A Self-Standards Model of Cognitive Dissonance

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This article presents a new model for understanding the role of the self in cognitive dissonance processes. We focus on the controversies among three major theories of how cognitions about the self mediate dissonance processes: Self-consistency (Aronson, 1992), Self-affirmation (Steele, 1988), and the New Look perspective (Cooper & Fazio, 1984). It is argued that each of these contemporary revisions of dissonance theory assumes that dissonance begins when people commit a behavior and then assess the meaning of the behavior against a standard for judgment. However, each approach makes different predictions for how self-knowledge mediates dissonance because each assumes different self-attributes and standards are used to assess the psychological meaning of a given behavior. The proposed model suggests that the basis of dissonance motivation and the role played by cognitions about the self depend on the type of self-standards made accessible in the context of discrepant behavior. By examining the ways in which people use self-standards to assess the social appropriateness or personal quality of their behavior and use self-attributes to reduce their discomfort, the proposed model can predict the conditions under which each of the contemporary views of the self in dissonance is the most accurate explanation of the process of dissonance arousal and reduction.

What role, if any, is played by cognitions about the self in the arousal and reduction of cognitive dissonance? This question has been debated for over 40 years since the original theory of cognitive dissonance was published by Festinger in 1957 (see Harmon-Jones & Mills, 1999). In that time, researchers have offered at least three different perspectives on how the self influences responses to behavioral discrepancies. One perspective maintains that cognitions about the self represent standards or expectancies that facilitate dissonance arousal (e.g., Aronson & Carlsmith, 1962; Aronson, 1968; Duval & Wicklund, 1972). More recent theory and research, however, proposes that cognitions about the self function as resources for dissonance

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reduction (e.g., Steele, Spencer, & Lynch, 1993; Aronson, Cohen, & Nail, 1999). Still other theory and research suggest that cognitions about the self are irrelevant to the process of dissonance arousal and reduction (e.g., Cooper & Duncan, 1971; Cooper & Fazio, 1984). Indeed, there is published empirical support for the predictions made by each perspective concerning the role played by cognitions about the self in the dissonance process (e.g., Aronson & Carlsmith, 1962; Steele et al., 1993; Cooper & Duncan, 1971). It is fair to suggest, however, that no general consensus exists among researchers about how self-relevant thought mediates the arousal and reduction of cognitive dissonance.

This article introduces a new model that was designed to forge a synthesis among the different perspectives on the role of the self in dissonance (Berkowitz & Devine, 1989). Toward this end, the proposed model will highlight a process that we believe is central to how dissonance is aroused and subsequently reduced. We propose that dissonance begins when people commit a behavior and then assess the behavior against some meaningful criterion of judgment.



Only when an action is measured against a relevant criterion does it take on a mantle that is aversive or threatening to the self. In the current model, the criterion used to assess the meaning of behavior is represented in memory as self-attributes and self-standards or guides for behavior (cf. Higgins, 1987, 1990). We refer to the proposed framework as the *Self-standards Model of Cognitive Dissonance*. ¹

The Self-standards Model (SSM) maintains that the role of self-relevant thought described by the various perspectives on dissonance is a function of the accessibility of different types of self-attributes. Most important for understanding the differences between the competing viewpoints is the distinction between discrepancies that involve representations of actual self-attributes and self-standards and, within the dimension of self-standards, the distinction between discrepancies that involve what we define as "personal" versus "normative" self-standards for behavior. By focusing on how the accessibility of relevant self-attributes and self-standards influence perceptions of the quality or appropriateness of behavior, the SSM can specify how and when self-concept differences like self-esteem moderate dissonance processes. Specifically, the model can predict (1) the conditions under which self-attributes will operate as an expectancy and cause more dissonance among people with high versus low self-esteem, (2) the conditions under which most people regardless of their self-esteem will feel the "bite" of dissonance arousal, (3) the conditions under which most people will be motivated to reduce dissonance via self-justification processes, and (4) the conditions under which self-esteem differences will moderate the reduction of dissonance arousal using a direct (i.e., justification) or indirect (i.e., affirmation) strategy (e.g., Stone, Wiegand,

¹ The emphasis in the current article on behavioral discrepancies as central to dissonance processes is based on the way in which dissonance research is conducted. While the breadth of cognitions capable of causing dissonance was considerable in the original theory, experimental research on dissonance has traditionally focused on cognitions about behavior. The use of "induced behavior" became the sine qua non of dissonance paradigms, as most of the now-classic experiments successfully tested their hypotheses by inducing such overt behavioral actions as lying to someone (Festinger & Carlsmith, 1959; Cooper & Worchel, 1970), making a counterattitudinal advocacy (e.g., Cohen, 1962; Nel, Helmreich, & Aronson, 1969), making a difficult and irrevocable decision (Brehm, 1956; Knox & Inkster, 1968), eating grasshoppers (e.g., Zimbardo et al., 1965), or harming innocent victims (e.g., Glass, 1964). As this short list illustrates, most of the original experiments that tested predictions derived from dissonance theory tended to focus on behavior that was likely to be construed by participants as threatening to the self (e.g., Aronson, 1968; Steele, 1988) or in some way aversive (e.g., Cooper & Fazio, 1984). As a result, the induction of behavior as the mechanism for studying dissonance effects produced revisions of the original theory that relied heavily on assumptions about how people make sense of their behavior. So, rather than dissonance being a function of just any inconsistent set of cognitions as Festinger originally posited, dissonance is primarily viewed by contemporary theorists as a function of cognitions concerning behavior-and in our current view, about the preexisting cognitions that help determine what the behavior could have or should have reflected, achieved, or produced.

Cooper, & Aronson, 1997). We believe that by highlighting the processing implicit to each contemporary perspective, we can propose a comprehensive model of how and why cognitions about the self influence the process of dissonance arousal and reduction.

To establish the context for the SSM and to examine the seemingly contradictory predictions that the model seeks to accommodate, we present a brief overview of the three contemporary theories of the self in dissonance before presenting the tenets of our new process model.²

COMPETING THEORIES OF THE ROLE OF THE SELF IN DISSONANCE

The debate among dissonance researchers over the role of the self and self-esteem in dissonance centers primarily on the nature of the self-relevant thought that influences dissonance arousal and reduction. Much of the dissension among researchers has centered on the different predictions made by the self-consistency (Aronson, 1968; Thibodeau & Aronson, 1992), self-affirmation (Steele, 1988; Steele et al., 1993), and "New Look" or aversive consequences (Cooper & Fazio, 1984; Cooper, 1992) theoretical perspectives.

The Self as an Expectancy in Dissonance Processes

The perspective that cognitions about the self serve as expectancies for behavior was initially advanced by the self-consistency model of dissonance (e.g., Aronson & Carlsmith, 1962; Aronson, 1968; see Thibodeau & Aronson, 1992). According to self-consistency theory, people hold expectancies for competent and moral behavior that they derive from "the conventional morals and prevailing values of society" (Thibodeau & Aronson, 1992, p. 592). Dissonance is aroused when people perceive a discrepancy between their behavior, such as advocating a counterattitudinal belief (e.g., Festinger & Carlsmith, 1959) or making a questionable decision (e.g., Brehm, 1956), and their "personal standards" or self-expectancies for the self-attributes of competence and morality. The reduction of dissonance is aimed at maintaining a sense of competence and morality through justification of the discrepant behavior (Thibodeau & Aronson, 1992).

The self-consistency perspective further proposes that self-esteem moderates the dissonance arousal process because the perception of what constitutes an incompetent or immoral act is a function of the expectations people hold for

² The proposed model does not address at least two other interpretations of dissonance, specifically, the self-perception (Bem, 1972) or impression management (Tedeschi, 1981) revisions. This is because neither of these two revisions assume a role for preexisting cognitions or arousal (e.g., Fazio, Zanna, & Cooper, 1977), each of which is central to the arguments presented here. A more thorough discussion of how these revisions fit the proposed model is beyond the scope of the current article.

their behavior. For example, if a person did not hold very high expectations for competent or moral behavior (i.e., low self-esteem), dissonance would not be aroused following an incompetent or immoral act, whereas people with higher expectancies for competent and moral character (i.e., high self-esteem) would perceive a discrepancy and be motivated to seek self-justification. Despite the fact that the consistency effect for those with low self-esteem has been difficult to replicate (e.g., Ward & Sandvold, 1963; Cooper & Duncan, 1971; see Shrauger, 1975, for a review), the available evidence suggests that under some conditions, people with negative expectancies (Aronson & Carlsmith, 1962), low self-esteem (Glass, 1964; Maracek & Mettee, 1972), or mild depression (e.g., Rhodewalt & Agustsdottir, 1986) do not experience dissonance arousal when their behavior is discrepant from socially accepted standards for conduct (see Swann, 1990, for a similar theoretical perspective). Thus, self-consistency theory assumes that positive cognitions about the self cause people to be more vulnerable to the arousal of dissonance following incompetent or immoral conduct (Thibodeau & Aronson, 1992).

The Self as a Resource in Dissonance Processes

The perspective that cognitions about the self serve as a resource for dissonance reduction derives primarily from research on self-affirmation theory (Steele, 1988; see also Spencer, Josephs, & Steele, 1993). Like self-consistency theory, self-affirmation posits that dissonance is aroused when people engage in actions that pose a threat to their self-concept. But in contrast to the consistency perspective, self-affirmation theory maintains that the primary goal of a dissonance reduction strategy is not to rescue the specific self-image threatened by discrepant behavior. Instead, the goal is to restore the moral and adaptive integrity of the overall self-system. This goal can be accomplished by focusing on other positive aspects of the self that hold importance for global self-worth (e.g., important values, Steele & Liu, 1983; positive social comparisons, Tesser & Cornell, 1991). The accessibility of positive cognitions about the self allow people to reduce their psychological discomfort without addressing directly the discrepant cognitions (Stone et al., 1997; Simon, Greenberg, & Brehm, 1995).

In the self-resource model, self-esteem represents the dispositional availability of positive cognitions about the self that can be used for dissonance reduction. The resource model maintains that for self-relevant thought to reduce psychological discomfort, people must be able to bring to mind more positive than negative self-attributes following a discrepant act. Based on the assumption that people with high self-esteem possess more positive attributes in their self-concept than people with low self-esteem (see Spencer et al., 1993), the resource model predicts that self-relevant thought can provide more affirmational resources to people with high self-esteem relative to people with low self-

esteem. Research shows that when people are allowed a moment of self-reflection before a discrepant act, people with high self-esteem report significantly less self-justification compared to people with low self-esteem (Steele et al., 1993). Thus, according to the self-resource perspective, positive cognitions about the self cause people to be *less* vulnerable to dissonance arousal and reduction following a discrepant behavior.

The Self as Irrelevant to Dissonance Processes

A third theory of cognitive dissonance suggests that the self and self-esteem concerns are irrelevant to dissonance arousal and reduction. According to the New Look model (e.g., Cooper & Fazio, 1984; Cooper, 1992), dissonance is aroused when a discrepant behavior represents a violation of societal or normative standards for behavioral conduct. The assumption is that people learn as children to monitor the fit between their actions and what their parents or peers believe is appropriate behavior—the perceived "norms" for behavior (Cooper, 1999). When behavior falls short of the perceived normative standards, dissonance is aroused and they are motivated to justify the behavioral discrepancy. The New Look model assumes that since most people subscribe to similar societal norms for behavior, then dissonance is not predicated on the availability or accessibility of positive self-attributes. Most people, regardless of their level of self-esteem, should feel uncomfortable when their behavior violates the internalized normative standards for competent and moral conduct. According to the New Look model, cognitions about the self have no special role in dissonance processes and most people are vulnerable to dissonance arousal when they perceive that their behavior has deviated from the relevant norms.

In sum, each major perspective on the self in cognitive dissonance makes specific predictions for how and why cognitions related to the self mediate the process of dissonance arousal and reduction. However, because they make opposing predictions for the role of self-relevant thought in the dissonance process, no single theory is capable of explaining all of the available data.

TOWARD A UNIFYING MODEL: THE ROLE OF SELF-STANDARDS IN DISSONANCE PROCESSES

From our perspective, the current state of the dissonance literature resembles a giant jigsaw puzzle of which each theoretical perspective on the self in dissonance has constructed one substantial section. At this time, however, the debate over the most parsimonious explanation of dissonance processes has obscured the overall picture by focusing on only one piece of the puzzle. We believe there is one comprehensive picture and that it can be constructed from the various parts that already exist. For example, it is quite

reasonable to suppose that, under some conditions, people are motivated by a desire to maintain specific positive or negative beliefs they have about themselves (i.e., self-consistency); it is equally tenable that, under some conditions, most people are motivated to reduce the perceived aversive consequences of their unwanted behavior (i.e., the "New Look"); it is also the case that under some conditions, people would prefer to think about other positive aspects of themselves rather than face the implications of their behavior (i.e., self-affirmation). Put this way, the three major perspectives are viewed neither as synonymous nor simple linguistic translations of one another. Rather, they each describe a distinct and important piece of the overall dissonance process and, in doing so, make a unique contribution to our understanding of how cognitions about the self mediate cognitive dissonance arousal and reduction.

To link the various perspectives together and construct a comprehensive model, however, requires examination of what they share in common. We believe the key similarity is that each perspective on the self in dissonance makes a specific assumption about how people think about their behavior. That is, each contemporary model of dissonance begins with the assumption that people behave and then attempt to make sense out of what they have done. Where the various perspectives appear to differ most is in their assumptions about the self-relevant information people use to determine the psychological meaning of their behavior. We propose that by focusing on the process by which people detect a discrepancy between behavior and belief, and then the processes by which people attempt to resolve the discrepancy, it becomes possible to connect the various parts of the puzzle together and provide an overall picture of the role played by cognitions about the self in cognitive dissonance. The SSM attempts to integrate the theories by delineating the potential processes by which people use their self-knowledge as an expectancy, a resource, or not at all when they think, feel, and react to a discrepant behavior (Stone, 1999; Cooper, 1999; Stone, in press).

According to the proposed SSM, people engage in a multistep process to determine if their behavior is foolish, immoral, or otherwise discrepant from important cognitions. Once they have acted, people evaluate their behavior against a standard of judgment, and that standard of judgment may or may not relate to a cognitive representation of the self. The SSM predicts that the evaluation of behavior may be based on generally shared, normative considerations of what is good or bad, foolish or sensible, moral or immoral or it may be based on personal, idiographically held considerations of what is bad, foolish, or immoral-standards that are connected to individual representations of the self. The model maintains that the standard used to interpret and evaluate the meaning of a given behavior determines the role of the self and self-esteem in the process of dissonance arousal. Furthermore, once dissonance is aroused, the

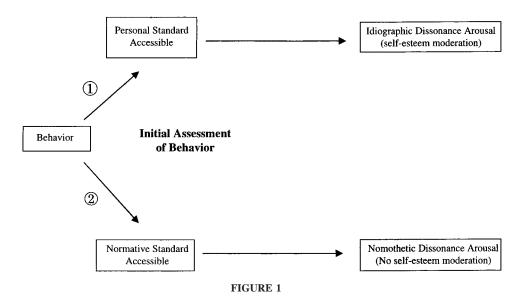
SSM predicts that bringing to mind certain aspects of the self can influence the degree to which people will justify their behavior or use their self-knowledge as a resource to reduce their discomfort. The moderating role of self-esteem in dissonance reduction depends on whether the cognitions about the self are positive, self-descriptive, and related to the behavioral discrepancy. Thus, a fundamental assumption of the SSM is that the role of the self in dissonance arousal and reduction is a function of the type of self-attributes and standards made accessible in the context of a discrepant behavior.

The SSM offers a schematic for understanding the processes that lead from behavior to unpleasant psychological arousal and the subsequent reduction of psychological discomfort. As seen in Fig. 1, the model proposes that dissonance arousal takes the following steps: (1) *people behave* and (2) *people interpret and evaluate their behavior*. In essence, they ask, is my behavior foolish, immoral, or otherwise undesirable?

If *personal standards* are situationally or chronically accessible in memory, the behavior is compared to one's own, idiosyncratic expectancies for behavior. As is detailed below, self-expectancies are directly related to self-esteem. Path 1 of Fig. 1 suggests that the higher a person's self-esteem, the more likely it is that the behavior will be perceived as foolish and immoral, and the more likely it is to lead to dissonance arousal. Dissonance arousal in this case is "idiographic" and will be moderated by individual differences in the content of self-knowledge (e.g., self-esteem).

If *normative standards* of judgment are situationally or chronically accessible in memory, the behavior is compared to the perception of what most people in the culture believe is foolish or immoral. As seen in Path 2 of Fig. 1, if people perceive a discrepancy from the normative standard, dissonance arousal will be "nomothetic" and *will not* be moderated by self-esteem.

The SSM proposes that once dissonance is aroused either nomothetically (i.e., using normative standards) or idiographically (i.e., using personal standards), people will experience discomfort and be motivated to seek its reduction. How they reduce their discomfort also depends upon the cognitions about the self that are made accessible following dissonance arousal. If no other cognitions about the self are brought to mind, the SSM assumes that the discrepancy will remain accessible and people will seek justification of their behavior to reduce their discomfort (see Path 1 of Fig. 2). However, if new cognitions about the self are made accessible in the context, then dissonance reduction will take the following steps: (1) If the self-attributes that are made accessible are positive and relevant to the behavior in question, then they will increase the motivation to justify behavior (e.g., attitude change). As seen in Path 2 of Fig. 2, if positive relevant attributes make self-expectancies accessi-



ble, people with high self-esteem will show *more* justification of their behavior than people with low self-esteem. (2) If the self-attributes that are made accessible are *positive* but *not relevant* to the behavior in question, then they will serve as a resource for the reduction of dissonance. Path 3 of Fig. 2 indicates that if positive irrelevant attributes are perceived as self-descriptive, people with high self-esteem will show *less* justification of their behavior compared to people with low self-esteem.

The SSM derives its predictions about the role of cognitions about the self in dissonance in part from certain assumptions about the cognitive nature of self-esteem. In the cognitive dissonance literature self-esteem has been treated primarily as a cognitive psychological construct

(Aronson & Carlsmith, 1962; Aronson, 1968; Spencer et al., 1993). Cognitive models generally maintain that global measures of self-esteem such as the Rosenberg self-esteem scale (Rosenberg, 1979) capture in part how people *think* about themselves (e.g., Rosenberg, 1979; Pelham & Swann, 1989; Blaine & Crocker, 1993; Brown, 1998). Research shows, for example, that people with high self-esteem identify positive traits as more self-descriptive than negative traits (Brown, 1986; Campbell, 1990), they rate positive attributes as important to possess and are relatively certain that they possess them (e.g., Campbell & Lavallee, 1993), and they report smaller chronic discrepancies between their actual self and ideal self-standards (Moretti & Higgins, 1990). Alternatively, people with low self-esteem identify

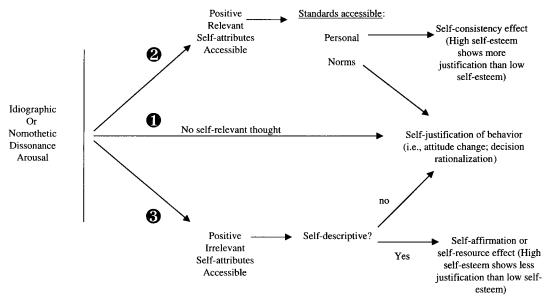


FIGURE 2

both positive AND negative traits as moderately self-descriptive and report larger chronic discrepancies between their actual and ideal self-standards. They also rate positive attributes as important to possess, but people with low self-esteem are less certain that they possess them. Thus, high self-esteem is characterized by an abundance of positive and confident self-knowledge, whereas low self-esteem is characterized by a relatively less confident balance of positive and negative self-knowledge (e.g., Blaine & Crocker, 1993).

Another important assumption of the model concerns how the cognitive aspects of self-esteem may be used in the assessment of behavior. Several scholars such as Markus (e.g., Markus & Kunda, 1986; Markus & Wurf, 1987) and Higgins (1996) have argued that the self is a multifaceted, dynamic organization of knowledge. To make the connection between the complex structure of self-knowledge and behavior, Markus and colleagues proposed the "working self-concept"—the subset of self-knowledge that is accessible in memory at any given moment. In any behavioral context, the content of the working self-concept depends "on what subset of selves was active just before, on what has been invoked by the individual as a result of an experience, event or situation, and most importantly, on what has been elicited by the social situation at the given time." (Markus & Kunda, 1986, p. 859). In the current model, self-esteem differences in the structure and content of selfknowledge can play a role in the dissonance process, but whether self-knowledge operates as an expectancy or a resource or is irrelevant to dissonance processes depends upon the type of self-relevant cognitions or "working selfconcept" people use when interpreting and evaluating their behavior and when searching for a strategy by which to reduce their discomfort.

The role of specific working self-concept information in the process of dissonance arousal and reduction, as it relates to the major perspectives on the self in dissonance, is described in the following sections. Whereas there may be a number of ways in which working self-knowledge can influence dissonance processes, we focus here on the processes by which cognitions about the self can operate as an expectancy, a resource, or be irrelevant to dissonance arousal and reduction.

THE ROLE OF SELF-STANDARDS IN DISSONANCE AROUSAL

We begin by noting that Festinger provided an early insight into the process of dissonance arousal specified by the present model. When speculating on the different kinds of inconsistencies that lead to dissonance, Festinger (1957) wrote of at least two kinds: One kind was dissonant because the individual perceived two cognitions as psychologically inconsistent and another was dissonant because "culture or

group standards dictate that they do not fit" (p. 13). Although Festinger was not definitive about how people determine the presence of an inconsistency (he was mostly interested in what happened once an inconsistency was perceived), it appears that Festinger believed people could use idiographic or shared information to determine that an inconsistency was present. As is detailed below, we believe the three major perspectives on the self in dissonance have not strayed much from Festinger's initial speculation.

Self-Standards as Expectancies in Dissonance Arousal

Self-consistency theory (Thibodeau & Aronson, 1992) maintains that people rely on their own "personal standards" for competence and morality to evaluate their behavior. When personal standards for behavior are brought to mind, people will evaluate their behavior in terms of its fit to their own self-expectations for competent and prudent conduct. Moreover, people with high self-esteem, who hold positive expectations for competent and moral conduct, are likely to perceive foolish or immoral behavior as falling short of their expectancies and consequently feel highly motivated to rationalize their actions. People with low self-esteem, who hold less positive expectations for competent or moral conduct, are likely to perceive the same behavior as confirming their expectations and are less motivated to rationalize their actions. Thus, cognitions about the self operate as expectancies that mediate the arousal of dissonance.

The self-consistency prediction appears to depend on on a critical assumption about the cognitive representation of a self-expectancy. Self-consistency theory maintains that the personal standards to which people subscribe are "culturally derived, and largely shared, by most people within a given society or subculture" (Thibodeau & Aronson, 1992, p. 596). In the SSM we define standards that are "culturally derived and largely shared" as normative because they represent the norms and rules held by important social groups that preserve the integrity and welfare of the collectives to which an individual belongs (Higgins, 1990; see Miller & Prentice, 1997). This raises an important question about the self-consistency model: If personal standards represent the perceived behavioral norms that are followed by most who live within a particular subculture, how can their use as a measuring stick for behavior cause people with different levels of self-esteem to reach different conclusions about the same behavior?

One possibility is that when "personal" standards are accessible, people not only think about the normative standards for behavior, but they also bring to mind aspects of the idiographic self-knowledge that underlies their level of self-esteem (e.g., Brown, 1986; Baumgardner, 1990). They may, for example, think about how well they personally "match" the normative standard by bringing to mind their "actual" self for a given attribute (Higgins, 1989). According to the proposed model, in order for the use of personal standards

to activate self-expectancies, idiographic self-knowledge must be used in combination with the normative standards during the interpretation and evaluation of behavior. Cognitions about the self are only likely to operate as expectancies in dissonance when people use a representation of idiographic self-knowledge to determine the meaning of what they have done.

The SSM holds that self-expectancies can be represented in memory by two self-relevant cognitions: (1) the "selfconcept," which is an actual self-attribute that represents a person's chronic standing on dimensions like competence or morality, and (2) the normative social standards that represent where a person should or ought to stand on these dimensions. People may derive idiographic expectancies for behavior from the relationship between the actual selfattribute and normative standard in that people expect their behavior to confirm or verify the chronic relationship between the actual self and the normative standard for dimensions like competence or morality. For example, when induced to tell someone a boring task is really interesting (e.g., Festinger & Carlsmith, 1959), a person may assess the competence and morality of the act by comparing his or her behavior (e.g., "I just said something stupid and immoral") against his or her self-expectancy or idiosyncratic representation of how well he or she typically upholds the normative standards for these attributes (e.g., "I am usually a smart and decent person-relative to the norms for competence and morality"). In this high self-esteem example, when a discrepancy is detected between the behavior and chronic self-expectancy, dissonance will be aroused. But a person with a less positive self-expectancy (e.g., low self-esteem) might not perceive a discrepancy following the same behavior. A person with low self-esteem might conduct the same act ("I just said something stupid and immoral"), but conclude that it does not represent a discrepancy when compared against a less positive self-expectancy (e.g., "I am not always a smart and decent person—relative to the norm for competence and morality"). In this case, the use of a self-expectancy to interpret behavior—the activation of the chronic discrepancy between an actual self attribute and its relevant normative standard—does not lead to dissonance arousal. Thus, the SSM predicts that in order for self-esteem to moderate the dissonance arousal process, people must assess the meaning of their behavior using their own selfexpectancies, which can be represented in memory as a chronic discrepancy between the actual self and the relevant normative standard (cf. Higgins, 1990). Dissonance is aroused when a given behavior fails to confirm the chronic relationship between the actual self-concept and its normative self-guide.

An example may make this view of self-consistency processes clear. Imagine George, a student, who answers a question incorrectly in his history class. He immediately realizes, with help from the teacher's scowl and his class-

mates' giggles, that his behavior has not measured up to the normative standard for academic competence—the knowledge that one should be correct when answering a question in class. In addition, George perceives himself to be one of the best students in class, based on the fact that he typically answers correctly when called upon by the teacher. According to our model, George held positive expectancies for his behavior because his self-concept for competence is usually perceived to match the normative standard on the dimension of competence-part and parcel of what it means to be one of the best students in class. In self-consistency terms, George's expectation for competence is based on a small discrepancy between his chronic actual self as a student and the shared normative standards for being a good student. Although he knows he is not perfect, he expects that the discrepancy between his classroom behavior and the normative standard will be small. After answering the question incorrectly, George will indeed experience dissonance because his behavior—the incorrect answer—is inconsistent with his self-expectancy—the knowledge that he usually matches the normative standard for answering correctly in

Now contrast George with his classmate Al who has a negative self-expectancy for competence in the classroom. Whereas Al understands that being correct in class is socially desirable, past experience has taught him that he is likely to fall short of the standard for perfection. Unlike his friend George, Al often misses questions in class and generally does not perform as well as George on most class assignments. In this case, Al's chronic self-expectancy, which is the difference between his actual self and the normative standard on the dimension of academic competence, is comparatively larger than George's. As a result, Al does not expect to answer questions correctly in class most of the time. If he too misses the answer to the same question that George missed, Al does not experience dissonance because his negative expectancy—the representation of his chronic actual self relative to the normative standard—is confirmed by his behavior. In the language of self-consistency, Al's behavior is consistent with his expectation that he is not a good student.

The SSM proposes that in order for people with high versus low self-esteem to reach different conclusions about the same behavior, they must bring to mind different self-knowledge when they attempt to interpret and evaluate what they have done. One representation of the self that distinguishes people with high from low self-esteem is their self-expectancies, defined above as the size of the chronic discrepancy between their actual self and the normative standards for attributes like competence and morality. People may use their self-expectancies as a latitude of acceptance/rejection for determining whether a given behavior represents a discrepancy (cf. Fazio, Zanna, & Cooper, 1977; Rhodewalt, 1998). As illustrated by path 1 of Fig. 1, we

predict that when personal standards for behavior are accessible, people will use their chronic self-expectancies to assess the meaning of their behavior. As a result, people with high self-esteem will experience more dissonance compared to people with low self-esteem following acts that involve deviations from the norms for "...lying, advocating a position contrary to their own beliefs, or otherwise acting against one's principles" (Thibodeau & Aronson, 1992, p. 592). In our view, these actions are inconsistent with the expectancies of people with high self-esteem because they fall outside of the latitude of what they accept as an accurate reflection of their self-concept. In contrast, these actions are more consistent with the expectancies of people with low self-esteem because their actual self is chronically more discrepant from the perceived normative standard, which provides them with a wider latitude of acceptance for their behavior (Rhodewalt & Agustsdottir, 1986; Baumgardner, 1990). A given act can promote different reactions from people with high and low self-esteem when the behavior is perceived to fall outside of the latitude of acceptance for those with high self-esteem, but within the latitude of acceptance for those with low self-esteem.

The use of self-expectancies as latitudes of acceptance/ rejection in the assessment of behavior may also lead people with low self-esteem to experience dissonance when their behavior is highly positive (e.g., an unexpected success on a difficult task, see Aronson & Carlsmith, 1962). Returning to our student Al for a moment, according to self-consistency theory (e.g., Aronson, 1992), if Al were to answer correctly in class, he could experience dissonance if he perceived his behavior as falling outside of the upper latitude of acceptance for his academic competence (Fazio et al., 1977; see Rhodewalt & Agustsdottir, 1986). His correct answer to a difficult question would be discrepant from his self-expectancy that he is not a good student; it represents a self-view that contradicts previous experience and may be difficult to maintain in the future (cf. Swann, 1990). As a result, dissonance would be aroused, and Al would be motivated to reduce his discomfort.

Note that the SSM does not suggest that people with high and low self-esteem have different standards for their behavior; to the contrary, we assume that both self-esteem groups strive to uphold the same normative standards for their behavior. Instead, we are hypothesizing that the context in which a discrepant behavior occurs can bring into working memory different cognitive aspects of the chronic self-knowledge that underlies self-esteem. The key to the use of chronic self-expectancies in the process of assessing behavior, however, lies in the simultaneous accessibility of idiographic self-attributes and normative standards in the context of a given act (cf. McGregor, Newby-Clarke, & Zanna, 1999). For self-esteem to moderate dissonance arousal, the normative standard cannot be the *only* criterion by which people assess the meaning of their behavior. In

addition to the norms, there has to be an idiographically based, unique conception of the self-concept involved in the evaluation of behavior (e.g., actual self-attributes). We predict that making personal self-standards accessible in the context of a discrepant act will bring to mind both idiographic self-attributes and normative self-standards because people are focused on their own, personal interpretation of what they have done. If they do not use idiosyncratic self-attributes in the assessment of their behavior, the SSM predicts that self-esteem will not moderate the process of dissonance arousal.

Self-Standards as Shared Norms in Dissonance Arousal

From the New Look perspective on dissonance (Cooper & Fazio, 1984; Cooper, 1999), personal standards and the self-expectancies they represent are not what cause cognitive dissonance arousal. Instead, the motivation to justify discrepant behavior stems from the need to uphold the socially accepted norms that govern competent and moral behavior. The New Look (Cooper & Fazio, 1984) perspective on dissonance tacitly assumed that the hedonic evaluation of behavioral consequences was substantially shared by members of the culture. For example, when students volunteer to convince a Dean's committee that it should adopt a policy that is at variance with their own and their colleagues' opinions, they can be reasonably sure that they have brought about a consequence that their society considers to be unwanted. Thus, when Cooper and Fazio brought the concept of aversive consequences to the theoretical table, they were considering the kinds of events considered to be unwanted by most people in the culture. The standards that are invoked to determine that the consequences are aversive are the shared, normative standards of the culture.

Fazio and Cooper (1983; Cooper & Fazio, 1984) speculated that the ontogeny of dissonance was based on children learning, via the reactions of their caregivers, that certain behaviors have painful consequences. A child who goes about the house breaking toys, glass, and furniture will learn that the caregivers respond to such behaviors with negative sanctions. The possibility of unique or pathological occurrences notwithstanding, most caregivers in our culture respond similarly to certain types of behaviors in their children. Children learn that certain types of behaviors are negatively sanctioned, whether they occur in their own house, in their neighbor's house, or on the playground. That our behaviors have generally shared meaning in the culture, that certain types of behaviors are negatively sanctioned, and that we share common understanding of unwanted, aversive events are assumptions that lie at the heart of the New Look model of dissonance (Cooper,1999).

From our current vantage point, we consider dissonance to be a nomothetic process in the New Look model precisely because it assumes that the assessment of behavior is based on standards that represent rules or norms of an important group, such as parents, "friends like mine," or "adults in society" (Higgins, 1990). According to the SSM, in order for most people to experience dissonance arousal regardless of the idiographic content of their self-knowledge, they must focus on the relevant normative standards when assessing the meaning of their behavior. When the normative standards for behavior are accessible, people with high or low self-esteem will use the same criterion to interpret and evaluate their actions. As a result, we predict that individual differences in self-knowledge will not mediate the arousal of cognitive dissonance.

To illustrate how people with different self-expectancies for behavior could come to the same conclusion after assessing their actions, we return to our students George and Al. This time, however, George and Al are in a domain depicted by Aronson (1992) to describe dissonance processes-basketball. On the school team, George is an exceptional shooter; he tends to make 80% of his free throws during practice. Although his goal is to make 100% of his shots, 80% is a high average and it provides George with a positive expectation for his free-throw shooting ability. Al, on the other hand, only shoots about 50% from the charity stripe. He too would like to shoot 100%, but practice has taught Al that he can only expect to hit about half of his attempts. Consequently, Al has a relatively negative selfexpectancy for his free-throw shooting ability. One day at practice, Al and George both shoot 50%. According to self-consistency (Aronson, 1992), missing 5 of 10 during practice confirms Al's negative self-expectancy and he does not feel dissonance. George, however, is very upset by hitting only 5 of 10 because he expected to sink at least 3 more buckets. Note that what mediates the reactions of Al and George in this situation is the use of a chronic selfexpectancy to evaluate their performance, i.e., the knowledge of where each usually stands (their chronic actual selves) relative to the normative standard for free-throw shooting. George is only upset if he realizes that he expected to hit 80%; Al is only comforted if he realizes that 50% is his usual performance. The simultaneous accessibility of a chronic actual self-attribute, the idiographic element of the self-expectancy, and the relevant norm for free-throw shooting has determined for whom dissonance is aroused.

Now place Al and George in a slightly different free-throw shooting context: at the free-throw line in a game with their school behind by 1 point and no time left on the clock. In this situation, the normative standard for behavior is also 100% perfection—players in this situation are fully aware that they have to sink the last free throw because missing the shot means losing the game. The interesting question here is for Al, who has a negative expectancy for his free-throw shooting ability. If he misses and the game is lost, does he feel dissonance? Or does he think, "Well, I'm not usually good from the line, so I guess missing the shot will not upset me." We predict that in this situation, the

normative standard carries the weight in the assessment of the missed shot. That is, Al knows that a basketball player should hit the winning shot if given the opportunity. His teammates expect it, his parents in the audience expect it, and the other team fears it! The point is that despite his negative expectancy for free-throw shooting, Al would experience dissonance because, in this situation, the normative standard for behavior—hitting the winning shot—is the most accessible standard for his behavior. We imagine that Al and George, and any other player in that situation, would experience dissonance if they missed the opportunity to win the game.

In sum, as illustrated in path 2 of Fig. 1, the New Look revision of dissonance assumes that dissonance occurs when people assess the outcomes of their behavior against a shared or normative representation of what their behavior should or ought to have produced. The New Look departs from self-consistency in its assumption that idiographic self-attributes do not enter systematically into this assessment process. Based on that assumption, we propose that most people will experience dissonance, regardless of idiosyncratic differences in the content of their self-knowledge, when they are primarily focused on the normative standard relevant to the situation. Put simply, when the basis for judgment is the same for everyone, individual differences in self-esteem will not moderate dissonance arousal. Focus on a normative standard to determine the meaning of their behavior may help to explain why, in some studies, selfesteem did not moderate justification of a classic dissonance-arousing behavior (e.g., Cooper & Duncan, 1971; Steele et al., 1993; Stone, 1999).

Sociocognitive Factors That Determine the Standard Used for Assessing Behavior

In the above examples of George and Al, the difference between using personal standards for behavior, which include the simultaneous accessibility of idiographic selfknowledge and normative standards, and the use of normative standards alone, which do not include the accessibility of idiographic self-knowledge, is in part a function of the perspective they were induced to take when interpreting their behavior. The SSM proposes that when personal standards for behavior are accessible, attention is focused inward on one's own, idiosyncratic interpretation of a given act. It is similar to a state of objective self-awareness (Wicklund, 1975), during which introspection initiates interpretation and evaluation of behavior using the self-attributes most relevant to the context (e.g., competence and morality; see Aronson, 1992). According to the model, introspection can bring to mind self-expectancies, defined as the chronic relationship between one's actual self and the relevant normative standards for behavior. However, because people with high and low self-esteem hold different expectancies for their behavior, a state of self-awareness

may cause people with high versus low self-esteem to reach different conclusions about what they have done. Thus, the accessibility of personal standards for behavior may induce a state similar to self-awareness that causes more dissonance among people with high versus low self-esteem.

In comparison, when normative rather than personal standards are accessible in the context, the SSM proposes that people take the perspective of others in assessing the meaning of their behavior. The accessibility of normative standards engages a state similar to subjective self-awareness, in which attention is focused outward toward the environment, but in this case, attention is directed specifically toward the attitudes, values, and opinions held by important others. The accessibility of the normative standards causes people to take the perspective of others and assess their behavior based on how important people, such as parents or peers, would interpret and evaluate what they have done. However, because attention is focused on a perspective that is external to the self, when people take the perspective of others, we hypothesize that idiosyncratic self-knowledge and expectancies do not necessarily come to mind. Instead, people assess how their behavior deviates from the attitudes, values, or opinions held by others—the relevant normative standards. If the behavior is perceived to be discrepant from the perceived norms, then dissonance is aroused and both high- and low-self-esteem individuals will become motivated to justify their behavior.

Early research on the role of self-esteem in dissonance is consistent with these assumptions. One way in which the accessibility of personal versus normative standards for behavior was influenced in the early research was through the cover stories or feedback procedures used to induce self-esteem and counterattitudinal behavior. For example, in a study often cited as support for self-consistency theory, Glass (1964) provided participants with false personality feedback designed to raise or lower self-esteem. Specifically, participants who received positive self-esteem feedback were told they were "considerate and sympathetic"; participants who received negative self-esteem feedback were told they were "inconsiderate" and "lacking the capability for leadership (i.e., conformist)." After the self-esteem manipulation, participants were induced to distribute painful electric shocks to a confederate under conditions of high or low choice. The results showed that when they chose to deliver the painful shocks, participants with high self-esteem derogated the victim of their aggression more than participants with low self-esteem. According to the selfconsistency interpretation, harming the confederate caused more dissonance for participants with high self-esteem because their aggressive act was inconsistent with their induced positive self-expectancies for considerate and sympathetic behavior. To reduce dissonance, those with high self-esteem justified their aggression by derogating the victim. In contrast, participants with low self-esteem did not

derogate the confederate because harming the victim was consistent with their induced negative expectancies for inconsiderate and conformist behavior (cf. Thibodeau & Aronson, 1992).

Compare the effect for self-esteem in the Glass experiment to another relevant self-esteem experiment conducted by Cooper and Duncan (1971). These researchers replicated the manipulation of self-esteem used by Glass (1964) before inducing participants, under high or low choice, to videotape a counterattitudinal message. Despite evidence that the self-esteem manipulation was successful, Cooper and Duncan found that when choice to make the advocacy was high, all participants justified the discrepant essay regardless of their level of self-esteem. How could this occur when similar procedures produced self-esteem moderation of dissonance processes in the research by Glass? One possibility concerns how participants were induced to write their counterattitudinal essay after they received the self-esteem feedback. Specifically, the investigators used instructions that are quite common in the induced compliance paradigm; they said, "We think we know how most students feel about this issue" and "We have enough essays favoring the (proattitudinal) position; what we need now are essays taking the other position." Differences in induced self-esteem may have had no effect on attitude change in this study because these statements, in effect, shifted participants' focus of attention from their personal self-standards to the normative standards for behavior: most students would not write such an essay, but you, the participant, did. As a result, justification was a function of perceived choice and participants changed their attitudes toward the content of their essays regardless of their induced level of self-esteem.

Our recent research has attempted to investigate the use of personal versus normative standards for behavior by priming one or the other after participants have committed a classic dissonance-arousing act (e.g., Stone, 1999). In one experiment, participants completed a free choice procedure modeled after Brehm (1956; see also Steele et al., 1993). Following the decision but before they rerated the items a second time, participants were primed for either their own personal standards or for the normative standards for competent behavior. Specifically, participants were asked to write a short description of a fictional target person named Donald who exemplified the attribute of competence. In the personal standards condition, participants were instructed to think about the standards for competent behavior from their own perspective and then to describe Donald using their "own personal standards" to define competence. In the normative standards condition, participants were directed to think about the standards for competence from a societal perspective and to describe Donald using "the standards that most people would use" to describe competence. Following the priming task, all participants were then asked to rate the choice alternatives a second time. The attitude change data

showed that while thinking about personal self-standards caused participants with high self-esteem to justify their choices significantly more than participants with low selfesteem, thinking about normative self-standards led to similar levels of justification in both self-esteem groups. Another experiment replicated this interaction pattern between self-esteem and the priming of personal versus normative self-standards following a counterattitudinal essay task similar to that used by Cooper and Duncan (1971). These data provide some preliminary evidence for our model inasmuch as they indicate that making accessible personal standards for behavior appears to engage self-expectancies and promote self-esteem moderation of dissonance, whereas making accessible normative standards for behavior engages similar dissonance processes in high- and low-self-esteem individuals. Regardless of what actual behavior began the process, self-esteem moderation of dissonance arousal was a function of the type of self-attributes and standards made accessible following the discrepant act.3

THE ROLE OF SELF-STANDARDS IN DISSONANCE REDUCTION PROCESSES

To this point, we have argued that self-relevant thought can be an important factor in the process of dissonance arousal when people use self-relevant criteria (i.e., standards that apply to them) to determine whether or not their behavior represents a threat to the self or an aversive outcome. How then can the accessibility of positive self-attributes, also central to the self-affirmation process, *reduce* the discomfort and motivation to justify a discrepant behavior?

In our view, self-affirmation occurs when focus on the

³ The distinction between personal and normative self-standards in the current model is similar to the distinction between the own versus other perspective people can take on ideal and ought self-discrepancies described by Self-discrepancy Theory (e.g., Higgins, 1989, 1990). In a similar vein, Higgins (1990) suggested that dissonance paradigms like Festinger and Carlsmith (1959) may make accessible specific matches, mismatches, and nonmatches between normative standards (e.g., the helpful subject), idiographic self-guides (e.g., morality), and social context guides (e.g., perception of responsibility). However, whereas Higgins used self-discrepancy theory to describe one specific example of what we call nomothetic dissonance, the current model expands greatly on this analysis by also describing the type of discrepancy that is likely to cause self-esteem differences in dissonance arousal. Moreover, given the role of normative standards in the present model, the distinction between personal and normative discrepancies may represent two very specific examples of an "ought self-discrepancy." That is, when people think about their personal standards for behavior, they are focused on a discrepancy between their behavior and what Higgins (1990) has defined as the relationship between a chronic "own-actual-self" and "own-ought-normative" self-guide, whereas focus on the normative standard in the current model involves just a comparison between behavior and an "own-ought-normative" self-guide. We see the tenets of self-discrepancy theory as having broad implications for understanding dissonance processes and we discuss some of these issues under Implications for the Model under Other Dissonance Processes.

discrepancy between behavior and self-standards is swept aside by the accessibility of positive self-attributes that are *irrelevant* to the behavioral discrepancy in question. Rather than reducing dissonance by changing cognitions related to the discrepant behavior, self-affirmation processes occur when new cognitions about the self distract people from thinking about the dissonant act (Stone et al., 1997; Galinsky, Stone, & Cooper, 2000). A crucial assumption, however, is that for self-affirmation processes to operate, the affirming actual self-attributes must be irrelevant or unrelated to the behavioral discrepancy that caused the discomfort in the first place.

To make this prediction clear requires some discussion about how dissonance arousal is viewed from the perspective of self-affirmation theory (Steele, 1988; J. Aronson et al., 1999). Self-affirmation maintains that dissonance arousal is a function of a threat to the globally positive "integrity" or cohesiveness of the self. Precisely how behavior constitutes a threat to self-integrity, however, is not explicitly defined in the theory; anything that threatens a positive self-image, including negative evaluations from others or negative life events, can also motivate a need for affirmation of the self (Steele, 1988; J. Aronson et al., 1999). Nonetheless, Spencer et al. (1993) suggest that in the classic dissonance paradigms, if attention is drawn to the threat inherent in a given behavior, "... all people (regardless of their level of self-esteem) will try to affirm themselves by deflecting or diminishing the threat . . . if people are not focused on their self-resources following (dissonance), both high- and low-self-esteem people will attempt to rationalize or dismiss the (dissonance) per se" (pp. 23-24). We believe these observations imply that from the self-affirmation perspective, unless positive self-attributes are made accessible in the situation, most people will remain focused on the threat represented by their behavior and most will be motivated to reduce dissonance via self-justification. From our perspective, this prediction can only be made if we assume that people with different levels of self-esteem come to the same conclusion, based on a normative self-standard, when they assess the meaning of their actions.

Our interpretation notwithstanding, self-affirmation does predict that self-relevant thought can provide resources for dissonance reduction. Specifically, the more positive self-attributes that are accessible in working self-knowledge, the less people will have to use justification to reduce their discomfort. Because people with high self-esteem have available more positive attributes, they are more likely to use a self-relevant thought for dissonance reduction compared to people with low self-esteem, whose self-knowledge presumably contains fewer positive self-attributes. As noted above, this assumption about the function of positive self-attributes in dissonance is substantially different from the assumption made by the self-consistency perspective,

which assumes that positive self-knowledge is likely to *increase* the need for self-justification. We believe the key to understanding how positive self-attributes can function as a resource (e.g., self-affirmation) or as an expectancy (e.g., self-consistency) in dissonance begins with the behavioral-relevancy of the positive self-attributes made accessible in the context of a given behavior.

To illustrate the importance of behavioral-relevancy, we return to our two students, George and Al. How would self-affirmation be possible after George answers the teacher's question incorrectly? Imagine that immediately following his academic embarrassment, Al reminds George about his winning free throw during the previous night's basketball game. We suggest that by bringing to mind his clutch performance on the basketball court—a positive attribute presumably unrelated to academic competence—Al has provided George with a positive self-resource that reduces the need to justify his incorrect answer. However, what if Al's comment went right to the heart of the matter by reminding George what a good student he usually is? Will this highly relevant and positive information help George reduce his dissonance? We propose that, although Al's reminder about George's academic ability has made positive self-attributes accessible, its relevance to the prevailing discrepancy between his incorrect answer and the normative standard for classroom behavior will not be selfaffirming. Rather, Al's comment will only make George's gaffe in class seem worse, and George will need to justify his behavior in order to effectively reduce dissonance. As in this case, making positive self-attributes accessible that are related to the behavioral discrepancy are likely to maintain or increase dissonance arousal and the motivation to justify behavior.

As illustrated by Path 2 of Fig. 2, the SSM predicts that the accessibility of positive self-attributes that are relevant to the discrepant act should increase discomfort because it invokes the standards for behavior. Furthermore, the effects of relevant positive self-attributes on dissonance reduction should be moderated by self-esteem when, and only when, they activate personal self-standards for behavior. Specifically, if relevant positive attributes bring to mind personal standards for behavior, then self-expectancies may become accessible, and people with high self-esteem will justify their behavior more than people with low self-esteem. In contrast, if relevant positive attributes bring to mind the normative standards for behavior, then, as predicted by the SSM, self-esteem will not moderate the process and most people will be motivated to justify their behavior. Thus, positive attributes that bring to mind the self-standards relevant to the behavioral discrepancy are not likely to provide resources for dissonance reduction, especially for people with high self-esteem.

In contrast, as illustrated by Path 3 of Fig. 2, if the situation brings to mind positive attributes that are unrelated

to the discrepant act, the SSM predicts that people with high self-esteem should be able to use this information as a resource against their discomfort, whereas people with low self-esteem will not. As noted above, research has shown that people with high and low self-esteem do not perceive positive traits to be equally self-descriptive (e.g., Brown, 1986; Baumgardner, 1990); those with high self-esteem should perceive irrelevant positive attributes as more descriptive of the self than people with low self-esteem. As a result, irrelevant positive attributes can be used as a resource to reduce discomfort by people with high self-esteem, but if the traits are not perceived as self-descriptive by people with low self-esteem, they will have to rely on justification to reduce their discomfort. Thus, the relevance of positive self-attributes to a discrepant behavior is a critical determinant of the use of self-esteem as a resource for dissonance reduction. The SSM predicts that the more self-esteem people have, the less they will need to justify a discrepant act (e.g., by attitude change) when the situation makes accessible positive self-attributes that are unrelated to the standards people use to evaluate their behavior.

Although there is currently no direct evidence for the predictions sketched above concerning the interplay between self-esteem and the behavioral relevancy of positive self-attributes on dissonance reduction, studies by J. Aronson, Blanton, and Cooper (1995) and Blanton, Cooper, Skurnik, and J. Aronson (1997) do provide evidence for the role of behavioral relevancy in dissonance reduction. In the J. Aronson et al. (1995) experiment, participants engaged in a counterattitudinal essay-writing task in which, under conditions of high choice, they wrote that their university should reduce spending on facilities for the handicapped. Participants were then asked if they would like to see the results of a personality test that they had previously taken. Participants were told that they could read paragraphs that described their standing on positive self-domains in which they had scored particularly high. Included in the list of paragraphs were those that were directly related to their dissonant act (e.g., compassionate) and those that were unrelated (e.g., creative). The results showed that in highdissonance conditions, participants did not want to read about their positive self-attributes that were relevant to the discrepant behavior. Despite the fact that these attributes were positive, participants chose to read paragraphs that told them how wonderful they were on irrelevant attributes those that were not related to the self-standards appropriate to that behavior. Participants appeared to select information that could take their focus away from the relevant positive self-attribute.

In the subsequent study by Blanton et al. (1997), the relevancy of the positive feedback was systematically manipulated and attitudes toward the essay topic were collected as the measure of dissonance reduction. As suggested by the J. Aronson et al. (1995) experiment, when the posi-

tive feedback was relevant to the counterattitudinal act, participants showed significantly more attitude change (i.e., dissonance reduction) relative to participants who chose to write the counterattitudinal essay but received no feedback. This suggests that the positive feedback increased the dissonance arousal beyond what was experienced by just writing the essay under conditions of high choice. In contrast, when the positive feedback was irrelevant to the behavior, participants showed significantly less attitude change compared to high choice control participants. As predicted by self-affirmation theory (Steele, 1988), dissonance was reduced by positive self-information, but, as predicted by the SSM, participants were only self-affirmed when the positive feedback was irrelevant to the discrepant behavior. Positive feedback relevant to the discrepant act caused more, not less, need to confront the implications of the behavior (see also Galinsky et al., 2000).

In sum, the SSM suggests that self-affirmation, as applied to a dissonance situation, is a process whereby people do not resolve the discrepancy between their behavior and their self-standards (Stone et al., 1997). Normally, dissonance reduction would occur in a manner dictated by the selfstandard that was made accessible in the situation, as predicted by the self-consistency and the New Look perspectives. But when positive features of the self unrelated to the discrepancy become accessible, people may alter their attention from the implications of their actions and revel instead in some of their other outstanding attributes. This may reduce negative affect (Galinsky et al., 2000) or invoke trivialization of the discrepant act (Simon et al., 1995). For people with high self-esteem, affirmation of the self may be an efficient and satisfactory means of reducing dissonance without going though the work of changing cognitions or behaviors related to the source of arousal.

IMPLICATIONS OF THE MODEL FOR OTHER DISSONANCE PROCESSES

The SSM was designed to integrate the three major perspectives on the role of the self and self-esteem in dissonance processes. The emphasis in the model on how people determine that their behavior represents a discrepancy may have broader implications for understanding dissonance phenomena. For example, whereas the current model describes the processes by which people may rely on personal versus normative standards to determine the meaning of their behavior, these may not be the only relevant cognitions people use to interpret and evaluate what they have done. Under some conditions, people may focus on the fit between their behavior and an important attitude or particular belief-a more intermediate level of action identification (Vallacher, 1992; see Stone, in press). This tenet of the SSM implies that it is possible for dissonance to be a function of a perceived discrepancy between behavior and

important cognitions that range from highly abstract and global (e.g., the self) to highly concrete and specific (e.g., an attitude toward an object or a specific belief about an issue; see Harmon-Jones, Brehm, Greenberg, Simon, & Nelson, 1996). Furthermore, the cognitions people use to interpret and evaluate the meaning of their behavior may be determined by the contextual goals or constraints on processing set forth in the situation (see Swann & Schroeder, 1995) or by the chronic goals and constraints on processing imposed by variables located within the person, such as the propensity for self-monitoring (Snyder & Tanke, 1976) or the stability of self-esteem (see Kernis & Waschul, 1995). An important direction for research concerns examination of the various mechanisms by which people determine the meaning and significance of their behavior—the first step toward dissonance arousal.

Another direction for research concerns the emotional experience of dissonance (Elliot & Devine, 1994). The relationship between our description of self-attributes and self-standards and those described by Higgins and his colleagues in Self-discrepancy Theory suggests that different types of behavioral discrepancies may lead to qualitatively different emotional labels applied to dissonance arousal. For example, Higgins and his colleagues have shown that discrepancies from ought self-standards are experienced as agitation-related emotions, whereas discrepancies from ideal self-standards are experience as dejection-related emotions (e.g., Higgins, 1989). This leads to the prediction that the dissonance arousal following a violation of ought-normative standards may be experienced as an emotional state such as anxiety or guilt, whereas dissonance following violation of personal self-standards, to the degree they represent an "ideal self-standard," may be specifically experienced as dejection- or frustration-related emotions such as shame or embarrassment. Furthermore, the emotional label applied to dissonance arousal may delineate qualitatively different states of dissonance motivation, which may subsequently influence the strategies people choose for dissonance reduction (Stone et al., 1997). The connections between specific behavioral discrepancies and emotion, including how people label dissonance arousal and how the labels influence dissonance reduction, are exciting directions for future research.

The labeling of dissonance arousal points to another important question: How can people misattribute their arousal to an external source if self-standards are used to assess behavior (Zanna & Cooper, 1974; see Cooper & Fazio, 1984)? According to the New Look model of dissonance (Cooper & Fazio, 1984), after dissonance arousal is labeled as negative, a situational cue can cause people to misattribute their arousal to a source other than their behavior. This proposition was derived from the Schacter and Singer (1962) model of emotion, which specified that arousal can be undifferentiated when its current source is

ambiguous. According to our model, the salience of a specific self-standard may disambiguate the source of dissonance arousal, which may then reduce the ability to misattribute the arousal or select a strategy for dissonance reduction that does nothing to resolve the discrepancy. However, it is also possible that when self-standards are accessible, people may not be consciously aware of their use in the assessment of their behavior (e.g., Nisbett & Wilson, 1977). Under some conditions, the assessment of a given behavior may be very quick, like a conditioned response. When this is the case, people may not be know the source of arousal because the processing is automatic and passive (e.g., Wegner & Bargh, 1998). The role of automaticity and unconscious processing in how people use different selfattributes for the interpretation of behavior represents another intriguing direction for future research on cognitive dissonance.

SUMMARY AND CONCLUSIONS

We have argued that the contemporary views of the self in dissonance have at least one common bond-they all make important assumptions about how people assess the meaning and significance of their behavior. We have proposed that this process involves a comparison between behavior and a self-standard made accessible by the situation in which the behavior was enacted. When a discrepancy is detected between behavior and a relevant self-standard, dissonance is aroused. However, we suggest that each of the major perspectives on the self makes a unique prediction that derives from different assumptions about the types of self-attributes and self-standards used to assess the psychological significance of a given behavior. Consequently, we propose that the role of cognitions about the self in dissonance depends on the type of self-attributes and standards people use to understand and evaluate their actions.

According to the SSM, self-consistency (e.g., Thibodeau & Aronson, 1992) emphasizes that people use their own personal standards when assessing their behavior, which brings to mind chronic, idiographic self-expectancies. We suggest that self-expectancies are represented in the working self-concept as the relationship between chronic actual self-attributes and normative standards for behavior. The model predicts that when personal standards are accessible in a behavioral context, people use their idiographic self-expectancies to assess the meaning of their behavior, and people with high self-esteem will be more likely to perceive behavior in one of the classic dissonance paradigms as a significant discrepancy. As a result, they will be more motivated to reduce dissonance via self-justification compared to people with low self-esteem.

In contrast, the SSM predicts that when normative standards are primarily accessible, individual differences in self-esteem will not moderate dissonance processes because the shared evaluation of the behavior will cause most people to perceive a discrepancy. According to the assumptions discussed in the New Look model (Cooper & Fazio, 1984; Fazio & Cooper, 1983), normative standards imply sanctions from others that will be perceived similarly by people with different self-expectancies. However, in the model, people must be primarily focused on the normative standard for the shared evaluation to carry the weight in the arousal process.

Finally, the SSM predicts that the accessibility of positive self-attributes will operate as a resource for dissonance reduction only if the self-attributes are irrelevant to the discrepancy between behavior and the self-standards responsible for causing the dissonance arousal. When irrelevant positive attributes are accessible, people with high self-esteem will benefit more and show less self-justification compared to people with low self-esteem. Some of the mechanics of this prediction, such as whether the accessibility of irrelevant positive self-attributes reduces dissonance by shifting attention away from the behavioral discrepancy (Blanton et al., 1997), reducing negative affect (Galinsky et al., 2000), or by trivializing the importance of the discrepancy (Simon et al., 1995), await future research.

It is our hope that by illuminating a process by which people assess the meaning and significance of their behavior, it may be possible to go beyond the current debate over which revision is the best account of dissonance phenomena. Although the debate over the underlying motivations for dissonance has been productive for the discipline, we favor more synthesis among all the various perspectives. By focusing on the cognitive processes by which people interpret their behavior, detect the presence of a discrepancy, experience and label their arousal, and seek a strategy for its reduction, we believe that dissonance theory can move forward in new directions that continue to present important insights into human social behavior.

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