

CHAPTER 4 SELF-KNOWLEDGE

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CHAPTER 4

SELF-KNOWLEDGE

—Make it thy business to know thyself, which is the most difficult lesson in the world. — Cervantes (Don Quixote, Part ii, Chapter 42)

In ancient times, people from all over Europe traveled to Greece to visit the Oracle of Delphi, seeking advice on matters of love, war, and commerce. Inscribed above the entrance were two simple words, “Know Thyself.” As simple as this injunction is, it has proven exceedingly difficult to follow. The road to self-knowledge is strewn with obstacles, leading Benjamin Franklin to quip, “There are three things extremely hard: steel, a diamond, and to know one’s self” (*Poor Richard’s Improved Almanac*, 1750).

In this chapter, we will examine the acquisition and application of self-knowledge. In the first section, you will study various sources of self-knowledge. Here you will see that individuals learn about themselves by consulting the physical world, the social world, and the psychological world of thoughts, feelings and behavior.

In the second section of this chapter, you will study some consequences of self-knowledge. Here you will see that once we acquire knowledge of ourselves, this knowledge serves as a lens through which we view the world.

The third section of this chapter explores the topic of egocentrism. Here you will see that people too frequently assume that others sees the world as they do, failing to consider that other people have perspectives that differ from their own.

I. **Sources of Self-Knowledge**

Most people think of themselves in a variety of ways. For example, some people think they are independent, ambitious, and hard-working, whereas others think they are sensitive, creative, and moody. Still others think they possess all of these qualities. How do people arrive at these conclusions? What sources of information do they use when forming these judgments?

A. **Physical World**

The physical world provides some information. If you want to know how tall you are, you can measure your height; if you want to know how strong you are you can go to a health club and take note of how many pounds you can lift. In these cases, you are using the physical world to gain knowledge of yourself.

Though useful as a source of self-knowledge, the physical world is limited in two important respects. First, many attributes are not anchored in physical reality. Suppose you want to know how kind you are. You can’t simply get out a yardstick and measure your kindness. The same is true if you want to know how clever or sincere you are. A physical basis for gaining knowledge in these domains (and many others) is lacking.

A second, and related point, is that even when attributes can be assessed with reference to the physical world, the knowledge we gain from the physical world isn’t necessarily the knowledge we are after. Knowing your height doesn’t really tell you

whether or not you are tall. You need to know how tall other people are, and whether you are taller or shorter than they are. The same is true when it comes to knowing how strong you are. Knowing how many pounds you can lift provides initial information about your strength, but you also need to know how many pounds other people can lift.

B. **Social Comparison**

The comparative nature of self-views means that people must consult the social world to gain self-knowledge. This insight forms the heart of Festinger's **social comparison theory** (Festinger, 1954). According to this theory, people learn about themselves by comparing themselves with others (Suls & Miller, 1977; Suls & Wills, 1991). Suppose I time myself and learn I can run a mile in six minutes. Before I can know whether this time is fast or slow, I need to know how fast other people can run a mile.

But who should these other people be? Festinger believed that people strive to know the truth about themselves, and compare themselves with those who are similar to them in order to meet this goal. In this context, similar means similar on dimensions relevant to the attribute being assessed (Goethals & Darley, 1977). For example, I would best be able to tell how fast I am by comparing myself with other men my age. Comparing my speed with women or children is less informative, because they are too different from me when it comes to this ability.

People do compare themselves with others who are similar to them, but this is not always true. People also compare themselves with those who are better off than they (a process called **upward comparison**) and with those who are worse off than they (a process called **downward comparison**) (Collins, 1996; Wheeler & Miyake, 1992; Wills, 1981). This occurs because the need for accurate self-knowledge is not the only motive that drives social comparison processes (Helgeson & Mickelson, 1995; Taylor, Wayment, & Carrillo, 1996; Wood, 1989). People engage in upward comparison in an attempt to inspire and improve themselves (e.g., if they can do it, I can do it) and engage in downward comparison in an attempt to flatter and console themselves (e.g., I may be poor, but at least I have a roof over my head unlike some people).

1. **Social Comparison Under Stress**

In an influential paper, Wills (1981) argued that downward comparison is especially likely to occur when people feel threatened or are under stress. For example, if your boss dismisses one of your ideas as completely impractical, you might think "It may not be a great idea, but it's a lot better than the lame ideas everyone else has offered." In situations like these, Wills contended, the desire for self-enhancement supersedes the desire for accurate self-evaluation and self-improvement.

Although some evidence supports Wills's assertion (Gibbons, Lane, Gerard, Reis-Bergan, Lautrup, & Pexa, 2002), the picture is a bit more complicated than he claimed. Downward comparisons make people feel better, but they do not provide much in the way of hope. To balance these competing concerns, Taylor and Lobel (1989) hypothesized that people facing threatening circumstances compare themselves with others who are worse off than they are, but choose to affiliate with others who are better off than they are.

Stanton and colleagues conducted an experimental test of this hypothesis (Stanton,

Danoff-Burg, Cameron, Snider, & Kirk, 1999). The participants were females with a life-threatening disease: breast cancer. The women were randomly assigned to listen to an audiotape interview of another (alleged) patient who described herself as being either well-adjusted to her cancer or poorly adjusted to her cancer. In a control condition, the woman did not specify whether she was well-adjusted or not. After listening to one of the three tapes, the patients rated their own adjustment and indicated how interested they were in talking to the woman they had heard on the tape.

Figure 4.1 shows strong support for Taylor and Lobel's (1989) hypotheses. Women felt best about their own plight after listening to the poorly-adjusted patient, but preferred to affiliate with the well-adjusted patient. These findings support the claim that, under threat, people prefer to compare themselves with others who are doing poorly (to make themselves feel better about their situation) but affiliate with those who are doing well (to gain inspiration and information).

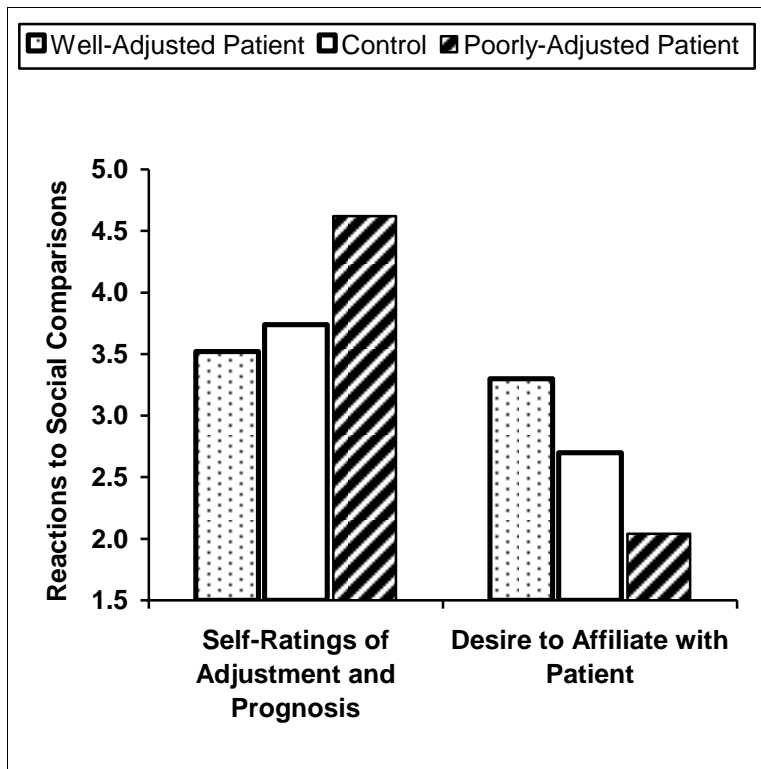


Figure 4.1. Divergent Reactions to Social Comparison. Women with breast cancer listened to an audiotape of another patient who said she was coping well with cancer, wasn't coping well with cancer, or didn't say anything either way. Women felt best about their own adjustment after listening to the poorly-adjusted woman, but preferred to affiliate with the well-adjusted woman. These findings support the claim that, under threat, people compare themselves with others who are doing poorly but affiliate with others who are doing well. (Source: Stanton, Danoff-Burg, Cameron, Snider, & Kirk, 1999, *Health Psychology*, 18, 151-158)

2. **Social Context and Social Comparison**

Of course, people aren't always free to choose targets of comparison; sometimes, social comparisons are forced upon them. Suppose you are invited to a high school

reunion. You can't very well decide who will attend, so you don't know for sure whether your accomplishments in life will seem substantial or paltry. What factors influence whether we feel good or bad in such situations?

Contrast Effects Following Self-Comparison. Most research reveals a contrast effect. Contrast effects occur when people feel better about themselves when interacting with others who are somehow worse off than they are. To illustrate, [Marsh, Kong, and Hau \(2000\)](#) interviewed over 7,000 students attending various schools in Hong Kong. The schools varied in their academic excellence, enabling the researchers to determine how these variations influenced students' perceptions of their academic ability. Contrast effects occur if students attending low achieving schools evaluate themselves more positively than do those attending high achieving schools. The data displayed in Figure 4.2 show just an effect. At every level of actual ability, students attending low achieving schools thought they were smarter than did students attending medium or high achieving schools (see also, [Bachman & O'Malley, 1986](#); [Davis, 1966](#); [Marsh & Hau, 2003](#); [Marsh & Parker, 1984](#); [Morse & Gergen, 1970](#)). Informally, this effect is known as the "Big-Fish-Little-Pond Effect," as it suggests it is better to be a big fish in a little pond than a little fish in a big pond.

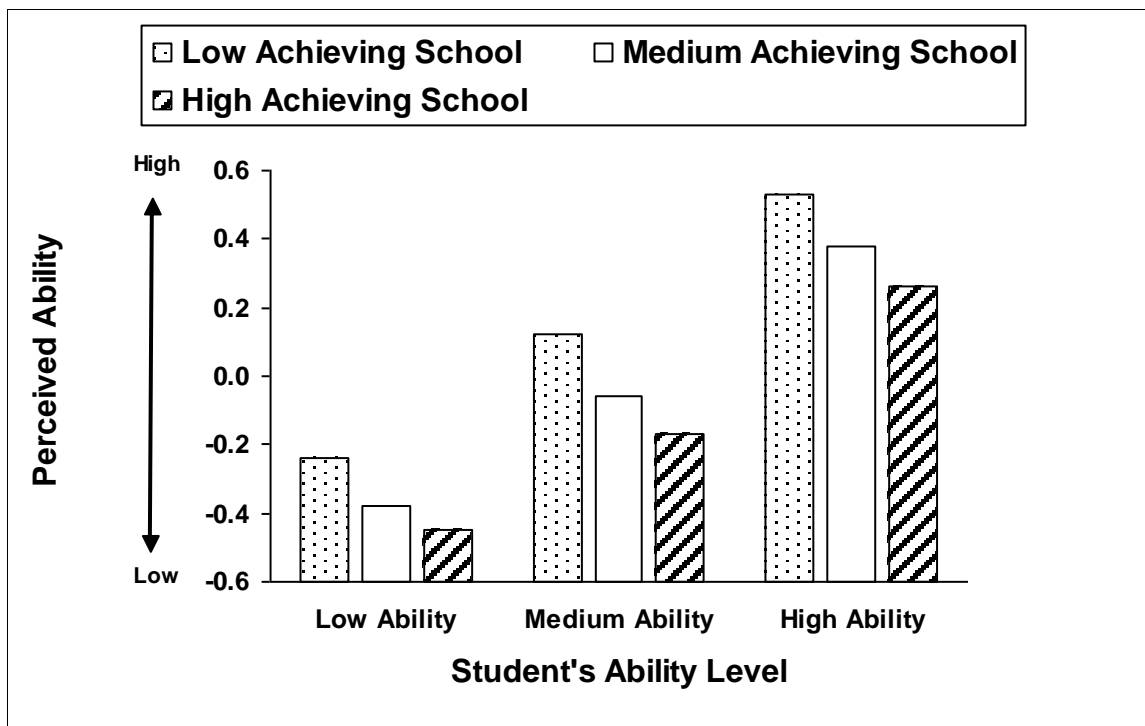


Figure 4.2. The "Big-Fish-Little-Pond Effect" in the Classroom. **At every level of ability, students who attended low achieving schools thought they were smarter than students who attended medium or high achieving schools. These findings suggest that people contrast their abilities against those in their immediate social surroundings.** (Source: Marsh, Kong, & Hau, 2000, *Journal of Personality and Social Psychology*, 78, 337-349)

Media images can also produce contrast effects in self-evaluations. This phenomenon can be observed in virtually every grocery store in America, whose checkout

stands are lined with magazines that depict thin fashion models in provocative poses. Exposure to these images typically produces a contrast effect: Women evaluate themselves more negatively after viewing images of attractive female models, especially when men are present (Cash, Cash, & Butters, 1983; Groesz, Levine, & Murnen, 2002; Henderson-King, Henderson-King, & Hoffman, 2001).

Even inanimate objects can produce contrast effects in attractiveness. Consider the effects of viewing a Barbie doll. Barbie is the most successful doll ever marketed. It has been estimated that 99% of 3-10 year olds own at least one Barbie doll, and that two Barbie dolls are sold every second worldwide (Rogers, 1999; Schor, 2004). Unfortunately, Barbie is exceptionally thin, with weight and body proportions so extreme that less than 1 in 100,000 women would be expected to have her figure and those that did would be unhealthy and anorexic (Norton, Olds, Olive, & Dank, 1996). In short, the ideal figure Barbie projects is largely unattainable and extremely harmful.

Do these unrealistic proportions influence the way girls think about their own bodies? To investigate this issue, Dittmar, Halliwell, and Ive (2006) had girls read a picture book about a character named "Mira," who was depicted buying clothes and going to a birthday party. In one condition, the book contained several pictures of a Barbie doll; in another condition, the book contained neutral photographs without any dolls. Afterward, the girls indicated how they felt about their own bodies. Figure 4.3 shows the results. Although the eight-year old girls were relatively unaffected by the experimental manipulations, the younger girls were more dissatisfied with their bodies after viewing the Barbie doll. These findings highlight how powerful social comparison effects can be, even when we compare ourselves with an inanimate object like a doll (see also, Jones, 2004).



Figure 4.3. Body Image After Viewing a Barbie Doll. **Viewing a Barbie doll did not affect the body image of 8 year old girls, but lowered the body image of younger girls.** (Source: Dittmar, Halliwell, & Ive, 2006, *Developmental Psychology*, 42, 283-292)

Assimilation Effects Following Social Comparison. Although contrast effects in social comparison are commonly found, they do not always occur. Under some conditions, people show an assimilation effect: they evaluate themselves more positively when they compare themselves with others who are exemplary on some dimension. Several variables influence whether contrast or assimilation effects occur, including the extremity of the model and the perceived modifiability of the trait (Smeesters & Mandel, 2006). An investigation by Brown, Novick, Lord, and Richards (1992) shows that psychological closeness is another relevant variable. These investigators led female participants to believe they would be having a get-acquainted conversation with another woman. Prior to the conversation, the participants were shown a picture of what the other woman (allegedly) looked like. Some participants saw a very attractive woman and others saw a woman who was relatively unattractive. To vary psychological closeness, some participants were led to believe that they shared the same birthday with the woman in the photograph; other participants in a control condition were not given this information. Finally, participants rated their own attractiveness.

Brown and colleagues reasoned that the shared birthday manipulation would lead participants to feel psychologically connected to the woman in the photograph, and that these feelings of relatedness would lead participants to assimilate to the woman's attractiveness (see also, Cialdini & De Nicholas, 1989; Finch & Cialdini, 1989; Miller, Downs, & Prentice, 1998). The data shown in Figure 4.4 confirm these predictions. Although the

usual contrast effect was found in the control condition (participants viewing the attractive woman rated themselves as less attractive than did participants viewing the unattractive woman), assimilation effects occurred in the shared-birthday condition (participants rated themselves as more attractive when viewing the attractive woman than when viewing the unattractive woman). These findings establish that assimilation effects occur when people compare themselves with another person who is part of their “extended self”.

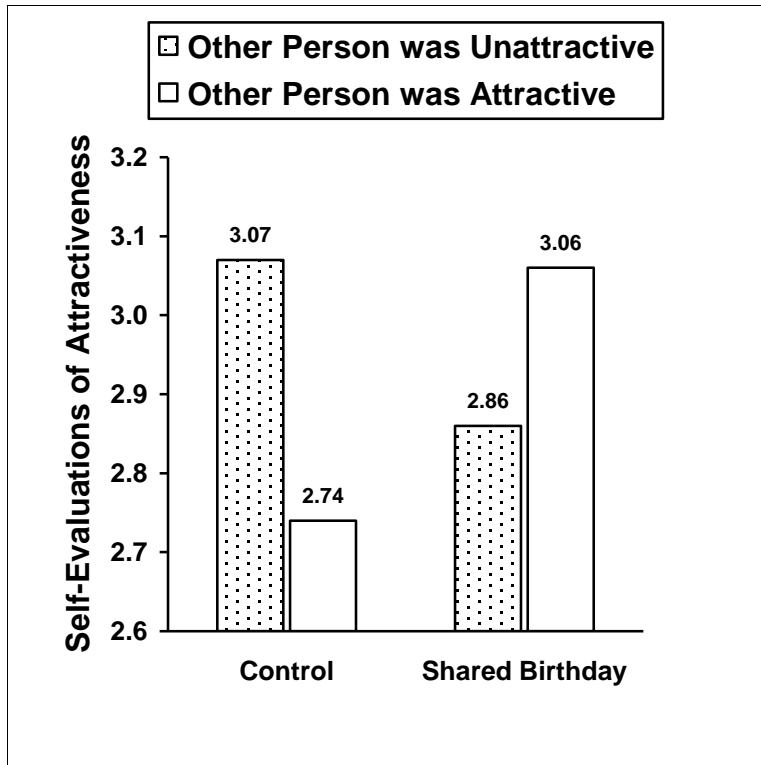


Figure 4.4. Assimilation and Contrast Effects in Self-Evaluations of Attractiveness. **Female participants viewed photographs of an attractive or unattractive woman, who (allegedly) either did or did not share their birthday. The data revealed a contrast effect in the control condition (i.e., the participants regarded themselves as being more attractive after viewing a photograph of an unattractive woman than an attractive woman), but an assimilation effect in the shared birthday condition (i.e., the participants regarded themselves as being more attractive after viewing a photograph of an attractive woman than an unattractive woman). These findings indicate that people assimilate to the characteristics of others when they feel psychologically connected to them. (Source: Brown, Novick, Lord, & Richards, 1992, *Journal of Personality and Social Psychology*, 60, 717-727)**

Related results have been reported by other investigators (Wheeler & Suls, 2007). For example, contrast effects occur when people think of themselves as individuals (i.e., as ME), but assimilation effects occur when people think of themselves in relational terms (i.e., as WE) (Brewer & Weber 1994; Gardner, Gabriel, & Hochschild, 2002; McFarland & Buehler, 1995; Mussweiler & Bodenhausen, 2002; Schmitt, Silvia, & Branscombe, 2000; Stapel & Koomen, 2001, 2005). Mussweiler (2003) has developed a theory to explain these effects. This theory assumes that contrast effects occur when people ask themselves “How am I *different* from another person?” and assimilation effects occur when people ask themselves “How am I *similar* to another person?” Any variable that increases our similarity with a comparison target (such as psychological closeness) increases the

likelihood that assimilation will occur and any variable that decreases our similarity with a comparison target (such as psychological distance) increases the likelihood that contrast effects will occur (Broemer & Diehl, 2004; Collins, 1996; Mussweiler, 2001a, 2001b; Markman & McMullen, 2003; Mussweiler, Rüter, & Epstude, 2004b).

3. ***Role Models as Sources of Inspiration or Despair***

Numerous intervention programs use social comparison processes to change people's behavior by exposing an audience to a role model. Some of these role models are positive (e.g., many self-help programs feature testimonials by successful graduates of the program) and some are negative (e.g., programs such as "Scared Straight" introduce young students to drug addicts or inmates who have served time for a variety of criminal behaviors). Mussweiler's (2003) theory of assimilation and contrast suggests that similarity will determine when these programs will produce beneficial results. As shown in Table 4.1, people who feel similar to the model and believe they could experience the same outcome show an assimilation effect: They feel inspired by a positive role model but scared by a negative role model. When people feel dissimilar to the model and believe they could not experience the same outcome, they show a contrast effect: They feel dejected and envious of a positive role model and smugly reassured by a negative role model (Lockwood, 2002, 2006; Lockwood & Kunda, 1997; Major, Testa, & Bylsma, 1991; Taylor & Lobel, 1989; Wood & VanderZee, 1997).

Table 4.1. Perceived Similarity Determines Emotional Reactions to Positive and Negative Role Models

	Positive Role Model	Negative Role Model
It Could Happen to Me (Assimilation Effects)	Hope and Inspiration	Anxiety and Fear
It Couldn't Happen to Me (Contrast Effects)	Dejection and Envy	Smug Reassurance

C. ***Reflected Appraisals***

Our friends, loved ones, and family members are more than simply targets of social comparison. We are also affected by their evaluations of us. Charles Horton Cooley, a 19th century American sociologist, identified this effect in his discussion of the looking-glass self. Cooley (1902) was particularly concerned with how people's feelings toward themselves develop. He argued that these feelings are socially determined. We imagine how we are regarded by another person, and this perception determines how we feel about ourselves. The term looking-glass self was used to call attention to the fact that other people serve as a mirror; that is, we see ourselves reflected in other people's eyes.

In a very large and interesting class of cases the social reference takes the form of a somewhat definite imagination of how one's self ... appears in a particular mind, and the kind of self-feeling one has is determined by the attitude toward this attributed to that other mind. A social self of this sort might be called the reflected or looking glass self. (Cooley, 1902, pp. 152-153)

1. **Theoretical Model**

Cooley went on to propose a three-step process. First, we imagine how we appear in the eyes of another person; second, we imagine how that person is evaluating us; third, we feel good or bad in accordance with this imagined judgment. Note the phenomenological nature of Cooley's model. It is our imagined judgment, not what the person actually thinks of us, that makes us feel proud or ashamed of ourselves.

A self-idea of this sort seems to have three principal elements: the imagination of our appearance to the other person; the imagination of his judgment of that appearance; and some sort of self-feeling, such as pride or mortification. The comparison with a looking-glass hardly suggests the second element, the imagined judgment, which is quite essential. The thing that moves us to pride or shame is not the mere mechanical reflection of ourselves, but an imputed sentiment, the imagined effect of this reflection upon another's mind (Cooley, 1902, p. 153).

Although Cooley was concerned with how people's feelings toward themselves develop, Kinch (1963) adapted these ideas to explain how people acquire self-knowledge. Kinch's model, which is shown in Figure 4.5, also has three components: (a) What other people actually think of us (the actual appraisals of others); (b) our perception of these appraisals (our perceived appraisals); and (c) our own ideas about what we are like (our self-appraisals). The model assumes that actual appraisals determine perceived appraisals, and perceived appraisals, in turn, determine self-appraisals. As an example, the model assumes that (a) another person thinks you are attractive (actual appraisal), (b) you are aware of this (perceived appraisal), and (c) because of this, you think you are attractive. Note again the phenomenological nature of the model. The lack of a direct arrow linking actual appraisals to self-appraisals means that it is our perception of what other people think of us, rather than what they actually think of us, that determines our self-appraisals.

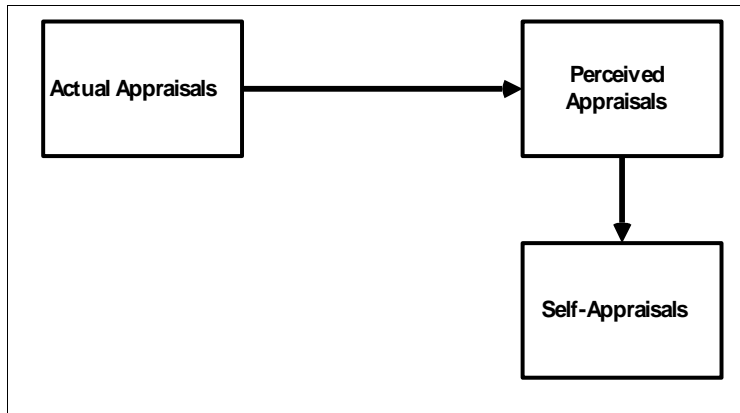


Figure 4.5. The Reflected Appraisal Model. **In this model, what other people think of us (actual appraisals) influences our self-appraisals indirectly, via perceived appraisals.**

2. **Empirical Findings**

Over the years, a great deal of research has tested the model shown in Figure 4.5 (for reviews, see Felson, 1993; Kenny & DePaulo, 1993). A typical investigation with college students involves a group of friends, roommates, or acquaintances. The students

rate themselves and each other on a number of dimensions (e.g., how attractive, intelligent, and sociable do you think person X is?). The students are also asked to predict how they are being rated by others (e.g., how attractive do you think person Y thinks you are?). Finally, the relations among actual appraisals, perceived appraisals, and self-appraisals are examined.

In general, this research has turned up only limited support for the reflected appraisal model. First, contrary to the model, people are not very good at knowing what any particular individual thinks of them. Felson (1993) believes this is because communication barriers and social norms limit the information we receive from others. This is especially true when the feedback would be negative. With the exception of professors' teaching evaluations, people rarely give one another negative feedback ("if you don't have anything nice to say about someone, don't say anything at all"), so people rarely conclude that other people dislike them or evaluate them negatively.

Despite being largely unaware of how any particular person evaluates them, people are better at knowing what people in general think of them. At the same time, the nature of this association may not conform to the one specified in Figure 4.5. The reflected appraisal model assumes that actual appraisals determine perceived appraisals (e.g., other people think you are smart, somehow communicate this information to you, and you correctly perceive that they think you are smart). But the influence of a common third variable could also produce an apparent association between actual appraisals and perceived appraisals. To illustrate, some students get better grades in school than do others. Teachers think students who get good grades are smart, and students who get good grades assume their teachers think they are smart. In this case, actual appraisals and perceived appraisals will be correlated, but there is no causal relation between them. They are correlated simply because they are both associated with a common third variable, grades. Figure 4.6 illustrates these effects.

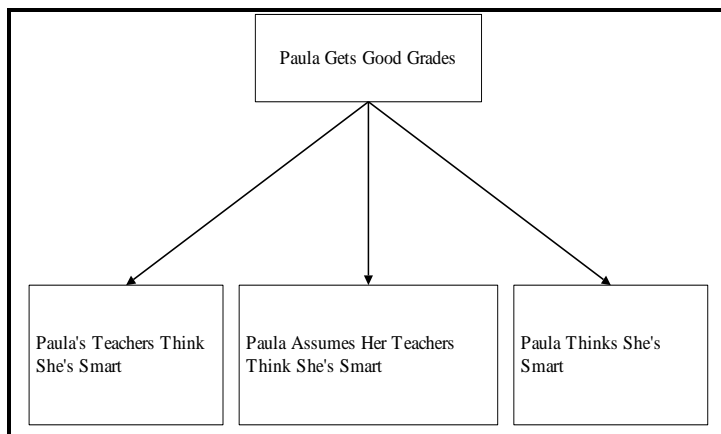


Figure 4.6. Reflected Appraisals and the Third Variable Problem. **The hypothetical example shows how a common third variable (grades) could influence self-knowledge independent of what other people think.**

A related problem clouds the interpretation of the association between perceived appraisals and self-appraisals. Although these variables are highly correlated (Felson, 1993; Kenny & DePaulo, 1993; [Shrauger & Schoeneman, 1979](#)), the causal association

between them is unclear. The reflected appraisal model assumes that perceived appraisals determine self-appraisals (e.g., if we think other people think we are clever, then we think we are clever), but the reverse causal sequence is also possible (e.g., if we think we are clever, we assume other people think so, too). Although correlational studies do not provide a definitive test of this issue, the tendency to assume that others see us as we see ourselves may provide a better explanation for the observed correlation between perceived appraisals and self-appraisals.

These findings suggest some important qualifications to the reflected appraisal model. As originally conceived, the model assumed that people see themselves as others see them. Person A forms an opinion about Person B, and Person B pliantly registers this opinion and incorporates it into her self-concept. This sequence may accurately characterize matters in early childhood, but it appears to be less relevant later in life. This is because people are not as passive as the model assumes. They strategically decide whose eyes to look into, and they selectively interpret the image they see reflected in those eyes. For this reason, people usually believe that others see them as they see themselves or wish to be seen.

Taking this idea one step further, self-verification theory argues that people behave in ways that actively create self-verifying impressions in others (Swann, 1987, 1996). To illustrate, suppose you and I are introduced and share a cup of coffee while discussing various topics. As shown in Figure 4.7, according to the reflected appraisal model, your view of my intelligence will come to influence my view of my intelligence: If you think I am intelligent, I will come to think I am intelligent. In contrast, self-verification theory argues that during the course of our conversation, I will try to convince you that I am as intelligent as I think I am. If I think I am intelligent, I might try to dazzle you with my knowledge of Greek poetry and astrophysics; if I think I'm unintelligent, I might disclose that I can't find my way around campus or remember my mother's maiden name. In a study with college roommates, McNulty and Swann (1994) found that self-verification effects were at least as powerful as reflected appraisals. These findings provide further evidence that people do not passively accept other people's opinions of them (see also, Cast, Stets, & Burke, 1999).

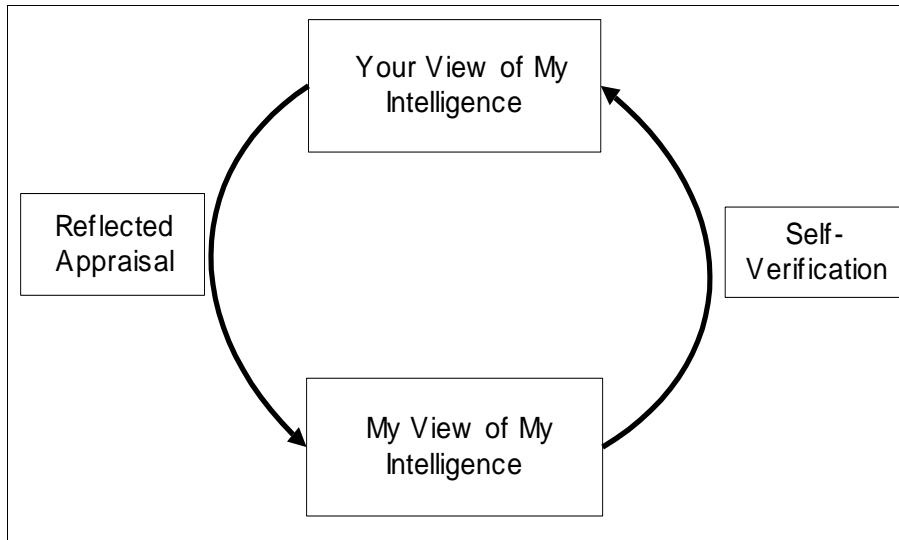


Figure 4.7. Reflected Appraisals and Self-Verification. **Reflected appraisals occur when our self-views are influenced by what other people think of us; self-verification occurs when our self-views influence what other people think of us.**

3. *Nonconscious Reflected Appraisals*

Although there is only modest evidence that other people's opinions shape our self-views, this doesn't mean we are never influenced by the judgments of others. Clearly, a disapproving glance from a spouse or friend can make us feel bad about ourselves. In an engaging study, Baldwin and colleagues demonstrated this effect experimentally (Baldwin, Carrell, & Lopez, 1990). In this investigation, graduate students in psychology were asked to evaluate their research ideas after viewing (at levels below conscious awareness) the scowling face of their advisor or the approving face of a fellow student. Those exposed to the disapproving face subsequently evaluated their work more negatively than did those exposed to the approving face (see also, Baldwin, 1994; Hinkley & Andersen, 1996).

It is especially noteworthy that the students in Baldwin's research were not consciously aware they had viewed an approving or disapproving face, even though seeing these faces affected the way they thought about themselves. This finding is consistent with evidence that even stimuli we're not paying attention to can activate particular self-views (Bargh, 1982; Strauman & Higgins, 1987). You might, for example, catch a glimpse of someone who reminds you of your mother. Without even realizing it, you might then start seeing yourself through her eyes and thinking of yourself from her point of view (Andersen & Chen, 2002).

In some cases, nonconscious reflected appraisals might even alter your behavior. To illustrate, Fitzsimons and Bargh (2003) first had participants indicate how motivated they were to make their mother proud. Several weeks later, the participants participated in a priming task. Half of the participants were asked to think about their mom, and half were asked to think about other things (e.g., the route they take to school). Finally, all participants were given a test of their verbal ability, in which they were asked to generate as many unique words as they could in five minutes. Fitzsimons and Bargh predicted that thinking about one's mom would facilitate the performance of participants who wanted to

please their mom, but have little effect on the performance of participants for whom this goal was of lesser importance. Figure 4.8 shows exactly this effect. This finding reveals that nonconscious reflected appraisals can influence our behavior (see also, Förster, Liberman, & Friedman, 2007; Shah, 2003a, 2003b; Wheeler, DeMarree, & Petty, 2007).

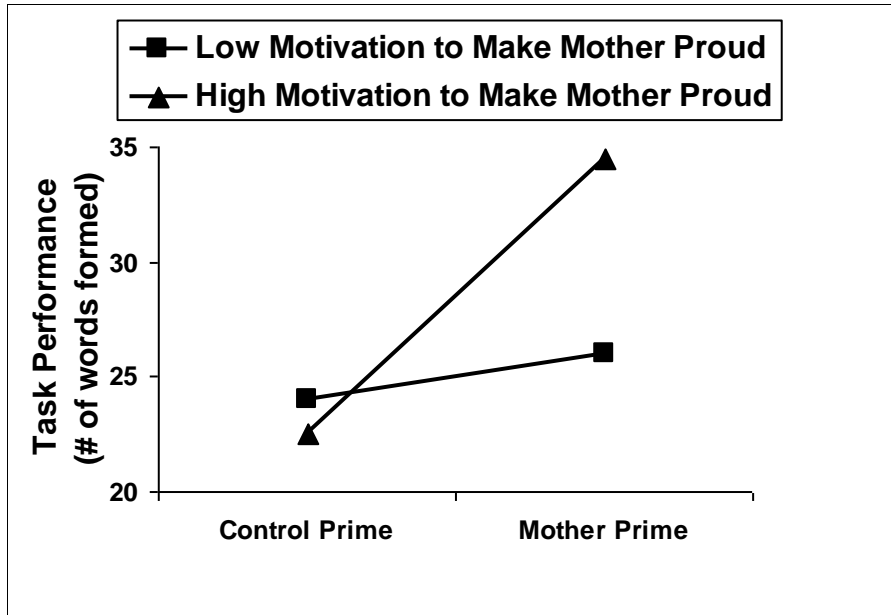


Figure 4.8. Task Performance After Thinking About Someone We Care to Please. **Although the priming manipulation had no effect among participants who weren't motivated to please their mother, it did increase performance among those who were motivated to make their mother proud of them. These findings show that thinking about another person can influence our own behavior.** (Source: Fitzsimos & Bargh, 2003, *Journal of Personality and Social Psychology*, 84, 148-164)

D. **Introspection**

Introspection is another commonly traveled road to self-knowledge. With introspection, people attempt to learn about themselves by directly consulting their thoughts, feelings, motives, and desires. Suppose, for example, I want to know whether I'm a sentimental person. I can look inward and ask myself how I generally feel at weddings, college graduations, and other occasions that are relevant to sentimentality. If I feel soft and warm on these occasions, I conclude that I am a sentimental person.

Introspection would seem to be a very reliable way of knowing what we are like. After all, what better way to know ourselves than to examine our own thoughts and feelings? This perception appears to be widely shared. Andersen and Ross (1984) asked college students whether another person would know them better if they knew their private thoughts and feelings for one day or if they were able to observe their behavior over a period of several months. By a wide margin, the students believed that other people would know them best if they were privy to their inner world of thoughts and feelings (see also, Johnson, Robinson, & Mitchell, 2004). Interestingly, this is less true when it comes to knowing others, as people believe that the best way to know others is to observe their behavior (Kruger & Gilovich, 2004; Pronin & Kugler, 2007).

1. ***Introspection and Decision-Making***

Introspection does not always foster self-insight, however. In an extensive program of research, Wilson and colleagues have shown that thinking too much about why we feel the way we do about some person, object, or issue can sometimes confuse us and undermine accurate self-knowledge (Wilson, 2002; Wilson & Dunn, 2004). To illustrate, the participants in one study looked at several art posters and then chose one to take home (Wilson, Lisle, Schooler, Hodges, Klaaren, & LaFleur, 1993). Some of the participants chose immediately, whereas others were encouraged to carefully consider why they felt the way they did about each poster before deciding. When contacted several weeks later, those who chose quickly expressed greater satisfaction with their choice than those who chose more deliberately. On the basis of these, and other findings, Wilson concludes that thinking too much about why we feel the way we do can disrupt, rather than promote, accurate self-knowledge (Wilson & Dunn, 2004; Wilson & LaFleur, 1995; Wilson & Schooler, 1991).

Why isn't introspection always beneficial? The most likely reason is that many of our preferences are guided by unconscious desires rather than conscious ones (Freud, 1957; Nisbett & Wilson 1977). For example, if you were asked why you like your boyfriend or girlfriend, you would probably say it has something to do with the person's personality (e.g., the person's warmth or kindness). In fact, these reasons are imperfectly related to why you feel the way you do. Other reasons, such as the person's physical attractiveness or even the way the person walks, laughs, smells, or gestures may be equally or more important. Because introspection rarely penetrates consciousness, the real reasons for our behavior are not accessed, and our decisions produce less satisfaction than if we had just gone with our "gut instinct."

Does this mean we should never think carefully before making a decision? Not necessarily. Dijksterhuis and Nordgren (2006) noted that there are three ways to make a decision: Decide immediately without thinking at all, give careful thought before deciding, or take in all of the information but delay making a decision while thinking about something else. This last alternative is captured by the phrase "I'll sleep on it." Here, we allow ourselves to unconsciously deliberate about a decision without thinking about it directly.

To test the efficiency of these three strategies, Dijksterhuis and van Olden, (2006) replicated the Wilson et al. (1993) study, adding a third condition in which participants were told to wait before making a decision. While they waited, they worked on another experimental task that prevented them from actively thinking about which poster they were going to choose. Several weeks later, all of the participants were contacted by phone and asked how satisfied they were with the poster they had chosen. Participants who were distracted before making a decision expressed the most satisfaction, suggesting that people may be happiest when they make their decisions without deliberately thinking too much about the choices they face. This appears to be particularly true when decisions are complex and complicated (Dijksterhuis, 2004; Dijksterhuis, Bos, Nordgren, & van Baaren, 2006).

2. ***Introspection as a Therapeutic Process***

For many people, introspection most commonly occurs when they write in a journal

or diary. Often, the attempt here is to gain insight into a significant event or work through a troubling experience. Pennebaker and his associates have conducted a series of experimental studies to determine whether this activity is beneficial (Pennebaker, 1997; Pennebaker, Kiecolt-Glaser, & Glaser, 1988). In these studies, participants are asked to spend 25-30 minutes a day for 4 days writing about an event or personal experience. Using random assignment to conditions, some participants are instructed to write about a significant life experience, whereas others are assigned to write about trivial events or impersonal topics. Although participants who write about significant topics initially experience more emotional distress, they recover quickly and ultimately fare better than those who write about superficial topics. For example, their physical and mental health is better, and they perform better in school. Moreover, this is especially true if, through writing, they have gained insight into the experience and its causes (Pennebaker, Mayne, & Francis, 1997). These findings suggest that introspection is beneficial when it allows individuals to understand and come to terms with a troubling personal experience (see also, McLean, Pasupathi, & Pals, 2007).

E. **Self-Perception**

Thoughts and feelings are not the only source of self-knowledge. According to **self-perception theory**, people also learn about themselves by examining their own behavior (Bem, 1972). To illustrate, suppose you ask me whether I like country music. If I am an ardent fan of this type of music, I would immediately answer “Yes.” But suppose my feelings are not so passionate or well-defined. To answer this question I might recall that I frequently listen to country music while driving in my car. So I answer “Yes, I like country music.” After all, what other reason can there be? No one makes me listen to it, so I must like it.

Notice that an outside observer would have reached a similar conclusion. You will also infer I like country music if you know I frequently choose to listen to it. This equivalence is a hallmark of Bem’s theory. The theory assumes that people acquire self-knowledge by passively observing their own behavior and drawing logical conclusions about why they behaved as they did, much as an outsider would do (see also, Gopnik, 1993).

To the extent that internal cues are weak, ambiguous, or uninterpretable, the individual is functionally in the same position as an outside observer, an observer who must necessarily rely upon those same external cues to infer the individual’s inner states. (Bem, 1972, p. 2)

This assumption distinguishes self-perception processes from introspection. Only you can introspectively examine your attitudes, feelings, and motives; with self-perception, we indirectly infer our attitudes, feelings, and motives by analyzing our behavior.

1. **Causal Attributions and Self-Perception**

The explanations people give for their actions are the key elements in self-perception theory. Formally, these explanations are known as causal attributions. Causal attributions are answers to why questions (Heider, 1958; Weiner, 1985). Imagine we see a person staggering as they walk across the street. We ask, “Why?” Is it because the person is injured, mentally unstable, physically challenged, drunk, or high on drugs? The

explanation we settle on is a causal attribution; we attribute the person's behavior to a cause.

Although behavior can be due to many causes, people are especially inclined to ask whether the behavior is due to a dispositional cause (or disposition) or the situation. A **disposition** is an enduring, inherent quality of a person, such as the person's character, personality, or ability. To illustrate, if we decide that Chris came late to class because she is lazy and disorganized, we have made a dispositional attribution for her behavior. A **situation** is any factor that isn't dispositional in nature. If we say Chris came late to class because she happened to oversleep or her roommate had taken her car or traffic was bad, we are making a situational attribution. Note that these situational attributions can be about Chris (she overslept), about other people (her roommate borrowed her car), or about the environment (traffic was bad), but none refers to an enduring, inherent property of Chris, such as her character or nature.

Bem's theory underscores that people also gain self-knowledge by making attributions for their own behavior. If the situation fully explains our own behavior, we refrain from drawing an inference about ourselves; if the situation cannot explain our behavior, we draw a dispositional inference about what we are like. To return to an earlier example, I would not assume I'm a lover of country music if the only station in town plays only country music. On the other hand, if I listen to country music even though I could listen to dozens of other stations, I infer I am a country music fan.

2. **Self-Perception of Attitudes**

Tests of self-perception theory have taken many forms. One line of research has examined how self-perception processes influence attitudes. According to Bem, people with poorly defined or weak attitudes use their behavior to infer their attitudes. [Chaiken and Baldwin \(1981\)](#) tested this prediction by first identifying two groups of participants: Those with firmly-held attitudes toward environmental issues and those with weakly-held attitudes toward environmental issues. Later, all participants completed a questionnaire asking them to indicate how often they performed various behaviors of an environmental nature. Using a device developed by [Salancik and Conway \(1975\)](#), Chaiken and Baldwin framed the questions in such a way that respondents were apt to conclude they had positive attitudes toward the environment or negative attitudes toward environment. For example, participants in the pro-environment condition were asked whether they *frequently* litter (most said no), whereas those in the anti-environment condition were asked whether they *occasionally* litter (most said yes).

After completing these questionnaires, the respondents rated their attitudes toward the environment. Self-perception theory predicts that people with weak or poorly-defined attitudes toward the environment will use their prior behavior to infer their attitudes. Figure 4.9 shows that this prediction was confirmed. Whereas people with firmly-held attitudes toward the environment were unaffected by which questionnaire version they received, people with weakly-held attitudes expressed more positive attitudes toward the environment when their prior behavior suggested they had a positive attitude than when their prior behavior suggested they had a negative attitude (see also, [Albarracín & Wyer, 2000](#); [Zanna, Olson, & Fazio, 1980](#)).

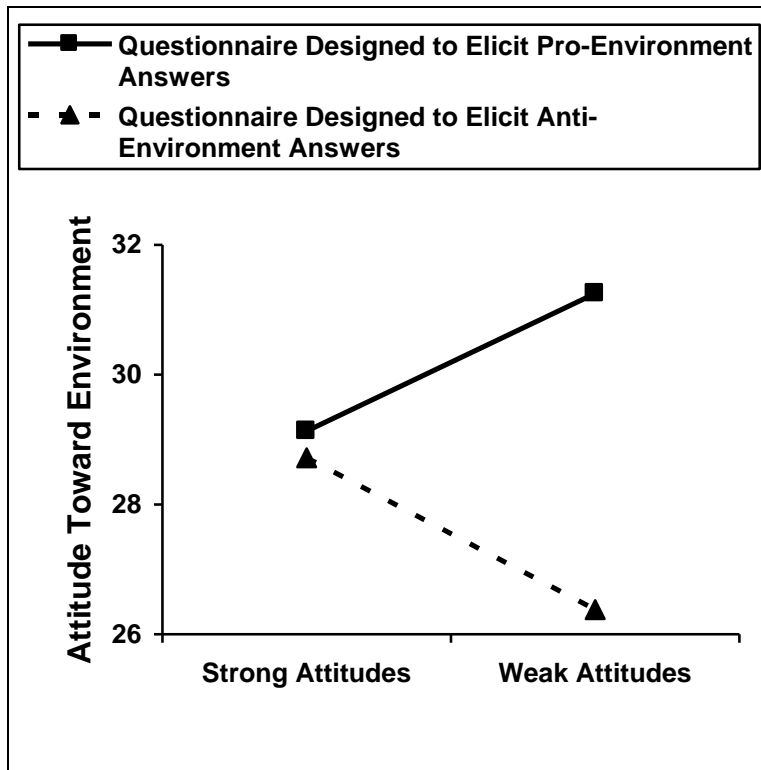


Figure 4.9. Attitude Strength and the Self-Perception of Attitudes. Questionnaires designed to elicit pro- or anti-environment answers had no effect on people with strong attitudes, but did affect participants with weak attitudes. This finding supports self-perception theory's claim that people with weakly-held attitudes use their behavior to infer their attitude. (Source: Chaiken & Baldwin, 1981, *Journal of Personality and Social Psychology*, 41, 1-12)

3. **Self-Perception of Motivation: The Overjustification Effect**

Many parents give their children stickers, candy, or other rewards for playing the piano, doing their homework, or cleaning up their room. Although these rewards are given with the best of intentions, self-perception theory tells us that they may have a hidden cost. When the children ask themselves why they are engaging in the activity, they might conclude it is because of the external rewards they receive rather than any intrinsic interest.

The negative effects of external rewards were first demonstrated by [Lepper, Greene, and Nisbett \(1973\)](#). In this study, nursery school children were allowed to play with felt-tip markers. Three experimental conditions were created. Children in the *expected-reward* condition were told they would receive a reward (in the form of a special certificate) if they drew with the markers. Children in the *unexpected-reward* condition also received a reward for playing with the markers, but they hadn't been told ahead of time they would receive it. Finally, children in a control condition neither expected nor received an award for playing with the markers.

Several days later, the children were brought back into the laboratory and were given the opportunity to play with a number of attractive toys, including the felt-tip markers. No rewards were mentioned or administered during this phase of the

experiment. To measure intrinsic interest, the researchers noted the amount of time the children spent playing with the markers during this free period. Consistent with the claim that external rewards can dampen intrinsic motivation, the data shown in Figure 4.10 reveal that the children in the expected-reward condition spent less time playing with the markers during the second stage of the experiment than did children in the other two conditions (for related research, see [Boggiano & Main, 1986](#); [Higgins, Lee, Kwon, & Trope, 1995](#)). One explanation for this finding is that the reward undermined the children's interest through a self-perception process: When they children asked themselves why they had initially played with the markers, they assumed it was because of the reward rather than any intrinsic interest.

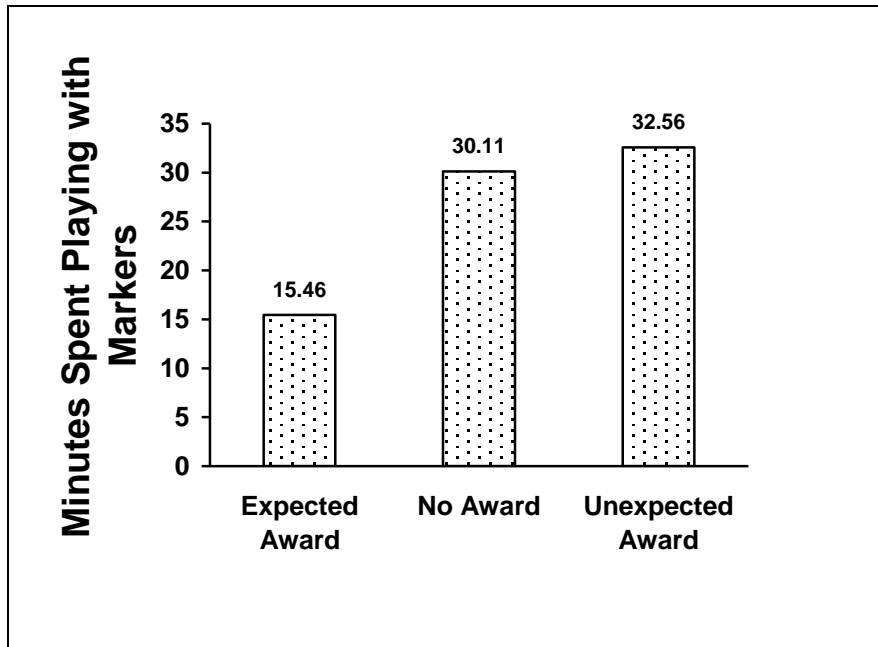


Figure 4.10. Minutes Spent Playing with Markers as a Function of Reward Condition. **Children who earlier had received an expected reward for playing with felt-tip markers subsequently showed less interest in the markers than did children who received either an unexpected reward or no reward at all. These findings document that expected rewards can undermine intrinsic motivation.** (Source: Lepper, Greene, & Nisbett, 1973, *Journal of Personality and Social Psychology*, 28, 129-137)

Fortunately, external rewards do not always undermine intrinsic motivation. [Deci \(1975\)](#) noted that external rewards contain two components. On the one hand, they can function as a bribe and reduce freedom by coercing people to behave in ways they normally would not. At the same time, external rewards can provide important information about the quality of one's efforts and accomplishments (as when a person receives a reward for trying hard or for turning in an exemplary performance). Rewards appear to undermine intrinsic interest *only* when the controlling aspect of the reward is more prominent than its informational value ([Ryan, Mims, & Koestner, 1983](#)). This means that rewarding someone for a job well done does not necessarily diminish the person's enthusiasm for performing the task ([Eisenberger, Armeli, & Pretz, 1998](#); [Eisenberger, Rhoades, & Cameron, 1999](#)). The same is true of praise. Verbal reinforcement heightens enjoyment when it is sincere and promotes choice and autonomy ([Henderlong & Lepper, 2002](#)), but reduces enjoyment

when it is controlling and conditional (Assor, Roth, & Deci, 2004).

It is interesting to consider this distinction with respect to a reading program being conducted in Tifton, Georgia. This town has undertaken a quest to become the Reading Capital of the World (<http://www.readingcapital.com> <http://www.readingcapital.com/>). To achieve this aim, the town offers monetary rewards to citizens who read. The program is a huge success, as the town's inhabitants are reading much more than they did before the program was initiated. The question arises, however, as to whether rewarding people in this manner will undermine their intrinsic enjoyment of reading. The developers of this program think not. They note that the rewards are given only when readers demonstrate competency. To receive a reward, the reader must pass a comprehension test for every book he or she reads. Because these rewards convey information about performance standards, they are unlikely to dampen people's enthusiasm for reading.

4. **Self-Perception of Emotion**

Self-perception processes can also explain emotional experiences. According to **Schachter's Two-Factor Theory of Emotion**, emotional experience is comprised of two factors: Physiological arousal and a cognitive interpretation or label (Schachter, 1964; Schachter & Singer, 1962). Ordinarily, people have little difficulty identifying why they feel the way they do. For example, the sound of a dentist's drill leads (most) people to feel dread, anxiety, and fear. On other occasions, however, the eliciting stimulus is less obvious. Suppose you wake up one day feeling uneasy. Undoubtedly, you will look to the situation to see if it provides a suitable explanation. If you have an exam that day you're apt to conclude that you're nervous; if your boyfriend or girlfriend is coming to visit you may decide that you're excited. In terms of Schachter's theory, you attribute the arousal you feel to a cause in the manner described by Bem's self-perception theory.

A classic experiment by Schachter and Singer (1962) showed that people sometimes use the behaviors of others to label their own emotional states. The participants in this study were led to believe that the experimenters were testing how a vitamin supplement affects vision. All participants then received a shot. In one condition, the shot was a placebo and had no physiological effects. In another condition, the shot contained epinephrine (a drug that causes arousal, such as increased heart rate and accelerated breathing). Some of the participants who received the epinephrine were correctly told that the drug would produce various side effects (increased pulse rate; mild heart palpitations), whereas other participants were not told about the drug's true side effects. These variations resulted in three conditions: (1) a no arousal/placebo condition; (2) an informed arousal condition; and (3) an uninformed arousal condition.

After receiving their shots, the participants were escorted to another room while the experimenter prepared the vision test. A confederate who allegedly had also received the injection was waiting in the room. In one condition, the confederate acted euphoric and ebullient. He made silly airplanes out of questionnaires and joyously shot baskets with wadded up balls of paper. In the other condition, the confederate acted agitated and upset. He complained about having to participate in psychology experiments and ripped up the questionnaires he had been given in an angry manner.

Several minutes later, the participants were asked to indicate how they were feeling

(euphoric or angry), allowing Schachter and Singer to determine whether the confederate's behavior influenced the participants' own emotional states. Recall that Schachter's theory maintains that emotional experience is comprised of two factors: Physiological arousal and a cognitive label. Participants given a placebo were not experiencing any physiological arousal, so they should not be searching for a cognitive label and should not be affected by the confederate's behavior. Participants given epinephrine are experiencing arousal, but some of these participants were correctly informed that the shot they were given would make them feel excited and aroused. Since these participants already had an explanation for what they were feeling, they, too, should be unaffected by the confederate's behavior. The key prediction, then, is that only participants who were experiencing *unexplained* arousal (i.e., those in the uninformed arousal condition) would be influenced by the confederate's behavior.

The data shown in Figure 4.11 provide some support for these predictions. As expected, participants in the placebo condition were unaffected by the confederate's behavior, and those in the uninformed arousal condition felt better when the confederate was happy than when the confederate was angry. These findings support the contention that people who experience unexplained arousal look to the situation to label their emotional experience. The data in the informed arousal condition do not conform to the experimental predictions, however. These participants should have been unaffected by the confederate's behavior, but they felt angry when the confederate was euphoric and euphoric when the confederate was angry. These results indicate that factors other than self-perception processes influence emotional states ([Reisenzein, 1983](#)).

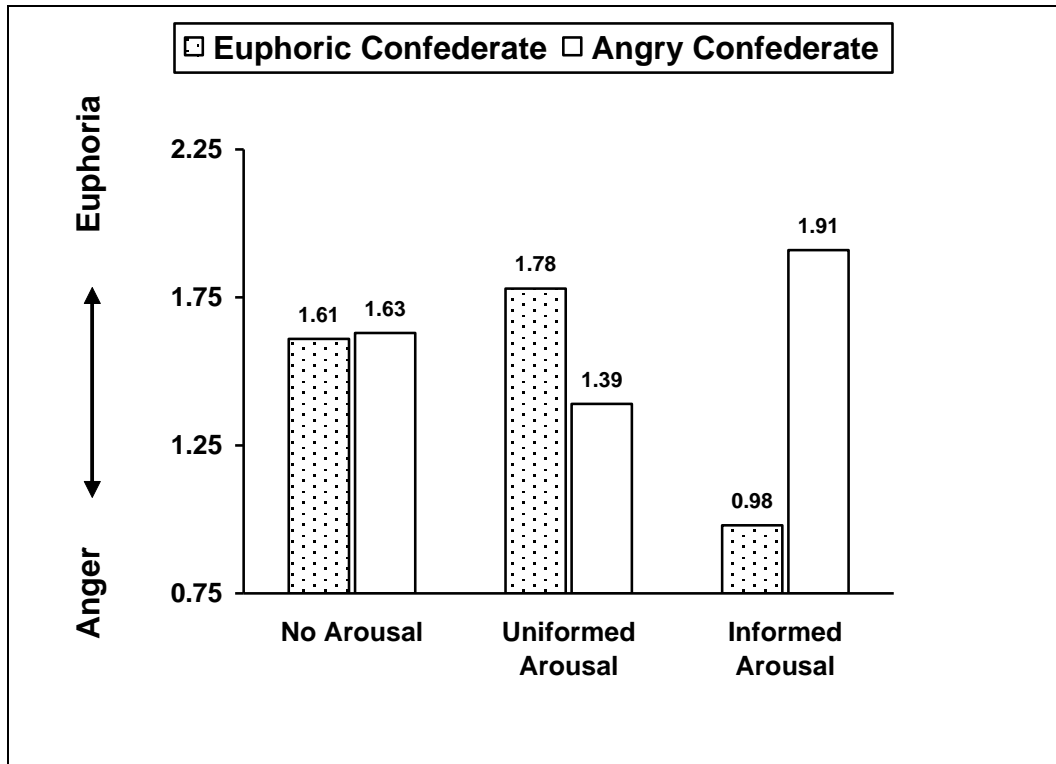


Figure 4.11. Schachter's Two-Factor Theory of Emotion. **The data show that the theory was supported in the no arousal/placebo condition and in the uninformed arousal condition, but not in the informed arousal condition. These findings provide qualified support for the claim that emotional states are comprised of two factors: Physiological arousal and a cognitive label. (Source: Schachter & Singer, 1962, *Psychological Review*, 69, 379-399)**

Misattribution of arousal. Because people do not always know why they feel the way they do, they can be led to misattribute the true causes of their emotional states. This misattribution of arousal can have some interesting consequences. For example, one investigation found that college students were more likely to cheat on a test if they had been told a drug they had been given would produce symptoms of anxiety than if they had been told the drug would relax them ([Dienstbier & Munter, 1971](#)). Why did this occur? Most people experience anxiety and arousal when they contemplate committing an immoral act. Even though all participants had been given a placebo, the participants in the “pill will make you tense” condition could easily believe that the anxiety they were feeling was due to the pill they had been given rather than to any compunction about cheating. This misattribution of arousal made it easier for them to cheat (see also, [Batson, Engel, & Fridell, 1999](#); [Storms & Nisbett, 1970](#); [Valins, 1966](#)).

F. **Section Summary**

In this section we have discussed a number of ways people learn about themselves. They can (a) consult the physical world, (b) compare themselves with others (social comparison), (c) incorporate the opinions of others toward them (reflected appraisals), (d) look inward (introspection), and (e) examine their behavior in the context in which it occurs and draw an appropriate inference (self-perception and attributions).

Not all of these sources of information are relevant for every attribute, but most are. Consider, for example, how these processes could lead a person to think of herself as shy and introverted. To begin, she might examine how she behaves at parties. If she's always standing off to the side, apart from others, she might come to regard herself as introverted through a self-perception process. She could also engage in introspection and examine her feelings in social situations. If she feels anxious and uncomfortable in the company of others, she might conclude that she is shy. People may also have told her she was shy. If she accurately perceived what they were saying, and she incorporated this information into her self-concept, she could come to believe that she was shy through the reflected appraisal process. Finally, she could also compare her level of social activity with others and conclude that she is less socially inclined than most other people. From that information she might also infer that she is introverted.

II. **The Application of Self-Knowledge**

Once self-knowledge forms, it influences a wide-variety of psychological processes. Seymour Epstein was one of the first psychologists to fully appreciate these influences. In an influential paper, [Epstein \(1973\)](#) argued that people's self-views shape the way they view the world. In pursuing this theme, Epstein likened self-knowledge to a theory (see also, [Kelly, 1963](#); [Sarbin, 1952](#)). Much as a scientist's theories organize and give meaning to a body of data, so, too, do people's ideas about themselves organize and give meaning to their own experiences.

I submit that the self-concept is a self-theory. It is a theory that the individual has unwittingly constructed about himself as an experiencing, functioning individual... Like most theories, the self-theory is a conceptual tool for accomplishing a purpose. [One of these purposes] is to organize the data of experience in a manner that can be coped with effectively. (Epstein, 1973, p. 407)

In the following sections of this chapter, we will review evidence in support of Epstein's assertion.

A. **Self-Schemas**

Building on Epstein's argument, [Markus \(1977\)](#) proposed that self-views that are important and are held with great certainty function as self-schemas. Schemas are hypothetical knowledge structures that guide the processing of information. People have schemas about many different things, including other people, social groups, social events, and objects ([Fiske & Taylor, 1991](#)). These schemas influence what information we notice, how we interpret and explain the information we take in, and what we remember.

Self-schemas have similar effects. In an initial demonstration, [Markus \(1977\)](#) first identified people who were schematic with respect to their perceived independence. These participants thought of themselves as very independent or very dependent, and they regarded this characteristic as very important. Other people were identified as aschematic with respect to this dimension. Aschematic participants didn't think of themselves as very independent or as very dependent, and they didn't regard this trait as important.

In the second part of the experiment, the participants were asked to indicate whether a series of words related to independence-dependence described them or not (e.g.,

How assertive are you? How conforming are you?). Participants who were schematic for independence-dependence made these judgments faster than did aschematic participants, indicating that self-schemas influence how quickly people process information for that characteristic (see also, [Bargh, 1982](#)). Additional findings showed that, in comparison with aschematics, schematic participants were better at remembering times when they acted in an independent or dependent manner.

Self-schemas also influence our reactions to environmental feedback. People who are schematic for a trait readily accept information that confirms their self-view but actively refute or reject information that runs counter to how they think of themselves ([Markus, 1977](#); [Swann 1996](#)). If, for example, you are certain that you are very graceful, you will quickly accept feedback that suggests you are agile, but carefully scrutinize or dismiss feedback that suggests you are ungainly.

Finally, self-schemas influence behavior. People who are schematic in a given domain act more consistently than do those who are aschematic ([Bem & Allen, 1974](#); [Markus, 1983](#)). For example, compared to those who are aschematic for independence-dependence, people who are schematic for this trait are likely to act independently when they are at work, with their friends, and in the classroom. This may be true even though both aschematics and schematics regard themselves as equally independent. The key difference is that people who are schematic for this trait are highly certain of their independence and regard the trait as particularly self-defining. These features account for the greater behavioral consistency schematic individuals display.

B. *Self-Knowledge and Social Perception*

Social-knowledge also shapes our understanding of other people. First, people describe others using qualities they regard as particularly self-descriptive ([Lewicki, 1983](#); [Markus, Smith, & Moreland, 1985](#); [Shrauger & Patterson, 1974](#)). If Sara thinks she is intelligent and creative, she will seek information about Kevin's intelligence and creativity when they meet, preferentially weight this information when she evaluates him, and describe him to others using these particular traits (e.g., "You should meet my friend, Kevin. He's not so smart, but he's really creative.")

Second, self-knowledge is used as a reference point or standard of comparison when evaluating other people. When asked whether another student is "studious," college students compare the student's study habits with their own before making a decision ([Dunning & Cohen, 1992](#); [Dunning & Hayes, 1996](#)). Only if the other student's study habits match or exceed their own do they judge the student to be studious ([Green & Sedikides, 2001](#); [Holyoak & Gordon, 1982](#); [Lambert & Wedell, 1991](#); [Sherif & Hovland, 1961](#); [Srull & Gaelick, 1981](#)).

Third, self-knowledge shapes people's judgments about which behaviors and qualities define broader traits and attributes. For example, what qualities do you think characterize leadership? How about creativity, athleticism, or intelligence? Chances are, you use your own self-views as a guide when making these determinations. To illustrate, [Dunning, Perie, and Story \(1991\)](#) first had participants rate themselves on two sets of attributes relevant to leadership. One set of attributes emphasized task-oriented qualities (e.g., ambitious, competitive, independent); the other set emphasized interpersonal skills

(e.g., agreeable, friendly, pleasant). Later, participants were asked what qualities are important to leadership. The results showed that participants defined leadership in ways that matched their own perceived qualities and strengths. Those who believed they possessed many task-oriented qualities believed successful leaders were ambitious, competitive, and independent; those who thought they possessed well-developed interpersonal skills believed successful leaders were agreeable, friendly, and pleasant.

Ultimately, these decisions shape our evaluations of other people as well ([Dunning & Cohen, 1992](#); [Dunning & Hayes, 1996](#)). Table 4.2 uses a hypothetical example to illustrate this point. In the example, two people are asked to judge another person's leadership potential. Person A thinks of himself as decisive, and believes this quality is an essential aspect of good leadership. Consequently, his decision regarding another person's leadership potential depends on whether the applicant is similarly resolute. Person B takes a similar route to judging leadership, but uses a different sets of self-views as a template. Person B thinks of himself as agreeable, believes agreeableness is an essential component of leadership, and bases his decision on whether the applicant is similarly sociable. In this manner, both judges endorse only applicants who possess qualities that mirror their own (see also, [Beauregard & Dunning, 1998](#); [McElwee, Dunning, Tan, & Hollmann, 2001](#)).

Table 4.2. Hypothetical Example Illustrating How Self-Views Influence Social Judgments

	PERSON A	PERSON B
	SELF-RATING	
Specific Self-Rating	I think I am decisive	I think I am agreeable
Trait Definition	I think decisiveness is a key component of leadership	I think agreeableness is a key component of leadership
Global Rating	I think I am a good leader	I think I am a good leader
	JUDGING ANOTHER PERSON'S LEADERSHIP POTENTIAL	
Base Decision on Personal Trait Definition	Gather information about the person's decisiveness	Gather information about the person's agreeableness
Use Self-Rating as a Standard	Use self-view as a standard, judging someone to be decisive only if they are (roughly) as decisive as I	Use self-view as a standard, judging someone to be agreeable only if they are (roughly) as agreeable as I
Global Rating	Base judgment of leadership potential on the applicant's decisiveness	Base judgment of the applicant's leadership potential on the applicant's agreeableness

C. Self-Knowledge and Social Prediction

People are frequently called upon to predict another person's behavior. For example, a store owner must anticipate how much her customers will pay for a product when deciding how much to charge. In a similar vein, when inviting someone on a date, we must take into consideration the invitee's tastes and preferences. Even driving requires social prediction. When we merge onto the freeway, we must anticipate whether other drivers will wait for us to complete the maneuver.

How do individuals go about making these sorts of social predictions? Much of the time, they draw on their own tendencies and preferences, and assume that others will behave as they themselves do. To illustrate, suppose you were asked to predict whether another person prefers Japanese cuisine to Italian. If you're like most people, you would begin by consulting your own preferences. If you prefer Japanese cuisine to Italian, you would probably predict that the other person has similar tastes and enjoys sushi more than pasta. Conversely, if you prefer Italian to Japanese, you will likely make the opposite prediction.

Formally, this tendency is known as the **false consensus effect**. The false consensus effect refers to the fact that individuals overestimate how many other people share their tastes, opinions, and attitudes. The effect was first demonstrated in an

experimental context by [Ross, Greene, and House \(1977\)](#). In one study, these investigators first asked participants whether they would be willing to stroll around campus carrying a sign that read “Repent.” After making their decision, participants estimated how many other students would comply with this request. The students consistently overestimated the commonness of their choice. Those who agreed to personally wear the sign estimated that 64% of their peers would do likewise, whereas those who refused to wear the sign estimated that 77% of their peers would also refuse. In short, both groups believed the majority of their peers would make the same choice they had made. (In fact, 50% of the students actually agreed to wear the sign and 50% declined.) Follow-up research has shown that this false consensus effect occurs for a wide variety of attitudes, preferences, and behaviors ([Krueger & Clement, 1998](#); [Marks & Miller, 1987](#); [Mullen et al., 1985](#)).

The false consensus effect is most evident when we judge the commonness of our negative qualities or behaviors ([Marks, 1984](#); [Mullen & Goethals, 1990](#)). For example, if you speed on the freeway or cheat on your income tax, you probably exaggerate the number of people who do likewise. Unfortunately, the tendency to falsely assume that other people share our bad habits can have negative consequences for our health and well-being. College students who engage in excessive drinking typically overestimate the number of students who similarly drink to excess, leading them to believe drinking is socially acceptable and common ([Schroeder & Prentice, 1998](#); [Sher, Bartholow & Nanda, 2001](#)). The same is true for people who smoke, fail to wear seat belts, or eat fatty foods. By believing “everyone does it,” people justify their negative habits and perpetuate their destructive tendencies.

III. **Egocentric Judgments**

The research we have been reviewing documents that self-knowledge shapes social evaluations and judgments. A related body of research shows that people are egocentric. As used here, the term, **egocentrism**, refers to a tendency to exaggerate one’s importance or give particular weight to one’s own perspective and experience. The term was used by the famous Swiss psychologist, Jean Piaget, who demonstrated that young children are very egocentric ([Piaget & Inhelder, 1956](#)). They view the world from their own perspective, without considering that other people might not share their point of view. Although Piaget believed people grow out of this tendency as they age, more recent research suggests that this is not always the case ([Diamond & Kirkham, 2005](#); [Epley, Morewedge, & Keysar, 2004](#)).

A. **Egocentric Memory**

Have you ever been at a party and heard your name mentioned from across a crowded room? This familiar experience, known as the “cocktail-party effect,” shows that people are highly attuned to self-relevant information. They are especially apt to notice such information and to process it efficiently and deeply.

People are also especially apt to remember information that pertains to themselves. In one study, [Rogers, Kuiper, and Kirker \(1977\)](#) first had participants answer one of four questions about a series of words. Some of the words were judged for their self-relevance (e.g., Does *honest* describe you?), some of the words were judged according to their semantic properties (e.g., Does *kind* mean the same as nice?), some of the words were judged according to their phonemic features (e.g., Does *shy* rhyme with sky?), and some of

the words were judged according to their structural properties (e.g., Is the word *rude* printed in lowercase letters?). After making these judgments, participants were unexpectedly asked to recall as many of the words as they could remember.

Figure 4.12 shows that words referenced to the self produced the highest rates of recall. Numerous investigations have subsequently replicated this **self-reference effect** (Greenwald & Banaji, 1989; Klein & Kihlstrom, 1986; Symons & Johnson, 1997). You might want to keep this point in mind the next time you study for an exam. If you can relate the material to your own life, you might be able to remember it better. This will be particularly true if you also generate your own ideas and examples. In group settings, people show better memory for their own actions than for the actions of others (Ross & Sicoly, 1979), and better memory for statements they have uttered than for statements other people have voiced (Greenwald, 1981).

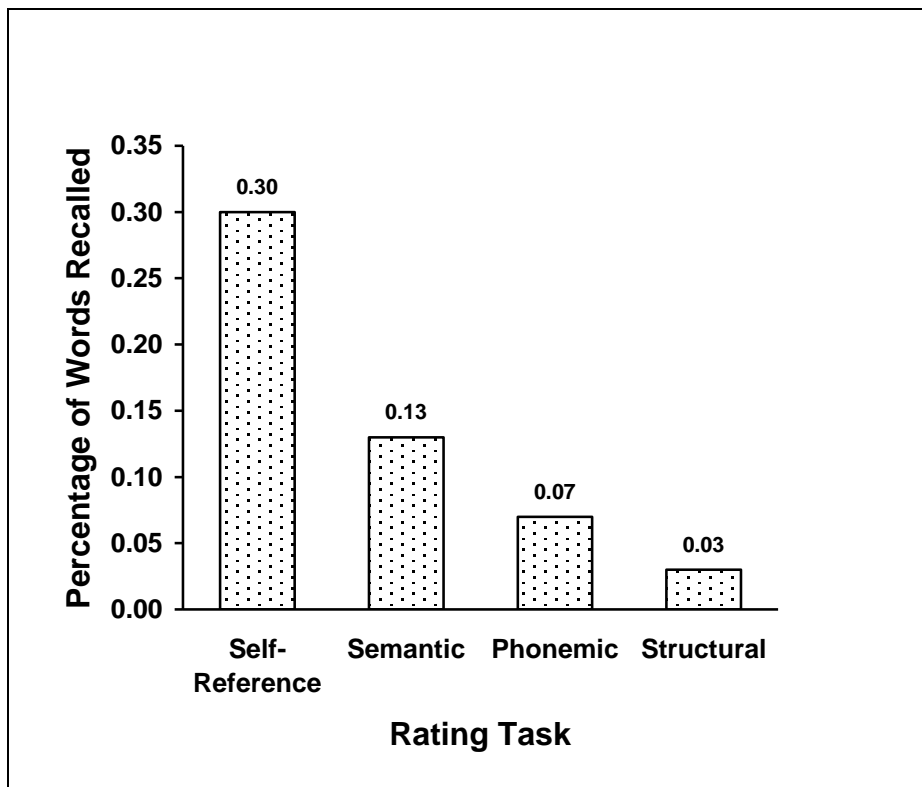


Figure 4.12. Memory for Words Referenced to Oneself or Rated According to Other Properties. **Words rated according to their self-relevance were more memorable than were words rated according to nonself-relevant properties.** (Source: Rogers, Kuiper, & Kirker, 1977, *Journal of Personality and Social Psychology*, 35, 677-688)

To explain their findings, Rogers, Kuiper and Kirker (1977) proposed that self-knowledge forms a unique cognitive structure with special properties (e.g., high degree of differentiation and elaboration). Follow-up research tested the assertion that self-knowledge was somehow special and unique in its memorability. Some investigators examined whether material that referred to other people produced similarly high rates of recall. In general, the more familiar the other person, the less advantage self-reference yields (Bower & Gilligan, 1979; Keenan & Baillet, 1980). For example, deciding whether a

word describes “your best friend” produces rates of recall comparable to those produced by the self-reference task, but deciding whether a word describes a stranger does not. Other research examined whether the memorial advantage of self-referent material occurs only for evaluative words, such as the trait adjectives Rogers et al. (1977) had used. Keenan and Baillet (1980) found that the self-reference effect was greatly diminished when nonevaluative nouns (e.g., Do you have legs?) were used instead of adjectives. These and other limits to the self-reference effect have led researchers to conclude that self-knowledge does not represent a unique cognitive structure. Rather, material referenced to oneself is well-recalled simply because it is well-organized and highly-elaborated (Gillihan & Farah, 2005; Greenwald & Banaji, 1989; Klein & Kihlstrom, 1986; Symons & Johnson, 1997).

B. ***Egocentric Perceptions of Conspicuousness***

Many students get anxious when they are called on to answer a question during lecture. They believe that everyone’s eyes are on them and that everyone will remember if they make a mistake. Gilovich and colleagues have dubbed this egocentric tendency, the **spotlight effect**, a term that underscores that people believe the social spotlight shines especially brightly on them (Gilovich, Kruger, & Medvec, 2002; Gilovich, Medvec, & Savitsky, 2000; Savitsky, Epley, & Gilovich, 2001; Savitsky, Gilovich, Berger, & Medvec, 2003). Among other things, people overestimate how much attention other people pay to their appearance, how harshly they will be judged for making a mistake, and how conspicuous their absence will be from a group or meeting. In a nutshell, we think everyone is watching us, but they’re not: They’re watching themselves. Keep this in mind the next time you feel like you’re having a “bad hair day.” Chances are, fewer people than you think are noticing.

The spotlight that shines on our behavior and appearance also illuminates our thoughts and feelings. Like the protagonist in Edgar Allan Poe’s classic story, *The Tell-Tale Heart*, we overestimate the extent to which other people can see through us and detect our emotional and psychological states. In an experimental demonstration of this **illusion of transparency**, Gilovich, Savitsky, and Medvec (1998) had undergraduates answer a series of questions before an audience of other students. The participants were instructed to tell the truth for some questions, but lie while answering other questions. Later the participants overestimated the degree to which the audience could detect their lies, falling prey to the illusion of transparency (see also, Barr & Kleck, 1995; Vorauer & Ross, 1999).

C. ***Egocentric Perceptions of Causal Importance***

People also exaggerate their causal importance. First, they exaggerate their ability to bring about desired outcomes, a phenomenon known as the **illusion of control**. For example, they feel they have a better chance of winning the jackpot in a lottery if they are allowed to pick their own numbers (Langer, 1975). In essence, people treat luck as a personal quality: They believe they have the ability to willfully alter events determined entirely by chance (Wohl & Enzle, 2002).

People also give themselves too much credit for a variety of activities and outcomes. When husbands and wives are asked how often they do various household chores (e.g., wash the dishes, take out the garbage), each accepts more responsibility than they are

given by the other (Ross & Sicoly, 1979; Thompson & Kelley, 1981). Similar effects have been found when workers collaborate on a joint project, when academics co-author a paper, and when athletes apportion responsibility for a team's victory or defeat (Leary & Forsyth, 1987; Savitsky, Van Boven, Epley, & Wight, 2005). Furthermore, people believe their assessments are fair but their collaborators' are biased, leading to disagreements and disputes that undermine enjoyment and threaten future collaborations (Caruso, Epley, & Bazerman, 2006; Kruger & Gilovich, 1999).

Influenced by the (erroneous) perception that they contribute more than their share to a joint project, people also believe they are entitled to more resources than are others. For example, in laboratory studies, people take more than their share of a common resource, and pay themselves more than they pay others for equal work (Epley, Caruso, & Bazerman, 2006; Thompson & Loewenstein, 1992; Wade-Benzoni, Tenbrunsel, & Bazerman, 1996). Similar findings occur outside of the laboratory. In recent years, excessive fishing has led to dwindling levels of salmon in the waters of the Pacific Northwest, as numerous fishermen take more than their share of the ocean's bounty. If this trend continues, the salmon population will be threatened to the point of extinction and no one will be able to make a living fishing.

D. ***Egocentric Social Comparison***

Suppose you have trained for a marathon, and believe you have a good chance of winning. Now suppose you find out that the weather on the day of the race is predicted to be hot and humid, with a 75% chance of rain. How will this information affect your confidence? If you're like most people, you will be less confident of success after hearing the weather forecast, even though the weather conditions affect everyone who runs the race. Why? Because when people make comparative judgments (e.g., will I beat others in a competition?), they focus primarily on their own perspective without considering other person's experience. Because it's easier for you to imagine how the weather will affect you (e.g., difficulty breathing, excessive sweating) than it is to imagine how the weather will affect others, your confidence is diminished, even though the adversity is shared by all runners. The opposite occurs for a shared benefit. When students who are graded on a curve are told they can drop one test, their confidence increases, even though all students will have the same opportunity (Moore, 2005; Moore & Kim, 2003; Windschitl, Kruger, & Simms, 2003).

E. ***Egocentric Perceptions of Knowledge***

In many situations, we must gauge what others know. For example, when constructing a test, professors judge the difficulty of a problem by estimating their students' familiarity with the material; in a negotiation, judgments about the information the opposition possesses shape one's offers and counteroffers; and when deciding where to dine or what movie to attend, friends and spouses often let someone else choose, commenting "you know what I like."

Although we are generally adept at estimating what other people know, we also demonstrate a predictable bias: If we know something, we believe other people know it, too (Nickerson, 1999). This bias, referred to as "epistemic egocentrism" and "the curse of knowledge" (Camerer, Loewenstein, & Weber, 1989; Royzman, Cassidy, & Baron, 2003),

has been shown to affect a wide-variety of judgments. For example, people who know the solution to a problem overestimate how easy the problem will be for other people to solve (Kelley & Jacoby, 1996; Nickerson, Baddeley, & Freeman, 1987) and people who are familiar with a city's landmark overestimate how many of their fellow citizens can also identify the landmark (Fussell & Krauss, 1992). This is one reason why professors tend to write difficult test questions. Because they know the answers, they assume their students will, too. To compensate, they increase the question's difficulty.

An egocentric tendency to assume that others know what we know influences interpersonal communication. In general, people overestimate how effectively they communicate their intentions and meaning (Epley, Keysar, Van Boven, & Gilovich, 2004; Keysar & Henly, 2002; Nickerson, 1999). This is particularly true when our message contains a degree of ambiguity. To illustrate, Keysar and Henly asked participants to relate several ambiguous sentences to a partner, such as "The woman killed the man with the gun." This statement's meaning is unclear: It could mean a woman used a gun to kill a man or it could mean that a woman killed a man who was holding a gun. Despite this ambiguity, participants who were told which meaning was correct overestimated whether their partner would be able to discern their intent (see also, Keysar & Bly, 1995). Communication problems like these are especially acute when people communicate over e-mail (Kruger, Epley, Parker, & Ng, 2005). Although people routinely use exclamation points and emoticons to convey their true intent in e-mail messages, they overestimate the extent to which their meaning is effectively communicated. As a consequence, e-mail messages are often misinterpreted and misunderstood.

F. ***Mechanisms that Produce Egocentric Judgments***

A variety of mechanisms produce egocentric judgments. First, such biases are frequently motivated by self-enhancement needs. After all, most individuals enjoy being the center of attention, feel validated when other people share their tastes and preferences, and are flattered to believe they communicate effectively. In support of this interpretation, many of the biases we have discussed are stronger for positive outcomes than negative ones. For example, the tendency to exaggerate one's contribution to a joint project is much stronger when the project goes well than when it goes poorly (Ross & Sicoly, 1979, Experiment 2). Moreover, as we will see in Chapter 5, many of the egocentric biases we have documented increase in strength after people have received negative feedback or failed at an unrelated activity. This finding also suggests that egocentric biases are used to enhance feelings of self-worth (Dunning, 2003; Sherman, Presson, & Chassin, 1984).

Egocentric biases are not driven solely by self-enhancement needs, however. Many are influenced by a variety of cognitive processes that do not entail motivated distortion or wishful thinking (Kunda, 1990; Pronin, Gilovich, & Ross, 2004). Among the most important of these processes is the **anchoring and adjustment heuristic** (Tversky & Kahneman, 1974). This term refers to the fact that people frequently make judgments by initially selecting an anchor or starting point, and then adjusting the anchor before arriving at a final decision. In most instances, the adjustment is insufficient, leaving a final judgment that is too heavily weighted toward the initial anchor. For example, if I ask you to guess the average yearly temperature in Buenos Aires, you will probably begin by thinking about how hot Buenos Aires can be, and then adjust your initial anchor to take into account seasonal

fluctuations. Because your adjustment is likely to be insufficient, you will probably end up overestimating the city's average temperature. (The correct answer is 64° Fahrenheit.)

As applied to egocentric judgments, this account assumes that self-knowledge is particularly likely to serve as an initial anchor, largely because it is so vivid, accessible, and memorable. Individuals then adjust insufficiently away from this anchor, leaving a judgment that is more closely tied to one's own position than is logically defensible (Epley & Gilovich, 2001, 2004, 2006; Epley, Keysar, Van Boven, & Gilovich, 2004; Nickerson, 1999). To illustrate, suppose you are asked to estimate how hungry another person is right now. To answer this question, you will probably first ask yourself how hungry you, and then adjust your judgment to reflect the characteristics of your audience. Despite this adjustment, your final judgment will probably remain very close to your own current level of hunger (Van Boven & Loewenstein, 2005).

Epley, Morewedge, and Keysar (2004) used the anchoring and adjustment heuristic to understand developmental shifts in egocentric thinking. They considered two explanations for why adults are generally less egocentric than children. First, adults may be less apt than children to use themselves as an initial anchor. Alternatively, adults may be likely as children to use themselves as an anchor, but be more adept than children at adjusting for their initial self-anchored judgment. In two investigations, the researchers found clear support for the latter process. When solving problems, children and adults were equally inclined to begin by considering their own perspective and preferences. Adults then adjusted this initial anchor to a greater degree than did children, providing estimates that were (somewhat) less egocentric. This research provides an interesting perspective on egocentrism. Rather than outgrowing a egocentric tendency to see things from our own perspective, adults simply become more accomplished at correcting for this primitive propensity.

IV. Chapter Summary

This chapter examined the acquisition and application of self-knowledge. We began by identifying the sources of information people consult when seeking to learn about themselves. These sources include physical factors, social factors, and psychological factors (such as introspection and self-perception processes). Each source provides useful information, but none is free of distortion or bias.

We then examined the application of self-knowledge. Once we gain self-knowledge, this knowledge serves as a lens through which we view the world. When perceiving others, this lens functions as a frame-of-reference, leading people to contrast other people's qualities with their own.

Finally, we reviewed a variety of egocentric judgments and biases. In many situations, people use their thoughts and feelings to predict what other people are thinking and feeling, frequently concluding that other people experience the world as they do.

- The physical world provides one source of self-knowledge, but is limited in two respects: (1) many attributes lack a physical basis (e.g., there are no tests of sentimentality); (2) even when attributes are anchored in reality, the physical world does not reveal how we stand relative to others (e.g., knowing we can run a 6-minute mile doesn't tell us whether we're fast or slow).
- People gain self-knowledge by comparing themselves with others, a process known as social comparison. Although comparisons with similar others provide the most accurate self-knowledge, people also engage in upward comparisons to inspire themselves and downward comparisons to console themselves.
- Social context influences self-evaluations. When people feel dissimilar from those around them, they experience contrast effects in self-evaluations (e.g., they feel unattractive in the company of attractive people); when people feel similar to those around them, they experience assimilation effects in self-evaluations (e.g., they feel attractive in the company of attractive people).
- People also learn about themselves by seeing themselves reflected in other people's eyes. This reflected appraisal process appears to be particularly influential in early childhood, although even adults can be influenced by the perceived judgments of others.
- Introspection occurs when individuals actively consult their own thoughts and feelings in an attempt to discern how they feel or why they feel the way they do. Although it is widely-regarded as an effective way to learn about ourselves, introspection does not always lead to accurate self-knowledge. This is because many of our preferences and behaviors are governed by nonconscious influences that are not always accessible to introspection.
- Self-perception theory maintains that people learn about themselves by making attributions for their own behavior.
- Once self-knowledge forms it influences a variety of psychological processes. Social perception is among the most important of these processes. When

evaluating others, we use our self-knowledge as a frame-of-reference.

- People often exaggerate their importance and assume that other people share their point of view. This egocentrism leads people to focus more of their attention on self-relevant information, to believe they are the focus of other people's attention, and to overestimate how clearly they can communicate their intentions.

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