jones, E. E., Rhodewalt, F., Berglas, S., & Skelton, J. A. (1981). Effects of strategic self-presentation on subsequent self-esteem. *Journal of Personality and Social Psychology*, *41*, 407-421.
- Kenny, D. A., & DePaulo, B. M. (1993). Do people know how others view them? An empirical and theoretical account. *Psychological Bulletin*, *114*, 145-161.
- Kihlstrom, J. F., & Cantor, N. (1984). Mental representations of the self. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 17, pp. 1-47). New York: Academic Press.
- Kihlstrom, J. F., & Klein, S. B. (1994). The self as a knowledge structure. In R. S. Wyer, Jr., & T. K. Srull (Eds.), *Handbook of social cognition: Basic processes* (Vol. 1, pp. 153-208). Hillsdale, NJ: Erlbaum.
- Kruglanski, A. W. (1989). The psychology of being "right": The problem of accuracy in social perception and cognition. *Psychological Bulletin*, *106*, 395-409.
- Kruglanski, A. W., & Mayseless, O. (1990). Classic and current social comparison research: Expanding the perspective. *Psychological Bulletin*, *108*, 195-208.
- Latane, B. (Ed.). (1966). Studies in social comparison. *Journal of Experimental Social Psychology*, Supplement 1.
- Leary, M., & Kowalski, R. M. (1990). Impression management: A literature review and two-components model. *Psychological Bulletin*, *107*, 34-47.
- Markus, H., & Cross, S. (1990). The interpersonal self. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 576-608). New York: The Guilford Press.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224-253.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, *41*, 954-969.
- Markus, H., & Ruvolo, A. (1989). Possible selves: Personalized representations of goals. In L. A. Pervin (Ed.), *Goal concepts in personality and social psychology* (pp. 211-241). Hillsdale, NJ: Erlbaum.
- Markus, H., Smith, J., & Moreland, R. L. (1985). Role of the self-concept in the perception of others. *Journal of Personality and Social Psychology*, *49*, 1494-1512.
- Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, *38*, 299-337.
- McGuire, W. J., McGuire, C. V., Child, P., & Fujioka, T. (1978). Salience of ethnicity in the spontaneous self-concept as a function on one's ethnic distinctiveness in the social environment. *Journal of Personality and Social Psychology*, *36*, 511-520.
- McGuire, W. J., & Padawer-Singer, A. (1976). Trait salience in the spontaneous self-concept. *Journal of Personality and Social Psychology*, *33*, 743-754.
- Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.
- Nelson, T. O. (Ed.). (1992). *Metacognition: Basic readings*. Needham Heights, MA: Allyn & Bacon.
- Nelson, K. (1993). The psychological and social origins of autobiographical memory. *Psychological Science*, *4*, 7-14.
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental process. *Psychological Review*, *84*, 231-259.
- Rogers, C. (1951). *Client-centered therapy: Its current practice, implications, and theory*. Boston: Houghton Mifflin.
- Rosenberg, M. (1979). *Concerning the self*. New York: Basic Books.
- Ross, M. (1989). Relation of implicit theories to the construction of personal histories. *Psychological Review*, *96*, 341-357.
- Ross, M., & Conway, M. (1986). Remembering one's own past: The construction of personal

- histories. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 122-144). New York: Guilford Press.
- Ruvolo, A. P., & Markus, H. R. (1992). Possible selves and performance: The power of self-relevant imagery. *Social Cognition, 10*, 95-124.
- Schlenker, B. R. (1980). *Impression management*. Monterey, CA: Brooks/Cole.
- Schlenker, B. R. (1982). Translating actions into attitudes: An identity-analytic approach to the explanation of social conduct. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 15, pp. 193-247). New York: Academic Press.
- Schlenker, B. R., Dlugolecki, D. W., & Doherty, K. (1994). The impact of self-presentations on self-appraisals and behavior: The power of public commitment. *Personality and Social Psychology Bulletin, 20*, 20-33.
- Schoeneman, T. J. (1981). Reports of the sources of self-knowledge. *Journal of Personality, 49*, 284-294.
- Schwarz, N., & Clore, G. L. (1988). How do I feel about it? The informative function of affective states. In K. Fiedler & J. P. Forgas (Eds.), *Affect, cognition, and social behavior* (pp. 44-62). Goettingen, FRG: Hogrefe.
- Sedikides, C. (1993). Assessment, enhancement, and verification determinants of the self-evaluation process. *Journal of Personality and Social Psychology, 65*, 317-338.
- Sedikides, C., & Skowronski, J. J. (1991). The law of cognitive structure activation. *Psychological Inquiry, 2*, 169-184.
- Sedikides, C., & Skowronski, J. J. (1993). The self in impression formation: Trait centrality and social perception. *Journal of Experimental Social Psychology, 29*, 347-357.
- Shaver, K. G. (1975). *An introduction to attribution processes*. Cambridge, MA: Winthrop.
- Shrauger, J. S., & Schoeneman, T. J. (1979). Symbolic interactionist view of self-concept: Through the looking glass darkly. *Psychological Bulletin, 86*, 549-573.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology, 30*, 526-537.
- Snyder, M., & Gangestad, S. (1986). On the nature of self-monitoring: Matters of assessment, matters of validity. *Journal of Personality and Social Psychology, 51*, 125-139.
- Snygg, D., & Combs, A. W. (1949). *Individual behavior*. New York: Harper & Row.
- Staats, S., & Skowronski, J. J. (1992). Perceptions of self-affect: Now and in the future. *Social Cognition, 4*, 415-431.
- Stryker, S., & Statham, A. (1985). Symbolic interaction and role theory. In G. Lindzey & E. Aronson (Eds.), *Handbook of Social Psychology* (Vol. 1, pp. 311-378). New York: Random House.
- Suls, J. (1986). Comparison processes in relative deprivation: A life-span analysis. In J. M. Olson, C. P. Herman, & M. P. Zanna (Eds.), *Relative deprivation and social comparison: The Ontario symposium* (Vol. 4, pp. 95-116). Hillsdale, NJ: Erlbaum.
- Suls, J., & Mullen, B. (1982). From the cradle to the grave: Comparison and self-evaluation across the life span. In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 1, pp. 97-124). Hillsdale, NJ: Erlbaum.
- Suls, J., & Wills, T. A. (Eds.). (1991). *Social comparison: Contemporary theory and research*. Hillsdale, NJ: Erlbaum.
- Swann, W. B., Jr. (1990). To be adored or to be known? The interplay of self-enhancement and self-verification. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 408-448). New York: Guilford Press.
- Taylor, S. E., & Fiske, S. T. (1975). Point of view and perceptions of causality. *Journal of Personality and Social Psychology, 32*, 439-445.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L.

- Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 181-227). New York: Academic Press.
- Tice, D. M. (1992). Self-concept change and self-presentation: The looking glass self is also a magnifying glass. *Journal of Personality and Social Psychology*, 63, 435-451.
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, 96, 506-520.
- Wegner, D. M., & Vallacher, R. R. (1977). *Implicit psychology: An introduction to social cognition*. New York: Oxford University Press.
- Weiner, B. (1989). *Human motivation*. Hillsdale, NJ: Erlbaum.
- Wicklund, R. A. (1975). Objective self-awareness. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 8, pp. 233-275). New York: Academic Press.
- Wicklund, R. A., & Brehm, J. W. (1976). *Perspectives on cognitive dissonance*. Hillsdale, NJ: Erlbaum.
- Wicklund, R. A., & Gollwitzer, P. M. (1982). *Symbolic self-completion*. Hillsdale, NJ: Erlbaum.
- Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin*, 90, 245-271.
- Wilson, T. D. (1985). Strangers to ourselves: The origins and accuracy of beliefs about one's own mental states. In J. H. Harvey & G. Weary (Eds.), *Attribution in contemporary psychology* (pp. 9-36). New York: Academic Press.
- Wood, J. V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin*, 106, 231-248.