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ABSTRACT

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Self-perception theory is concerned with the manner in which we come to know our inner states, e.g., hunger, pain, emotions, attitudes. Daryl Bem (1965, 1972) the principal architect of the theory, has proposed that individuals do not have direct knowledge of their internal states, and must therefore infer them from their overt behaviors and the conditions under which these behaviors occur. Thus, one's behavior is said to determine his attitude rather than vice versa.

This theory's impact on social psychology has been immense; it initiated the change in research emphasis from cognitive consistency theories to information processing models, and has also been evoked to account for a host of other psychological phenomena. However, the theory's value is suspect given its internal inconsistencies, and the multitude of evidence contrary to its major tenets. This report elucidates these shortcomings, and provides empirical support for reinterpreting two of the theory's major phenomena.

Bem (1965, 1967) introduced self-perception theory as an alternative interpretation of cognitive dissonance phenomena. One such dissonance phenomenon which Bem explains in self-perception terms is the classic reverse incentive effect, where individuals are observed to change their attitudes more the less they are paid to advocate counterattitudinal positions. Dissonance theory claims that this attitude change is motivated because individuals find it aversive to perform counterattitudinal behaviors for little justification. Self-perception theory denies any such aversive motivational drive toward consistency, and holds that individuals view themselves objectively--as communicators who are credible or not credible depending on the justification for their advocacy. (Counterattitudinal behavior is impossible by this view because the attitude is formed after the advocacy.) Bem supports this explanation by demonstrating that observers (who do not experience any dissonance) can reproduce the original pattern of results. The first two studies of this report take exception to this claim. It was hypothesized that observers view large incentives as evidence that the requested advocacy is reprehensible. Monetary incentive, thus, serves as a cue to the evaluation of the requested behavior. In accordance with this interpretation, observers did replicate the reverse incentive effect, but the effect was greatly attenuated

when the actor's payment was determined by chance (thus nullifying the cue value of the incentive regarding the reprehensibility of the requested behavior). Since this interpretation is incompatible with Bem's, the self-perception account of dissonance phenomena is rendered suspect.

The second pair of experiments were designed to refute the self-perception claim that individuals will infer their stable personal dispositions from their trivial, commonplace behaviors. For example, after acquiescing to an initial request, people typically are more susceptible to a later call for assistance. The popular self-perception account of this "foot-in-the-door" phenomenon holds that individuals come to view themselves as favorable toward such requests as a result of performing the initial favor. The present social reinforcement explanation suggests that individuals are reinforced for performing small favors, and thus their acquiescence is operantly conditioned. Consistent with this view, subjects' subsequent acquiescence was observed to be a function of the outcome of the initial interaction. This finding is contrary to the self-perception expectations.

In discussing the outcomes of both series of experiments a number of self-perception theory's inadequacies are revealed. It is concluded that self- and

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interpersonal perception are probably separate, motivated processes, rather than objective, isomorphic ones as Bem contends.

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CHAPTER I

INTRODUCTION

Overview of the Problem

Self-perception theory (Bem, 1965, 1967, 1970, 1972) addresses the question of how we come to know our inner states, e.g., hunger, pain, emotions, and attitudes. Bem admits that most people find this a naive question; most believe that they have direct knowledge of their feelings and beliefs. Self-perception theory asserts that this is not the case. Individuals do not read their internal stimuli to determine how they feel. Rather, they infer their inner states from observations of their own behavior and the situations in which this behavior occurs. Thus, the individual is functionally in the same position as an outside observer because he cannot discriminate between his internal stimuli: "In identifying his own internal states, an individual partially relies on the same external cues that others use when they infer his internal states." (Bem, 1970). Bem further argues that we are usually unaware that our self-attributions are based on public cues (this leads us to believe that we can read our internal states directly). For example, a man and his wife

would both conclude that he likes brown bread because he always eats it. However, his belief that he likes brown bread is illusory; he is inferring that the bread tastes good from observations of his eating behavior. Thus, self-perception theory dictates that self-awareness is an inference based on observations of one's own behavior and its controlling variables.

Self-perception theory has wide implications for psychology. For example, the theory subsumes one of social psychology's central issues, the relationship of attitudes to behavior, and asserts that the guiding assumptions in this area are incorrect. That is, most investigators proceed from the assumptions that attitudes are related to one's values, and that attitudes influence behavior. Self-perception theory holds the opposite to be true: attitudes follow from, and are the products of, behavior. The theory also suggests that psychology's preoccupation with motivational constructs and conceptual processes has been futile. The individual is depicted as an objective observer of his own behavior, who is influenced little by his motivations, internal cues, etc., when he is making self-attributions.

Despite its radical position, self-perception theory has been evoked to explain a host of psychological phenomena. This is understandable as the theory, when given cursory examination, appears to account for a wide range of behaviors, e.g., over-justification effects

(Deci, 1971, 1972; Lepper, Green, Nisbett, 1973), perception of pain (Corah & Boffa, 1970; Klemp & Leventhal, 1972), helping behavior (Uranowitz, 1975), cognitive dissonance effects (Bem, 1965, 1967; Bem & McConnell, 1970), the foot-in-the-door effect (Snyder & Cunningham, 1975; Seligman, et al., 1976), bogus physiological feedback--self-attribution effects (Nisbett & Valins, 1972), etc.

While the above phenomena lend self-perception theory a measure of empirical support, the theory has major shortcomings which call its validity into question. These shortcomings include: (1) the theory's vague exposition, (2) the theory's limited applicability, and (3) the large body of evidence which refute the theory's major tenets. These problems are described below, and will be discussed in detail later.

Bem (1972) has proposed that individuals infer their inner states from observations of their own behavior to the extent that their internal cues are weak, ambiguous, or uninterpretable. This qualification of his original theoretical statement fails to specify how strong internal cues must be to influence or negate the self-inference process. Thus, the theory is difficult to disprove since one could attribute any failure to obtain a self-perception effect to unexpected internal cues.

It can be argued that self-perception theory only operates in trivial cases. Bem (1972) has evoked the

"strength of inner cues" qualification to explain failures to obtain self-perception effects. In the two cases where he does this it appears that the "overriding inner cues" were quite weak. This suggests that the theory may apply only when internal cues are nonexistent. Similarly, Taylor (1975) reports that individuals only infer their attitudes from their behavior when the attitudinal issues involved are unimportant or inconsequential, and argues that people form attitudes and make decisions via more sophisticated cognitive processes than the one outlined by Bem (1972).

There is abundant evidence that the processes of self-attribution and interpersonal attribution differ greatly. While Bem (1972) acknowledges these differences (i.e., the individual: a) has access to his internal cues, b) has knowledge of his past behaviors, c) is motivated to protect his self-esteem, d) has a different attributional perspective than one who is observing him), he argues that they are of less consequence than is often supposed. However, the differences between self- and interpersonal attribution have become better documented since the appearance of Bem's (1972) revised version of self-perception theory, and the theory becomes less tenable as the validity of these differences becomes substantiated.

The position taken here is that self-perception theory, when carefully examined, is untenable. If this

position is correct, then it should be possible to reinterpret the phenomena that the theory's proponents cite as supporting evidence. This paper will (1) critically review self-perception theory, (2) attempt to account for two of the theory's major phenomena (the interpersonal simulation of forced compliance dissonance effects and the foot-in-the-door effect) in ways which preclude self-perception interpretations, and (3) argue that self-attributions are seldom, if ever, based on objective, uninformed observations of one's own behavior.

History of Self-perception Theory

How do we come to know our thoughts, feelings, beliefs, etc.? Most people believe that the answer is obvious: we have direct knowledge of our inner states. Yet others have contended that we do not monitor our thoughts and feelings directly; rather, we infer them from observations of our behavior. This debate over whether attitudes, emotions, and the like cause behavior or vice versa is an old one. William James (1890) was among the first, in modern times, to propose that we infer our inner states (emotions in particular) from observations of our own behavior. For example, a boy "knows" he is afraid of the bear because he is running from it. The act of running is his cue as to his feelings. It is not the case that he envisages being mauled, becomes fearful, and then runs away.

Self-perception theory explains self-awareness in much the same way as did James (1890). The crux of Bem's theory is that self-perception is limited to the same set of public cues used in interpersonal perception. That is, we determine what we are feeling and believe in the same way we determine what others are feeling and thinking--by observing our (their) overt behavior and its controlling variables. When our behavior is under the influence of controlling variables, we do not necessarily consider it an indicant of our inner states. However, when our behavior does not appear to have been emitted to obtain reward, or avoid punishment, we conclude that that behavior reflects our attitude.

Self-perception theory was inspired by B. F. Skinner's (1957) "radical-behavioral" analysis of "private events": This analysis argues that we do not have direct knowledge of our inner states because we cannot be taught how to label, or discriminate between them. Bem (1972) summarizes this argument as follows. The socializing community teaches the child to label objects in the environment via the "pointing and naming" game. The community has difficulty, however, in teaching the child to label his internal stimuli because only he has access to them:

The problem arises when stimuli . . . are "private" internal states to which nobody but the individual himself has access, for it then becomes difficult for the verbal community to make differential

reinforcement of the appropriate descriptive response directly contingent upon the presence or absence of the stimuli which are to be labeled (Bem, 1972, p. 3).

Members of the training community must therefore infer the child's inner states from observations of his behavior, and the child learns to do likewise. Bem's (1970) cogent example of the color blind individual illustrates the community's inability to teach one to label his private (internal) stimuli. Consider an individual who sees blue when everyone else sees yellow and vice versa. Both the color blind and a normally sighted person would apply the words "blue" and "yellow" to the same external stimuli. However, neither individual would recognize that their private stimuli differed.

Bem (1972) does note a few cases where the individual may learn to identify his internal states directly. This might occur when the private stimuli are so intense that they produce observable behavior. For example, an observer can provide a child with the descriptor "it hurts" when the child is injured and in tears. The child would thus learn to label a general class of private "painful" stimuli. Such cases are considered to be the exception rather than the rule, i.e., we usually suffer the illusion of direct knowledge:

One implication of Skinner's analysis is that many of the self-descriptive statements that appear to be exclusively under the control of private stimulation may, in fact, remain under the control of the same public events which members of the community themselves must use in "inferring" the individual's inner states (Bem, 1965, p. 199).

This analysis of self-awareness is not intuitively convincing--an individual certainly can determine whether a sensation is painful or pleasurable without having to be taught to observe and label his behavior. Yet Bem's point is that private stimuli play a lesser role in self-awareness than we believe. Since the theory fails to specify exactly how much a role private stimuli play, the issue is irresolvable.

Self-perception theory evolved to a less rigid position on the role that private stimuli and internal processes play in self-attribution between 1965 and 1972. The early version of the theory (Bem, 1965, 1967) denied motivational constructs and conceptual processes altogether. Self-awareness was even defined in terms of an objective response:

self-awareness, one's ability to respond differentially to his own behavior and its controlling variables, is a product of social interaction. . . . Among the responses that comprise self-awareness, verbal statements that are self-descriptive are perhaps the most common. . . . (Bem, 1965, p. 199).

This version of the theory was somewhat of a contradiction. On the one hand it embraced radical behaviorism and "eschewed any reference to hypothetical internal processes," while on the other hand it proposed a model of self-inference in which the individual was depicted as an objective processor of the information contained in his own behavior. Bem's (1965) initial statement of the theory

attempted to circumvent this contradiction by placing the word "inference" in quotation marks:

. . . an individual's belief and attitude statements and the beliefs and attitudes that an outside observer would attribute to him are often functionally equivalent in that both sets of statements are "inferences" from the same evidence: the public events that the socializing community originally employed in training the individual to make self-descriptive statements. The individual, in short, is regarded as an observer of his own behavior and its controlling variables; accordingly, his belief and attitude statements are viewed as "inferences" from his observations (p. 200).

The current version of the theory (Bem, 1972) acknowledges that private stimuli influence self-awareness:

Individuals come to "know" their own attitudes, emotions, and other internal states partially by inferring them from observations of their own overt behavior and/or the circumstances in which this behavior occurs. Thus, 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 (p. 2).

This exposition of the theory lacks the radical-behavioral flavor of its precursor. For example, there is nothing in the later statement to suggest that the self-inference process is not considered to be a cognitive process of which the individual is fully aware. Furthermore, attitudes are referred to as internal states rather than "verbal statements that are self-descriptive."

While the current version of the theory (Bem, 1972) appears to treat attitudes as cognitive entities, the theory's conception of attitudes remains unclear. Bem (1972) reiterates his earlier position (cf. Bem & McConnell,

1970), that the data of incoming behavior "update" the individual's information on his attitude. That is, uncoerced counterattitudinal behavior changes the individual's attitude in the direction of that behavior, and the individual can neither recall his previous attitude nor perceive that his attitude has changed. This implies, as did early self-perception theory (Bem, 1965, 1967), that attitudes are short-lived responses. But this position is inconsistent with "new" self-perception theory (Bem, 1972): The original position implied that the extremity of the individual's initial attitude would exert little influence on attitude change, whereas the current theory suggests that the individual's attitude will change more when his initial position is moderate, rather than extreme. Self-perception theory (Bem, 1972) thus is vague about its conception of attitudes, and inconsistent in its predictions regarding attitude change.

The following section further examines self-perception theory's shortcomings, contradictions, and evidence which conflicts with the theory's major tenets.

Criticisms of Self-perception Theory

Falsifiability of the Theory.--Self-perception theory (Bem, 1972) concedes that private stimuli play a role in self-awareness; however, the theory fails to specify how much a role such stimuli play, thus making the

theory difficult to falsify. Bem (1965, 1967) initially posited a strict isomorphism between self- and interpersonal perception (suggesting that private stimuli exert little or no influence on self-awareness). As such, the theory was quite testable: any evidence that the processes of self-attribution and interpersonal attribution differed called the theory into question. In contrast, the revised version of theory (Bem, 1972) asserts as its second postulate that individuals infer their inner states from observations of their own behavior to the extent that their internal cues are weak, ambiguous, or uninterpretable. While this qualification appears to make the theory's predictions more precise, it also provides the theory with a means to explain negative results, i.e., any failure to obtain a predicted effect can be attributed to unexpected internal cues. For example, Bem (1972) evokes the theory's second postulate to explain the findings of Klemp & Leventhal's (1972) and Nisbett & Schacter's (1966) perception of pain research. The Klemp & Leventhal study employed the same procedure as did Bandler, Madaras, and Bem (1968). Bandler et al. found that subjects rated the shocks they escaped as being more painful than those they sustained (subjects presumably inferred how painful the shocks were from their avoidance behavior). Klemp & Leventhal (1972) only replicated this finding for high-shock-tolerance subjects; low-tolerance subjects rated the shocks they sustained as being more

painful than those they escaped. Bem (1972) argued that the low-tolerance subjects were frightened, and thus the internal stimulus (fear) superseded the information potentially available to them from external sources, including their behavior. (Bem also applies this analysis to a conceptually similar study by Nisbett and Schacter.) Whether one views Bem's analysis as a demonstration of the theory's explanatory power, or the theory's evasiveness probably depends on one's private attitude about the theory--assuming that such exists. This issue could be resolved, however, if the theory specified how strong internal cues had to be to influence the self-inference process.

Limitations of the Theory's Applicability.--Self-perception theory's second postulate also provides a means by which to argue the theory is trivial. If one concedes that internal cues are ubiquitously present, then evidence that the theory only operates when internal cues are very weak calls the theory's utility into question. Bem's analysis of the pain perception research exemplifies this point. He argued that the fear that subjects experienced negated the self-inference process. Since it seems unlikely that much fear could have been aroused in the context of such research, this suggests that the self-inference process may only operate when internal cues are nonexistent.¹

The utility of the theory can be questioned from a different perspective, i.e., will people base their

self-attributions (e.g., attitudes) on their behavior when they must subsequently act upon these self-attributions? Taylor (1975) argues that individuals will not base their attitudes on their behavior unless "the attitudinal issues involved are relatively unimportant or inconsequential." Subjects in Taylor's experiment were provided with false physiological feedback (cf. Valins, 1966) regarding their attitudes. Half of the subjects were led to believe they would have to act upon their attitudes, and the other half were not. Only those subjects who did not expect to act upon their attitudes allowed their attitudes to be influenced by their "autonomic" behavior. These results suggest that individuals carefully evaluate their alternatives when they must act upon their opinions. Thus, one may only base his opinion on his behavior when (1) the issue is not important enough to warrant careful evaluation, and (2) his opinion will have little or no implication for his subsequent behavior.

The conditions under which self-perception theory operates may be restricted even further since it seems unlikely that one would often have a recent behavior to reflect upon (especially when the attitudinal issue is unimportant). It seems more likely that an individual would consider his values and beliefs that are related to an issue than scan his memory for a relevant behavior when he is forming his opinion. That is, one probably responds

to an inquiry about his opinion on a noninvolving issue by expending as little cognitive effort as possible. Contrast Bem's (1965, 1966) laboratory demonstrations of self-perception with what is likely to occur in the "real world." Bem's subjects were typically induced to perform behaviors that would imply their evaluations of innocuous external stimuli. Thus, they had a recent behavior to reflect upon, and little prior sentiment for the stimuli either way. Now consider the proverbial man in the street who is asked to state his opinion on some issue that is either of little importance to him, or that he has not previously considered. It is unlikely that this individual has a recent behavior, that is related to the issue, from which to infer his opinion. It is more likely that he will base his opinion on his values and beliefs that are related to the issue.

Empirical Evidence Contrary to the Theory's Tenets.--

Self-perception theory asserts that self- and interpersonal perception are isomorphic. Although Bem (1972) acknowledges that self-attributions and interpersonal attributions may differ in four ways, he argues that these differences are not as significant as is often supposed. Since it is clear that the theory is only tenable to the extent that these differences are insignificant, these attributional differences (and recent research that substantiate them) will be reviewed so that their significance may be re-evaluated.

The second postulate of self-perception theory (Bem, 1972) acknowledges that the actor and observer differ in that only the actor has access to his internal stimuli. Bem believes this difference is trivial because the actor can seldom utilize his internal stimuli when formulating self-attributions:

The thrust of the Skinnerian analysis of self-attributions is not that we can make no discriminations among internal stimuli, but only that we are far more severely limited than we suppose in this regard because the verbal community is limited in how extensively it can train us to make such discriminations (p. 40).

Although the theory fails to specify how strong internal stimuli must be to influence self-attributions, the previous discussion of pain perception research suggests that they need not be very strong.

Bem (1972) notes that self- and interpersonal perception can differ in that the individual is motivated to protect his self-esteem; however, "the evidence for esteem-maintenance processes is not nearly as strong as is often supposed." This position neglects much of the evidence that individuals are motivated to view themselves differently from others. For example, Lerner's (1970) well documented (cf. Lerner & Simmons, 1966; Jones & Aronson, 1973) "just world" hypothesis, Chaikin and Darley (1973), and Duval and Wicklund's (1973) theory of objective self-awareness.

Self-perception theory, as an amotivational model of self-attribution, requires that both the actor and

observer be objective observers of the actor's behavior. This seems unlikely. Regan, Straus, and Fazio (1974) report that people evaluate an actor's behavior differently depending on their liking for him. That is, observers tend to assign causality for an actor's behavior in a manner that is consistent with their liking for him: when the actor is liked, his good behaviors are attributed to his disposition, while his bad behaviors are attributed to the situation (and vice versa when the actor is disliked by the observer). This evidence suggests that people may be biased in viewing their own behavior. If people tend to like themselves, have positive self-concepts, etc., then they should be inclined to attribute their good behaviors to their dispositions and their bad behaviors to the situations in which they find themselves. If this analysis is correct, then another delimiting condition should be appended onto self-perception theory: Individuals may infer their dispositions from observations of their positive behaviors, but will attribute their negative behaviors to external controlling variables.

A third possible difference between self- and interpersonal perception is that the actor, but not the observer, has knowledge of his past behavior. Bem (1972) argues that this difference is operative in most cases where motivational explanations are invoked. For example, a student may infer that the exam he failed was difficult,

while an observer may conclude that the student was dumb. Their attributions would presumably differ because only the student has knowledge of his previous intellectual achievements. This argument is weak, however, because the student's recollection of his previous achievements was surely motivated by his recent failure. The reader will also note that this "knowledge of past behaviors" difference is somewhat contrary to the theory's conception of attitude change, i.e., the individual's most recent behavior is said to "update" his attitudinal information leaving him in ignorance of his previous attitude. Thus, Bem contradicts his "updating" thesis when he attempts to account for motivational differences between the actor and observer via this "knowledge of past behavior" reasoning.

Bem (1972) cites Jones and Nisbett's (1972) divergent perspectives hypothesis, and concedes the possibility that actors and observers have wholly different attributional perspectives. Jones and Nisbett argue that there is a pervasive tendency for actors to attribute their behavior to situational factors whereas observers attribute the same behavior to the actor's stable personal disposition. The primary causes for these differing perspectives are: (1) the actor knows his behavior varies from situation to situation whereas the observer often sees the actor in but one role, (2) it is the actor's situation that is visually salient to him whereas the actor becomes the figure on the ground in the observer's visual field. Since there was

little empirical support for this actor-observer difference at the time of Bem's (1972) article, he only mentions it briefly. However, this difference has become better documented since that time (e.g., Storms, 1972; Nisbett, Caputo, Legant, and Marecek, 1973; Arkin & Duval, 1975), and is now a formidable rival of the self-perception position.

Suggested Research

These criticisms of self-perception theory, taken together, suggest that its proposed self-observation-inference process only operates under limited conditions--if at all. Yet the theory currently receives much attention, and is invoked to account for a host of psychological phenomena. This is understandable given that information processing models are currently in vogue, and that self-perception theory is so general that it can be applied to a wide range of phenomena. However, the research discussed above reduces the theory's tenability considerably. If the preceding review of the theory is veridical, then it should be possible to explain the theory's supporting evidence in ways which preclude self-perception interpretations.

The self-perception phenomena which have been singled out for reinterpretation are: the simulation of forced-compliance dissonance phenomena, and the foot-in-the-door phenomenon. Bem's (1967) interpersonal simulation of Festinger & Carlsmith's (1959) forced-compliance study was

chosen because it, perhaps more than any of Bem's other demonstrations, served to popularize the theory. The foot-in-the-door phenomenon was selected because it is currently receiving much attention, and the self-perception explanation of the effect is the accepted one.

The following two chapters will provide alternative interpretations for both of these phenomena, accompanied by empirical support for each interpretation. The final chapter attempts an integration of the two studies which is antithetical to self-perception theory. It will be argued that self- and interpersonal perception are not isomorphic--primarily because individuals have stable self-concepts (usually positive), and will perceive their behaviors to be consistent with their self-concepts--rather than objectively, as self-perception theory contends.

CHAPTER II

A REANALYSIS OF THE DISSONANCE- SELF-PERCEPTION CONTROVERSY

Overview

Festinger and Carlsmith's (1959) investigation of the effect of forced compliance on attitude change is one of social psychology's classic experiments. Their study was among the first to demonstrate that an individual becomes more favorable toward a counterattitudinal position the less he is paid to advocate that position. Festinger and Carlsmith explained this "reverse incentive" effect in terms of cognitive dissonance. The dissonance interpretation holds that individuals experience some degree of discomfort when performing counterattitudinal behaviors for insufficient justification, and may therefore change their attitudes (making them more consonant with their behaviors) as a means of reducing this discomfort.

Self-perception theory was introduced (Bem, 1965, 1967) as an alternative interpretation of cognitive dissonance phenomena. In his theory, Bem argued that the reverse incentive effect could be explained without postulating an aversive motivational drive toward consistency. The

self-perception interpretation holds that subjects in dissonance experiments view their own behavior objectively, as would outside observers, and conclude that their behavior reflects their attitudes when it occurs under conditions of low justification, but arrive at no such conclusion when their behavior occurs under conditions of high justification. Bem has supported this analysis by demonstrating that observer-subjects who are given descriptions of the original dissonance experiments can accurately reproduce the original subjects' results. (He argues that since observers cannot be experiencing any dissonance, they are probably determining the hypothetical subjects' attitudes in the same manner in which the original subjects determined their own attitudes.) Bem's (1967) interpersonal simulation of the Festinger-Carlsmith dissonance classic is the most persuasive evidence of this type. The present research demonstrates that this simulation can be accounted for in a manner which is inconsistent with the self-perception analysis. This interpretation of Bem's simulation holds that the size of the incentive offered for the performance of a potentially unpleasant behavior provided the observers with an indication of the degree of aversiveness associated with that behavior. If this interpretation is persuasive, it is apparent that the plausibility of the self-perception position is far from self-evident.

The Controversy Over Bem's
Interpersonal Simulations

Cognitive dissonance theory postulates that individuals experience discomfort when their behaviors are inconsistent with their attitudes and beliefs. One way individuals are said to reduce such discomfort is by changing their attitudes to make them more consonant with their behavior. The usual forced-compliance dissonance demonstration amounts to inducing the individual to perform a counterattitudinal behavior either "freely" or without choice. Individuals who perform such behaviors of their own "free will" typically change their attitudes in the direction of their behavior more than individuals who are paid (rewarded), or coerced into performing such behaviors. Festinger & Carlsmith (1959) performed the best known study of this type. Subjects in their experiment were offered either \$1 or \$20 to advocate another's participation in a series of dull laboratory tasks. As predicted, subjects who were paid \$1 to lie to the ostensive next subject later rated the tasks more favorably than subjects who were offered \$20 to do the same. The dissonance analysis of this finding holds that a person who makes counterattitudinal statements for a small incentive will experience psychological discomfort or tension. To reduce this arousal the individual may rationalize his behavior by changing his attitude in the direction of his advocacy.

In applying a self-perception analysis to the reverse incentive effect, Bem rejected the dissonance postulate of aversive motivation in favor of a passive process of self-attribution. Bem argued that subjects in dissonance experiments view themselves as communicators who are either credible or not credible, depending on the variables controlling their advocacy. Thus, subjects who were paid \$1 in the Festinger-Carlsmith research believed their own statements (i.e., that they enjoyed the repetitive tasks), whereas subjects paid \$20 could not determine whether they should believe what they said (i.e., they had no opinion of the dull tasks even after having performed them for one hour).

Bem's (1965, 1967) tactic for supporting the above analysis is known as the interpersonal simulation methodology. This method consists of providing observer-subjects with descriptions of dissonance experiments and asking them to estimate the original subjects' attitudes. If the inferential processes of self- and interpersonal attribution are the same, then observers should be able to reproduce the original results. Dissonance theory would not make such a prediction because observers do not, presumably, experience dissonance.

While Bem's simulation results support the self-perception interpretation, one cannot conclude from them that actors and observers estimate the actor's attitude

via the same process. That is, one might accept the communicator credibility analysis for observer-subjects and yet maintain that dissonance reduction is occurring in involved-subjects.²

Dissonance theorists (e.g., Elms, 1967; R. A. Jones et al., 1968; Mills, 1967; Piliavin et al., 1969), however, have rejected Bem's analysis of the simulations as well as his interpretation of dissonance phenomena. They argue that the simulations succeeded only because the observers were not given the original subjects' initial (pre-dissonance induction) attitudes. For example, Jones et al. claimed that Bem's descriptions led observers to infer that subjects who had complied with the experimenter's request for the lesser incentive were initially more favorable toward the requested behavior than those who complied for the larger incentive. These authors replicated many of Bem's (1965, 1967) simulations, and found that observers believed fewer subjects would have complied for the smaller incentive. Furthermore, Bem's descriptions provided observers with the average subject's initial attitude; when Jones et al. provided observers with the particular subject's premanipulation attitude (to preclude the actor in the smaller incentive condition being judged as initially more favorable toward the behavior), they obtained incentive effects.

Bem (1968) argues that Jones et al.'s results actually support his position because their implicit self-selection hypothesis is consistent with the self-perception formulation: an individual looks at his own behavior and asks "What must this man's attitude be if he is willing to behave like this in this situation?" He attributes Jones et al.'s simulation failures to their provision of inappropriate information to the observer-subjects. That is, observers should not have been given subjects' initial attitudes because the original dissonance experiments would have failed if this information were made salient prior to final attitude assessment. Furthermore, the original subjects' premanipulation attitudes were not salient in their postmanipulation phenomenology:

the self-perception analysis implies that the data of incoming behavior "update" information regarding one's attitude, replacing any prior information to the contrary (Bem, 1972, p. 28).

Thus, subjects in forced-compliance experiments can neither recall their initial attitudes nor perceive that their attitudes have changed.

Although Bem & McConnell (1970) present evidence in support of the "updating" thesis, the interpretation of their results is widely disputed. Green (1974) notes that dissonance theory can also explain Bem & McConnell's findings; " . . . subjects changed their attitudes in order to reduce dissonance and then either forgot or did not reveal their premanipulation attitudes." Along different

lines, Shaffer (1975) presents evidence which suggests that Bem & McConnell's findings reflect a demand for consistency between recalled and current attitudes rather than their phenomenological equivalence.

The controversy surrounding Bem's interpersonal simulations of forced-compliance studies thus has centered around the issue of whether observers should be given the hypothetical subjects' premanipulation attitudes. This approach has led to a theoretical stalemate. The present research therefore attempts to refute Bem's interpretation of the simulation results from an entirely different perspective. Given that these simulations provide almost the sole support for Bem's analysis, one would be compelled to reject the self-perception account of forced-compliance phenomena if the communicator credibility analysis were shown to be incorrect.

A Reinterpretation of Bem's Interpersonal Simulations

Despite all the furor over Bem's simulations of dissonance experiments, his most persuasive evidence, the simulation of Festinger & Carlsmith (1959), remains unchallenged. The initial attitude saliency polemic excluded consideration of this simulation because the original experiment did not employ a pre-posttest design. The alternative hypothesis proposed in the present research, however, allows for a consideration of this critical

experiment. This interpretation of the simulation suggests that the size of the incentive provided observer-subjects with an indication of the relative degree of unpleasantness (or reprehensibility) associated with the requested behavior. Presumably, one does not pay another a large sum of money to perform a brief and perfectly reasonable behavior. Thus, offering someone \$20 to perform what appears to be an objectionable behavior should serve as a cue that the behavior is indeed distasteful, unpleasant, etc. On the other hand, offering someone only \$1 might suggest that the requested behavior is perfectly reasonable.

Testing the Information-Incentive Cue Interpretation

The present analysis suggests that by negating the attributional information value of the incentive, we will attenuate the well-established reverse incentive effect. This negation could be accomplished by having the amount of money the hypothetical subject is to be paid determined by chance (i.e., a random drawing), prior to his agreeing to cooperate. Self-perception theory would not predict such an attenuation because the amount of money one accepts to make certain statements is said to determine the credibility of those statements regardless of how the amount of payment was determined. Study 1 therefore crosses two levels of monetary incentive (\$1, \$20) with two levels of payment mode (simple replication and chance). A reverse incentive

effect was predicted for the simple replication of Bem's (1967) simulation. It was further predicted that this effect would be attenuated in the chance payment conditions. Thus, an Incentive X Mode of payment interaction is predicted.³

Method

Subjects

Two-hundred introductory psychology students from a large midwestern university volunteered to participate in the experiment for course credit. Without regard to sex, subjects were randomly assigned to one of the four experimental conditions formed by the factorial combination of the two independent variables.

Materials

Bem's (1967) transcripts were used to produce four tape-recorded descriptions of the Festinger-Carlsmith (1959) experiment. Two of these descriptions followed Bem's transcripts verbatim, and differed only by the size of the incentive offered (\$1, \$20). These two conditions constituted the replication of Bem's (1967) experiment. The tape recorded messages introduced Bob Downing, a subject who participated in an experiment as part of his introductory psychology course requirements. After the tasks that Bob had engaged in were described, the following information was presented:

After the end of the second half hour, the experimenter . . . explained to Bob that he had been one of two kinds of participants in the experiment. The group he had been in received no information or introduction about the tasks, or what the experiment was going to be like. In the other group, a hired student, whose regular job was to act as though he had just finished the experiment, told the waiting subject about what the experiment was like. The experimenter showed Bob a sheet headed "For group B" which had written on it: "It was very enjoyable, I had a lot of fun, I enjoyed myself, it was very interesting, it was intriguing, it was exciting."

The experimenter explained to Bob that the assistant student was not able to come in today, and since Bob knew about the experiment, it has been suggested that he be hired to converse with the waiting subject. The experimenter further explained that if Bob would help, there was a possibility that he could be called upon in the future if they needed him. The experimenter offered to pay Bob one dollar (twenty dollars) for doing it now, and then being on call in the future. Bob agreed to do it, and the experimenter gave him a sheet headed "For group B" and asked him to read it through again.

Two other descriptions were made from the same master tape, and were therefore identical to the original recording except that the second paragraph presented above was deleted and replaced by the following:

The experimenter explained to Bob that the assistant student was not able to come in today, and since he knew about the experiment, it had been suggested that he be hired to converse with the waiting subject. The experimenter informed Bob that he had some money left over from a research grant that needed to be used up. He decided to dispose of this excess money by allowing his assistant to draw slips of paper from a jar. Each slip of paper had a different amount of money written on it. The experimenter further explained that if Bob would help, there was a possibility that he could be called upon in the future if they needed him so whatever he might be paid would be for doing it now, and for being on call in the future. Bob drew a slip of paper with one dollar (twenty dollars) written on it, and agreed to talk with the waiting subject. The experimenter gave him the sheet headed "For group B" and asked him to read it through again.

These different segments were electronically dubbed onto the master tape so that the splicing was undetectable.

Bem's (1967) four-item questionnaire constituted the dependent measure. The key question required subjects

to estimate Bob's rating of the tasks on a scale from -5 to +5, where -5 indicated that he thought the tasks were dull and boring, and +5 that he thought they were interesting and enjoyable.

Procedure

Upon arriving at the laboratory, subjects were seated and told that they were participating in an experiment designed "to determine how accurately people can judge another person." Subjects were studied in groups of 7-15. The taped description that each group was to hear was randomly determined prior to arrival. In all conditions, subjects then heard a tape in which the following events occurred: A college student named Bob Downing participated in an experiment involving two repetitive motor tasks (these tasks were described non-evaluatively). This was the extent of Bob's participation in the experiment per se. The experimenter then offered Bob money to tell a waiting subject that the tasks were interesting and enjoyable. Bob agreed to do this for the amount he was offered, and proceeded to the next room to talk to the subject. The woman who was waiting there interrupted Bob in the middle of his pitch, and said that her friend had told her the experiment was boring, and that she should avoid participating. Bob insisted that this was not true--that the tasks were fun, interesting, and enjoyable.

After observer-subjects had heard the tape, they were asked to complete Bem's questionnaire, which focused on Bob's apparent feelings about the experimental tasks. Subjects were then debriefed as to the purpose of the research.

Results

A 2 (Incentive) x 2 (Payment Mode) x 2 (Sex of Subject) analysis of variance was performed on responses to the critical (first) item of Bem's (1967) questionnaire, which assessed observer-subjects' estimates of Bob's rating of the repetitive experimental tasks. This analysis disclosed a significant main effect for Incentive, $F(1, 192) = 4.96$, $p < .05$, and as hypothesized, a significant interaction of this factor with Payment Mode, $F(1, 192) = 7.46$, $p < .01$. No other main effects or interactions attained statistical significance in this analysis. A decomposition of the significant interaction of Incentive by Payment Mode via planned comparisons disclosed a set of results that were exactly congruent with our expectations. The judgments of observer-subjects in the simple replication Payment Mode conditions were consistent with those found in previous dissonance and self-perception research: Those who heard the actor comply with the experimenter's request for a payment of \$1 judged him to be more favorably disposed toward the tasks ($M = 2.20$) than did those observers whose actor received \$20 ($M = -.14$). This difference in mean ratings

was significant, $t(192) = 3.50$, $p < .001$, and replicates the results of Bem's (1967) simulation. When the information value of the incentive was removed in the chance Payment Mode conditions, however, no differences were observed as a function of Incentive. That is, subjects in the \$1 Incentive group did not perceive the actor to be any more favorably disposed toward the task than those in the \$20 Incentive condition ($M = .42, .66$, respectively, $t(192) = 0.36$, ns).

Analyses of the subjects' responses on the remaining items of Bem's (1967) questionnaire revealed no significant effects, a result that also was consistent with previous findings.

Experiment 2

While the results of the first experiment support the hypotheses developed earlier, they do so by demonstrating no significant differences between the two critical chance payment mode conditions. Since a confirmation of the null hypothesis is not always convincing, a second experiment was conducted to bolster the "incentive cue" hypothesis.

The approach of Experiment 2 was to supersede the informational value of the incentive. If incentive magnitude was employed by the subjects of previous interpersonal replications as an indicant of the reprehensibility of the requested actions, then specific information regarding

the behavior's evaluative valence should supersede the implications derived from the incentive cue. Thus, describing a behavior as distasteful, or as enjoyable, should override any information the incentive would otherwise provide. In Experiment 2, therefore, two levels of Incentive (\$1, \$20) were factorially combined with two levels of the experimenter's apparent evaluation of the requested behavior (reasonable, or distasteful). If our reasoning is correct, then the experimenter's implied evaluation should have a strong effect on subjects' judgments, while the incentive should have very little influence.

Method

Subjects

Eighty-eight subjects from the same population as that of Experiment 1 were assigned randomly to one of the four experimental conditions formed by the factorial combination of the Incentive and Experimenter Evaluation manipulations. A total of 22 subjects, without regard to sex, was assigned to each treatment condition.

Materials

The master tape of Experiment 1, which followed Bem's (1967) transcripts verbatim, was used to produce the four critical stimuli of this investigation. In those conditions in which a positive experimenter evaluation

toward the task was to be imparted, the second paragraph of the script material presented earlier was modified, with the recorded experimenter explaining to Bob Downing that his usual assistant, who was unavailable, found his job to be interesting and enjoyable, after which Bob's cooperation was solicited for either \$1 or \$20.

In the negative task evaluation condition, the experimenter informed Bob that his usual assistant (who was unavailable) had complained about having to tell fellow students that the experimental tasks were enjoyable. After this manipulation, Bob's assistance was secured for \$1 or \$20.

Procedure

As before, a group administration was employed, with groups assigned randomly to one of the four treatment conditions. After the taped presentation, subjects completed Bem's (1967) questionnaire, which was identical to that of Experiment 1, and were then debriefed.

Results

A 2 (Incentive) by 2 (Experimenter Evaluation) by 2 (Sex of Subject) analysis of variance was performed on subjects' responses to each item of Bem's (1967) questionnaire. In the analysis of the critical first item, which assessed subjects' estimates of Bob Downing's reaction to the tasks, the predicted significant main effect of Experimenter Evaluation was found, $F(1, 80) = 24.25$,

$p < .001$: Subjects in the positive Evaluation conditions estimated the actor's attitude toward the tasks to be appreciably more favorable than those in the negative Evaluation groups, $M = 1.55, -1.75$, respectively. Also significant but not predicted was the Sex of Subject main effect, $F(1, 80) = 4.74, p < .05$; Apparently, female subjects thought that Bob Downing would rate the tasks more positively than males, $M = .43, -1.03$, respectively.

As predicted, the analysis also revealed an attenuated Incentive effect, $F(1, 80) = 2.88, p < .10$. This finding is in line with the observation that the incentive magnitude in previous simulations provided observers with an indication of the reprehensibility of the behavior requested of the actor. When the cue value of the incentive was supplanted by the more obvious Experimenter Evaluation treatment in this experiment, the effect of the incentive was minimized. A closer inspection of the data reveals that the influence of the incentive on subjects' judgments was trivial in the positive Experimenter Evaluation conditions, but somewhat more important in the negative Evaluation groups (see Table 1). This between-condition variation in incentive effect resulted in a suggestive, but nonsignificant, Evaluation \times Incentive interaction, $F(1, 80) = 3.13, p < .10$, whose tentative interpretation would suggest that for subjects in the negative evaluation conditions, the large incentive provided a halo or sweetening effect for the requested behavior.

Table 1.--Mean Estimates of the Actor's Evaluation of the Task as a Function of Incentive and the Experimenter's Implied Evaluation*

Incentive	Experimenter's Implied Evaluation	
	Distasteful	Enjoyable
\$1	-2.86	1.59
\$20	-0.64	1.50

*n = 22 subjects/cell

Analysis of subjects' responses to the three remaining items of the experimental questionnaire provided some (generally nonsignificant) evidence supportive of this conjecture, but in fairness it should be emphasized that these findings were neither predicted nor anticipated on the basis of previous research, and are in fact clearly tangential to the major issues of this investigation. The central aim of this study was to provide support for the incentive cue interpretation of the results of Experiment 1, and it seems apparent that this function was fulfilled. When, by virtue of the Experimenter Evaluation manipulation, observer-subjects were not forced to infer the legitimacy of Bob Downing's behavior from extraneous cues, the incentive effect did not occur. Note that in this experiment, as in the first, the hypothetical subject-experimenter agreed to perform an apparently reprehensible or reasonable action after being informed of the payment he would receive

for his services. Under these conditions, the self-perception account lays heavy emphasis on the incentive manipulation as a predictor of subjects' attitudes; clearly, the predictive implications of this position were not supported in the results of this experiment.

General Discussion

It is commonly observed that the less justification an individual has for performing a counterattitudinal behavior, the more favorable he becomes toward that behavior. Individuals in this situation apparently conclude that they would not have performed the behavior if they had not agreed with it. Explaining how and why individuals reach this conclusion has been the object of the long-standing dissonance-self-perception controversy. The dissonance explanation (cf. Aronson, 1968) holds that performing counterattitudinal behaviors (e.g., lying) for insufficient justification is aversive in that such behaviors threaten one's favorable self-concept. Thus, the individual's rationalization (that his beliefs are in fact consistent with his behavior), is motivated by a state of psychological tension. The self-perception interpretation, on the other hand, discounts the possibility of counterattitudinality because there is no attitude prior to behavior. This position holds that individuals objectively observe their own behavior, as might dispassionate outside observers, and conclude that their behavior reflects their attitudes when it occurs under conditions of low justification, but not when it occurs under conditions of high justification. In short, self- and interpersonal perception are construed to be wholly objective, isomorphic processes. Thus, dissonance theory views the reverse incentive effect

as an instance of motivated attitude change, whereas self-perception theory considers it an example of attitude estimation based on objective reasoning.

While the evidence supporting dissonance theory is both copious and diverse, Bem's interpersonal simulations provide the sole support for the self-perception account of dissonance phenomena. Thus, Bem's analysis of dissonance phenomena becomes less plausible as his interpretation of the simulation results becomes suspect. Let us now review the present research which was devised to cast doubt on the self-perception interpretation.

Bem's analysis of interpersonal simulations holds that observers employ the monetary incentive as a means of determining the credibility of the actor's statements. Thus, he interprets the Festinger-Carlsmith experiment as follows.

If the observer had seen an individual making such statements for little compensation (\$1), he can rule out financial compensation as a motivating factor and infer something about the individual's attitudes . . . , he can conclude that the individual holds an attitude consistent with the view that is expressed in the behavior: He must of actually enjoyed the tasks. On the other hand, if an observer sees an individual making such statements for a large compensation (\$20), he can infer little or nothing about the actual attitude of that individual, because such an incentive appears sufficient to evoke the behavior regardless of the individual's private views. The subject paid \$20 is not credible in the sense that his behavior cannot be used as a guide for inferring his private views (Bem, 1972, p. 7).

Although this "credibility" analysis plausibly accounts for Bem's (1965, 1967) simulation results, it is

also conceivable that observers view the experimenter's offer of \$20 to be reimbursement for the objectionable task of enlisting the hapless other in a boring experiment which she would otherwise avoid. The offer of \$1, on the other hand, would not lead observers to believe the experimenter is asking the actor to do anything objectionable.

On casual inspection the present interpretation might appear similar to Bem's. The difference between the analyses becomes clear, however, if one compares the information that the large incentive is said to provide observers. Bem argues that observers are not able to form a conclusion about the actor's true belief because his statements may have been emitted solely to obtain the reward. The present analysis holds that observers view the actor and experimenter to be in some agreement about the requested behavior, i.e., it is objectionable and hence the large payment.

The reasoning behind the present research thus becomes clear. If the magnitude of the incentive determines the credibility of the actor's statements, as Bem suggests, then it should not matter whether the amount of payment is simply stated or determined by chance--the actor has still agreed to perform the behavior for some amount of money. If, on the other hand, the incentive carries information about the valence of the requested behavior, then removing this information by a chance determination of the incentive (experiment 1), or superseding it with explicit

information regarding the valence of the behavior (experiment 2) should attenuate the reverse incentive effect.

The results of these two studies, taken together, provide strong support for the hypothesis that subjects in Bem's (1967) interpersonal replication experiment employed the monetary incentive as an indicator of the distastefulness or (social) desirability of the behavior requested of the actor. In the first study, these cues were removed by having the actor's payment determined by chance prior to his agreeing to cooperate with the experimenter. Under these conditions observers did not perceive the tasks to have been rated differently as a function of payment. Thus, the size of the incentive appears to operate as an informational cue to the observer, allowing him or her to gauge the pleasantness or unpleasantness of the requested behavior. The second study demonstrated that the reverse incentive effect failed to appear when the cue value of the incentive was superseded by direct information regarding the presumed pleasantness of the tasks. Here the observer's estimates of the actor's liking for the tasks was in accord with the experimenter's presumed evaluation of them.

The outcome of the second study poses an additional difficulty for Bem's model: In the negative experimenter evaluation condition, in which the theory presumably would call for the most powerful self-perception effect, we find an incentive effect (see Table 1). In this treatment

condition, the experimenter asks a naive subject to describe as fun and enjoyable the series of repetitive tasks that he had just completed. His usual assistant, the experimenter continues, finds this to be a distasteful action. After being promised either \$1 or \$20 for his assistance, the subject agrees with the experimenter's request. If the self-perception account of the forced compliance phenomenon is tenable, then an observer viewing this interaction must judge the subject paid only \$1 to be more favorably disposed to the tasks than the subject offered \$20. Instead, exactly the opposite result was obtained. Thus, it seems clear that Bem's model is unable to account for the outcome of these two studies. The incentive cue hypothesis, on the other hand, is well supported by these results.

The "informational-incentive cue" alternative might also be applied to all of Bem's other dissonance simulations, such as his interpersonal replication of Brehm and Crocker's (1962) hunger study. In Brehm and Crocker's research, subjects who had fasted for an entire morning were asked to continue their fasting for either \$5.00 or no payment. Subjects paid \$5.00 reported greater hunger than those who were not paid. Bem's simulation of this study produced similar results which were interpreted in the same fashion as the results of his simulation of Festinger-Carlsmith:

If the observer were to see a subject volunteering for the sum of \$5, he would discriminate the mand properties of that behavior, which is to say that he would be able to conclude very little about the subject's hunger; the internal discriminative stimuli arising from "hunger," the observer would assume, would not be a controlling variable of the decision to volunteer. (Bem, 1965, p. 205)

The present analysis, however, suggests that observers viewed the experimenter's offer of \$5 as a concession that the sustained fast would be unpleasant, and from this inferred that the subject would experience hunger.

A similar reinterpretation of Bem's interpersonal replication of Cohen's (1962) counterattitudinal essay-writing dissonance experiment also appears plausible in light of the results of the present research. If this interpretation of Bem's (1965, 1967) simulations is persuasive, it is clear that they cannot be held as evidence for a self-perception interpretation of forced-compliance studies.

The Incentive-Cue Analysis and Involved Subjects

Although the information-incentive cue analysis provides a reasonable account of observers' judgments, it is not possible to conclude that the original subjects determined their own opinions in such an objective manner. Unlike observer-subjects, the original subjects actually performed behaviors which could challenge their sense of autonomy, self-consistency, good character, etc. Noting this, Aronson (1968) suggests that dissonance arousal is

most likely to occur when " . . . the dissonance involved is between a self-concept and cognitions about a behavior that violated this self-concept." Take the Festinger-Carlsmith study as an example. This experimental situation was devised with the intention that subjects would experience some degree of discomfort over deceiving a fellow student. It seems reasonable that subjects who were paid only \$1 could expiate any such guilt they felt by concluding that the tasks were not, in fact, that bad, so "the girl probably liked them after all." Thus, if Aronson is correct, the information-incentive cue analysis is only a plausible interpretation of those dissonance experiments where subjects' self-concepts were not violated, e.g., Brehm & Crocker's (1962) hunger study in which subjects were asked to endure hunger, but for a noble cause.⁴

There is a second reason why applying any interpretation (this one or Bem's) of simulation results to actual dissonance experiments is unwarranted. In the time since Bem (1965, 1967) introduced his amotivational account of dissonance phenomena, a number of investigators have obtained evidence to the effect that dissonance is arousing (e.g., Waterman & Katkin, 1967; Cottrell & Wack, 1967; Waterman, 1969; Pallak & Pittman, 1972; Cottrell, Rajewski, & Smith, 1974; Zanna & Cooper, 1974; Zanna, Higgins, & Taves, 1976; Kiesler & Pallak, 1976). The results of these studies are clearly contrary to the self-perception explanation.

In conclusion, Bem's simulations fail to provide an adequate account of dissonance experiments for two reasons. First, the present research provides an interpretation of the simulation results which is incompatible with the self-perception explanation. Secondly, there appears to be little, if any, justification for attributing the same processes to both involved- and observer-subjects.

As has been noted throughout this chapter, dissonance theory propounds that individuals will change their attitudes in order to maintain their existing (positive) self-concepts. Bem (1972), on the other hand, suggests that one's self-concept is as amenable to change as is his attitude concerning any other object. The next chapter explores this notion that people will make positive and negative self-attributions on the basis of observing their apparently trivial behaviors. In particular, this section will focus on the so-called "foot-in-the-door" effect. Bem (1972) cites this phenomenon as evidence that " . . . , it might be possible to change longer-standing attributions that the individual might make about himself by manipulating his behavior and apparent controlling variables appropriately." In exploring the self-perception explanation of the foot-in-the-door effect, Snyder & Cunningham (1975), among others, have argued that individuals even will form negative self-attributions on the basis of their refusals to help others. The analysis of this phenomenon to be presented argues that individuals are reinforced by any

information that bolsters their existing (positive) self-concepts, and will discount their refusals to act pro-socially to situational factors. These arguments will be supported by empirical evidence that precludes the self-perception interpretation.

CHAPTER III

SOCIAL REINFORCEMENT, SELF-PERCEPTION, AND THE FOOT-IN-THE-DOOR PHENOMENON

Bem (1972) does not limit the domain of self-perception theory to an individual's "attributions of his transitory states or his attitudes" (p. 37). Rather, he contends that an individual's "long-standing" attributions about himself may be changed by manipulating his behavior and its controlling variables, and cites the well known foot-in-the-door phenomenon (cf. Freedman & Fraser, 1966), as evidence of this. This phenomenon has long been recognized by advertisers, salespersons, conartists, and other persons whose business entails persuading others. The technique is both simple to apply and effective in a wide range of situations. All that one need do is persuade an individual to perform a trivial favor on his behalf. Once this has been accomplished, this individual is more likely to comply subsequently with a larger, more substantial request than an individual who was not approached initially. Researchers who have investigated the foot-in-the-door effect have, for the most part, accepted the self-perception

explanation. It is, however, difficult to believe that a long lasting change in one's self-concept would result from performing such pedestrian behaviors as answering a few brief questions or placing a small sign in one's window. The self-perception of dispositional properties even seems less likely in cases of negative, socially undesirable behaviors, especially when such behaviors may be attributed to external (situational) factors. It would seem more plausible that the increase in acquiescence following the performance of a small favor is a function of the positive affect the individual associates with the initial helping situation. For these reasons the following research examines a social reinforcement formulation as an alternative to the self-perception account of this phenomenon.

Freedman and Fraser (1966) conducted the original foot-in-the-door experiment. These authors induced subjects to perform a minor favor on their behalf (answering a very brief series of questions). The subjects who carried out this favor were found later to be more compliant to a larger request than a group of persons who had not been approached initially. Freedman & Fraser (1966, p. 201) invoked a self-perception explanation to account for their findings: "Once he has agreed to a request, his attitude may change. He may become, in his own eyes, the kind of person who does this sort of thing, who agrees to requests made by strangers, who takes action on the things he

believes." The striking generality of the foot-in-the-door effect attracted the interest of a number of investigators who, having accepted the self-perception explanation, proceeded to investigate its boundary conditions (e.g., Pliner, Hart, Kohl, & Saari, 1974; Cann, Sherman, & Elkes, 1975; Harris, 1972; Seligman, Bush, & Kirsch, 1976; Snyder & Cunningham, 1975).

Snyder & Cunningham's (1975) experiment is of particular interest in that it was intended to demonstrate that individuals would form negative self-attributions (and subsequently act accordingly), as the result of refusing an initial request for assistance. This study was typical of other foot-in-the-door experiments except that it included an initial request condition that was "sufficiently large to guarantee noncompliance" (p. 64). If refusing an initial request leads subjects to view themselves as non-compliant, as self-perception theory would suggest, then subjects in this refusal condition should be less susceptible to a larger request than those who were not initially contacted. This expectation did receive some support ($p < .08$). Cann et al. (1975) report similar results which were also of marginal statistical significance ($p < .07$). While these findings are suggestive, it is difficult to believe that subjects adopted negative self-attributions after refusing such unreasonable requests.

A Reinforcement-Based Alternative

Although the findings to date are consistent with the expectations of a self-perception orientation, the mechanism thought to underlie these results appears implausible. To predict a major modification in the self-concept as a result of a refusal of an unreasonable request is inconsistent with a vast literature concerned with the stability of the self-concept (see Rabin's review of this literature, note 1), and of the well documented proclivity of most individuals to maintain a positive self-image (e.g., Aronson, 1968). The present report is thus focused on the development of an alternative explanation which subsumes previous findings; and can be extended to situations in which the self-perception model is either mute, or provides opposed predictions. This alternative is grounded in principles of social reinforcement, one of psychology's oldest and most powerful theoretical orientations, and forms the basis of the experimental research to follow.

Most people in most societies are taught to respond to others in a responsible, prosocial manner. From their earliest socialization experiences, children learn to be trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, etc., and are reinforced for behaving in this manner. In Miller and Dollard's (1941) terms, positive affect becomes "attached" to prosocial behavior as a consequence of the socialization process. Aronfreed and

Paskal (1965), Bryan (1972), and Midlarksy and Bryan (1967), among others, have provided empirical demonstrations of the manner in which this attachment of positive affect with altruistic behavior occurs. In the specific case of the foot-in-the-door phenomenon, this approach appears readily capable of subsuming the general data pattern of results observed in the "minor initial request" treatment conditions of most past research. The social reinforcement formulation fosters the hypothesis that those who complied with the minor requests of most past research found the experience to be pleasant or reinforcing. They had freely provided a service to another, had been able to fulfill the request for assistance without any major expenditure, and were probably politely thanked for their efforts. Consider the original investigation of Freedman and Fraser (1966, p. 97): After agreeing to answer a number of questions about various household products, the subject "was asked a series of eight innocuous questions dealing with household soaps . . . She was then thanked for her cooperation, and the contact was terminated" (our emphasis). After an experience of this type, the telephone interview situation itself took on reinforcing properties. When asked two days later to engage in a similar experience, it is obvious that the subject's immediate past history of reinforcement would operate in favor of a positive response.

At first glance, the social reinforcement formulation might appear quite similar to the self-perception approach; however, though both positions embrace various aspects of Skinner's (1957) radical behaviorism, they provide wholly different mechanisms to account for the foot-in-the-door phenomenon. Bem (1972) has employed Skinner's mand/tact distinction to explicate the manner in which individuals come to determine their own attitudes and dispositions. He suggests that the greater the reward an individual is offered to perform a behavior, the less likely that individual is to conclude that the behavior truly reflects his or her disposition. Note that this position holds the magnitude of reinforcement prior to acquiescence (or behavior) to be critical; the effects of post-acquiescence reinforcement on subsequent behavior have received little theoretical emphasis. Thus, in explaining the foot-in-the-door phenomenon, the theory holds that the compliant subjects of past research concluded that they were favorable to participating in telephone interviews since they had freely participated in just such an event. In short, subjects' modified self-attributions were seen to mediate acquiescence to subsequent requests for assistance.

The social reinforcement orientation, on the other hand, employs Skinner's principle of operant conditioning in its analysis of the foot-in-the-door phenomenon. Applied to this area of research, the social reinforcement position suggests that the more reinforcing the initial contact, the

more likely one is to agree to a subsequent interview. Variations in self-attributions are neither necessary nor expected as a consequence of one's participation in a brief telephone interview.

The two theoretical formulations also hold different views of situations in which subjects are induced to refuse major initial requests (e.g., Snyder & Cunningham, 1975; Cann et al., 1975). The self-perception model suggests that people who refuse large requests will come to view themselves as non-cooperative or non-compliant, and should therefore prove less susceptible to subsequent requests for help. This position seems somewhat implausible, however, because the large initial requests are designed to produce unanimous refusal. Under such stark conditions, it seems more likely that subjects would (correctly) conclude that very few people would acquiesce to the request, rather than that they are, by nature, unhelpful. If this reasoning is correct, then refusing an outrageous request is probably not aversive to most, but affectively neutral. As such, the social reinforcement position would hold that such a behavior would have little influence on one's general susceptibility to a subsequent request (see Cialdini et al., 1975, for a discussion of the conditions under which the refusal of a request for assistance can positively affect later altruistic behavior).

To this point, the available research evidence does not allow for a clear choice between the self-perception

and the social reinforcement accounts of the foot-in-the-door phenomenon. It is the purpose of the experiments that follow to provide the basis for such a comparison. The experimental arrangements of the first study of this report were structured in such a way that subjects in the minor initial request conditions left the compliance situations in either a positive or a negative affective state. These subjects' susceptibility to a later request was then assessed. This approach allows for a disentanglement of the predictions of the competing models, since both reinforced and non-reinforced compliant subjects will have performed identical actions, voluntarily, and thus would be expected by self-perception theory to respond identically and positively to a second request. The social reinforcement approach, on the other hand, would postulate that only those leaving the initial request situation in a positive affective state would be likely to respond favorably to the second request. Similarly, in conditions in which subjects are induced to refuse a request, Bem's model predicts an attenuation in acquiescence to a later request; the social reinforcement position fosters no such expectation. According to this approach, the refusal of an unreasonable request will have no effect on compliance to subsequent requests.

Experiment 1

Method

Subjects and Experimenters

A total of 160 adult females, chosen at random from the telephone directory of a medium-sized midwestern city, constituted the sample. Subjects were randomly assigned to one of five treatment-control conditions.

Eight male undergraduates served as experimenters. Each initially contacted by telephone a total of 16 subjects, after randomly assigning four to each of the four experimental conditions of the study. In addition, these experimenters chose, but did not contact, four subjects who were later to serve as controls. After the first contact, each experimenter exchanged his list of 20 names (and telephone numbers) with another experimenter. The women on each list were then contacted two days later by an experimenter who was blind to the subject's treatment condition. Thus, differences between treatment conditions cannot be attributed to experimenter artifacts.

Procedure

All treatment group subjects were called on the same day (a Wednesday), during the afternoon between the hours of 1:00 and 4:00 P.M. Only female respondents were employed; if a male answered the telephone, the experimenter asked to speak to the "lady of the house." One of

four treatment conditions were effected in this phase of the experiment. Subjects were asked to participate either in a very brief or a very extended interview. The minor request condition was structured so that subjects left the experimental situation in either a positive, or a negative, affective state. The reinforcement contingencies that operated within the "minor request-positive outcome" condition were similar to those of the typical foot-in-the-door experiment. In the "minor request-negative outcome" condition, an attempt was made to forestall the attachment of positive reinforcement to the subjects' prosocial actions by not thanking them, and by demonstrating that their apparently altruistic behavior was of no utility whatever to the recipient of their "favor." Thus, no differences in acquiescence to a later request between those subjects and an untreated control group were expected.⁵ Subjects in a fourth experimental condition were asked to participate in an extended interview which all, almost invariably, refused. Two days after the first request, all experimental subjects, along with the controls who had not been contacted initially, were called by another experimenter who identified himself as associated with a research group different from that of the first interviewer. A moderate request was made of all subjects in this phase of the study (a 15-20 minute interview, consisting of 30 questions). The single dependent measure of the study was the subjects' response to this request.

Manipulations

Minor request-positive outcome.--In this condition, subjects in the initial contact were read the following script: "Hello, my name is _____ of the Consumer's Interest Group. We are calling you today to ask if you would be willing to answer 10 short questions over the telephone concerning your use of various beverages. This should only take about four or five minutes of your time. Would you be willing to cooperate?" If the subject agreed to this minor request, she was asked 10 questions, most of which dealt with her preferred brands of coffee and soft drinks, the quantity and type of milk typically purchased, her use of nonreturnable bottles, etc. The first question of the interview asked the subject to identify the number of people in her household.

At the completion of the interview, the experimenter replied: "Thank you very much, you've been very helpful. We think this research is very important, and the information you've provided will enable us to benefit consumers like yourself. Thank you again for your cooperation."

Minor request-negative outcome.--Initially the same script and questions outlined above were employed in this condition of the experiment. After having completed the 10-item interview, however, the experimenter, reflecting back to the first item, said, "Oh, did you say there were

____ people in your household?" When the subject responded affirmatively, the experimenter stated, "I can't use your answers. I was supposed to deal with households of more (or less) than five persons." Without further ado, the experimenter terminated the interview by hanging up the telephone.

Minor request-positive outcome (control).--This control condition was included to determine whether observed differences between the positive and negative outcome groups could be attributed to subjects' differing perceptions of the importance of the interviews or the competence of the interviewers, rather than to the differential provision of post-interview reinforcement. Recall that in the positive outcome condition, subjects were told that the research was "very important," while the negative outcome subjects were not. In addition, positive outcome subjects might have perceived the telephone interviewer (and interviewers in general) as more competent than did the negative outcome subjects. Lastly, subjects' altruistic behavior in the positive outcome condition was clearly more useful than in the negative condition. The present condition controls for these differences, since it was identical to the negative outcome condition, except that the experimenter terminated the interaction in a pleasant or reinforcing manner, as follows: "Did you say there were ____ people in your household? I'm afraid I've goofed. I was supposed to deal

with households of more (or less) than five persons. It seems that we have already interviewed an adequate number of smaller (larger) families. I'm sorry that I cannot use your answers, but I would like to thank you for your help anyway. Thanks again, and have a nice day."

Major request.--In this condition, the script read as follows: "Hello, my name is _____ of the Consumers Interest Group. We are calling you today to ask if you would be willing to come into the university and complete a rather lengthy questionnaire regarding the types of beverages you use, some time on Friday afternoon. This will take about 1 3/4 hours of your time. Would you be willing to cooperate." The two (of 32) subjects who agreed to this request were told that they would be contacted later regarding the exact time and place of the interview.

Second Request.--Two days after the initial contact, all subjects were called by an experimenter blind to the respondent's treatment condition. The experimenter introduced himself as follows: "Hello Mrs. _____, my name is _____. I'm a student at _____ University doing a class project on motor vehicle safety. We're calling you today to ask if you would be willing to aid us in our study by answering 30 questions over the telephone concerning your winter driving habits. This should only take about 15 or 20 minutes of your time. Would you be willing to

cooperate?" The subject's response constituted the dependent measure. If the subject answered affirmatively, the experimenter explained that he would put her name on a list of possible respondents to be contacted later.

Results

A summary of subjects' responses to the second request as a function of treatment condition is presented in Table 2. Four subjects who had participated in the initial interview could not be reached for the second request, and this explains the minor variation in the number of respondents within each condition.

Table 2.--Responses to the Moderate Request as a Function of Treatment Condition

Condition	Acquiescence	Rejection
Minor Request-Positive	21 (3)	11 (3)
Minor Request-Positive (control)	23 (2)	9 (2)
Minor Request-Negative	9 (0)	20 (3)
Major Request	7 (1)	24 (1)
Control	10	22

Note: Parenthesized values refer to the number of subjects in each condition who responded inappropriately to the initial request. Removing these subjects from the analysis had no effect on the pattern of results, and thus they were included in all analyses.

As predicted by either the self-perception or social reinforcement positions, the usual foot-in-the-door effect

was observed. That is, a greater proportion of subjects in the minor request-positive outcome condition complied to the target request than subjects in the no initial request control condition ($p = .656, .312$, respectively, $z = 2.751$, $p < .005$).⁶ This finding constitutes a conceptual replication of the research in this area.

Some experiments in this area of research have included major (initial) request conditions in which subjects were induced to refuse the initial request (e.g., Snyder & Cunningham, 1975; Cann et al., 1975). The present study also included a major request condition, and a comparison of the proportion of acquiescent subjects in this condition versus that of the minor request-positive outcome group disclosed a finding that replicated both Snyder and Cunningham and Cann et al. The proportion of acquiescent subjects in the minor request-positive outcome condition was significantly greater than that observed in the major request group ($\hat{p} = .656, .226$, respectively, $z = 3.437$, $p < .001$).

Given that the usual foot-in-the-door effect was obtained, the comparison of most interest is that involving the minor initial request conditions that were accompanied by either a positive or a negative outcome. Despite the fact that subjects in both conditions performed the same behaviors, and thus by Bem's theory should have formed similar self-perceptions, there was a major difference in

acquiescence proportions between these two groups, with significantly more positive outcome subjects acquiescing to the second request than those who had experienced a negative outcome at the completion of the first interview ($\hat{p} = .656, .310$, respectively, $z = 2.699, p < .005$).

A comparison of the results of the major request and control groups also supports the social reinforcement position over the self-perception model. According to the self-perception explanation, subjects who refused the major request should have come to view themselves as noncompliant, and thus be less acquiescent to the target request than those in the control group. The social reinforcement position, on the other hand, would predict no difference in acquiescence between these groups, and none was observed ($\hat{p} = .226, .312$, respectively, $z = .775, ns$).

As would be expected on the basis on these results, and of the social reinforcement position developed earlier in this report, no significant differences were observed in comparisons involving the negative outcome group with either the control subjects ($\hat{p} = .310, .312$, respectively, $z = -.018$) or the major initial request condition ($\hat{p} = .310, .226$, respectively, $z = .740$).

A final series of comparisons involving the subjects of the minor request-positive outcome (control) condition lend further support to the social reinforcement interpretation. As noted earlier, this control condition was

included to inspect the rival alternative hypotheses that differences between the positive and negative outcome groups were a function of subjects' differential evaluations of the importance of their contributions or of the competence of the typical telephone interviewer. Presumably, a person whose immediate past history had included an unsatisfying interaction with an incompetent interviewer would be unlikely to volunteer his or her services later in a similar situation. As the data of Table 2 indicate, however, it was not the competence of the first interviewer, nor the apparent magnitude of their contribution that affected subjects' later acquiescence rates, but rather the interviewer's provision of social reinforcement. Consistent with the reinforcement orientation, the proportion of subjects in the minor request-positive outcome (control) group willing to comply with the second request was similar to that of the minor request-positive outcome group ($\hat{p} = .718, .656$, respectively, $z = .44$, ns), and significantly exceeded that of the minor request-negative outcome group ($\hat{p} = .718, .310$, respectively, $z = 3.19$, $p < .001$), the major request group ($\hat{p} = .718, .226$, respectively, $z = 3.92$, $p < .001$), and the control subjects ($\hat{p} = .718, .312$, respectively, $z = 3.25$, $p < .001$).

Experiment 2

While the data pattern of the first investigation matches the theoretical predictions of the social

reinforcement position more closely than those of the self-perception model, it is conceivable that the experimental arrangements of the study might be viewed as biased in favor of such an outcome. It might be argued, for example, that the provision of a negative experience at the completion of the first interview removed this treatment condition from the predictive realm of self-perception theory. Alternatively, it is possible that a positive change in self-perception was induced in the negative treatment group, but that this effect was overshadowed by the outcome of this condition. The implied restrictions which either of these rival hypotheses place on the range of phenomena to which self-perception theory could be applied are severe, however, and would call into question the general utility of Bem's model. At this point, a theoretical discussion of the relative merits of self-perception and social reinforcement for the foot-in-the-door phenomenon is perhaps best deferred, and a second study which focuses on the predictive efficiency of these competing approaches proposed.

Suppose that instead of contrasting the effects of a positive or negative outcome in the initial interview situation on later acquiescence, we focused instead on the effect of the provision of different initial levels of positive reinforcement on later behavior. It is in situations of positive reinforcement that the majority of research in this area has been conducted, and since the

self-perception approach is the favored theoretical explanation of this phenomenon, it is clear that such an experiment should fall within the predictive boundaries of the theory. According to this formulation, however, people are not particularly sensitive to minor variations in internal stimuli: "The thrust of the Skinnerian analysis of self-attributions is not that we can make no discriminations among internal stimuli, but only that we are far more severely limited than we suppose in this regard because the verbal community is limited in how extensively it can train us to make such discriminations" (Bem, 1972, p. 40). Thus, in the absence of a very major discrepancy in the positivity of the initial outcome, self-perception theory would predict no differences in acquiescence to a later request. Contrary to the self-perception prediction, a social reinforcement orientation would foster the expectation that the more reinforcing the initial compliance behavior, the more likely that positive affect would be associated with the general telephone interview situation; thus, the probability of acquiescence in later, similar, situations would be increased as a function of the initial magnitude of reinforcement.

Method

Overview

The general outline of this investigation closely resembled that of the first study. Experimental subjects

were asked to participate in a brief telephone survey, and were differentially reinforced during, and at the completion of, the interview. Two days later, these same individuals were contacted again by an interviewer ostensibly unrelated to the original survey, and asked to participate in another, more extensive, research exercise. Comparison of the proportion of acquiescent subjects within the two differentially reinforced treatment groups, and between these groups and an untreated control group, constituted the primary research question.

Subjects and Experimenters

As before, participation in this study was limited to female respondents. Twenty-five subjects chosen at random from the telephone directory were assigned to each of the three conditions of this experiment. For the first (minor request) interview, a single male experimenter contacted all of the 50 experimental subjects. Two days later, these same subjects, along with an additional 25 women who were to serve in the control condition, were called by a female interviewer who made a moderate request of all subjects. As before, the second experimenter was blind with respect to subjects' treatment condition.

Manipulations

Minor request-normal.--In this condition, subjects heard the following script: "Hello, my name is _____ of

the Consumer's Research Group. We are compiling a guide to aid consumers, and are calling you today to ask if you would be willing to answer 10 questions over the telephone concerning various household products. Would you be willing to help in our survey?" When the subject agreed, a short series of questions concerning various buying habits, attitudes toward meat and coffee prices, amounts of bread and milk consumption, etc., were posed. At the completion of the series, the experimenter responded, "Thank you for your help," and terminated the interview.

Minor request-extensive.--This condition approximated that of the minor request-normal treatment except that during each interview, the experimenter reinforced four of the subject's responses by commenting that he agreed with her position, found her answers to be well reasoned, insightful, consistent, etc. At the completion of these sessions, the experimenter replied, "Thank you very much for your time. Your responses will really help our survey. Thank you again, and have a nice day."

Second Request.--Two days after the initial contact, all experimental and control subjects were read the following: "Good afternoon, may I please speak to _____. I'm a student in the communications department at _____ University. We are participating in a study and are calling you today to ask if you could help us by answering 45

questions over the phone concerning your attitudes about radio, television, and newspapers. Would you be able to help in our survey?" If the subject responded affirmatively, she was told that another interviewer would contact her, if she was selected from a list of persons who had indicated their willingness to cooperate in the project.

Results

A summary of subjects' responses to the second (moderate) request as a function of treatment condition is presented in Table 3. Relevant comparisons of these data with the findings of Experiment 1 provide evidence for the comparability of these two studies. For example, the experience of the "minor request-positive outcome" subjects of Experiment 1 was very similar to that of the second study's "minor request-normal" group. If the methodologies of these two studies were truly comparable, no differences in acquiescence proportions between these particular groups would be expected. This expectation was confirmed: the minor request-positive reinforcement group acquiesced to the second request at only a slightly higher proportion than the minor request-normal subjects of Experiment 2 ($\hat{p} = .656, .56$, respectively, $z = 0.74$).

Similarly, if the magnitude of the second request was comparable between the two experiments, no major difference in control group acquiescence proportions would be expected. As in the first comparison, this expectation

Table 3.--Responses to the Moderate Request as a Function of Treatment Condition: Experiment 2.

Condition	Acquiescence	Rejection
Minor Request-Normal	14	11
Minor Request-Extensive	19	6
Control	8	17

was confirmed, with control subjects of Experiments 1 and 2 complying in nearly identical proportions ($\hat{p} = .322, .32$, respectively, $z = 0.06$).

Considering only the data of Experiment 2, the more theoretically relevant comparisons involve those of the two reinforced groups with the control subjects. Consistent with the results of earlier research, it was found that the subjects in both of the minor request conditions proved more acquiescent to the second request than the control subjects. This result held for the minor request-normal comparison with the controls ($\hat{p} = .56, .32$, respectively, $z = 1.71$, $p < .05$), and more strongly for the minor request-extensive, control group comparison ($\hat{p} = .76, .32$, respectively, $z = 3.12$, $p < .001$).

It is apparent on the basis of these results that subjects reinforced during the initial interview were more likely than subjects who received only the normal treatment to comply with a later, unrelated solicitation. A direct comparison of the acquiescence proportions of the minor

request-extensive and the minor request-normal groups provides additional support for this observation ($\hat{p} = .76$, $.56$, respectively, $z = 1.49$, $p = .068$). While this last comparison only borders on statistical significance, it should be recognized that the differences between the two treatment conditions were very slight.

Discussion

The appeal of self-perception theory as an explanatory device for the foot-in-the-door phenomenon lies in its simplicity. In the typical experiment in this area, subjects are induced with minimal pressure to perform a trivial, but apparently prosocial, action on behalf of another. From self-observation of this altruistic behavior, the person presumably alters his self-perception in a positive way, becoming in his own eyes, the kind of person who will help another or support a worthy cause. This explanation is satisfying because it is congruous with the implicit view of the self-concept that most of us entertain.

While the self-perception interpretation seems plausible, the social reinforcement formulation offers a more direct account of the foot-in-the-door phenomenon because it does not require that one's self-concept change following the performance of a trivial, albeit prosocial, behavior. Rather, it is assumed that such actions are intrinsically rewarding given that we are reinforced for such behavior from early childhood. Secondly, it is

assumed that most persons hold a positive opinion of themselves, and therefore any forces that serve to reinforce this evaluation will be sought out, or, at a minimum, not avoided (Aronson, 1968). Thus, an individual may not be altering his self-perception so much as basking in the interviewer's acknowledgment of his noble character.

The self-perception explanation becomes even less appealing when we consider those studies in which a person is induced to refuse a favor (cf. Snyder-Cunningham, and Cann et al.). According to the theory, the refusal to act altruistically should operate to move the individual's opinion of himself in a negative direction. (The individual would, presumably, come to view himself as uninterested in social concerns or the welfare of others.) The likelihood of this type of change in self-evaluation as a function of refusing to perform a service on behalf of another does not appear great. Individuals who were induced to refuse the initial (major) requests in these studies probably attributed their refusals to the magnitude of the requests.

The empirical evidence from the present research also suggests the adoption of the social reinforcement explanation. Consider the results of Experiment 1. While the standard replication of the foot-in-the-door effect provides no choice between the usual self-perception and the proposed social reinforcement explanations, a comparison of the responses of the minor request-negative outcome subjects

with those of the other conditions does allow for such a choice. The negative outcome subjects performed exactly the same behaviors (under identical circumstances) as those in the minor request-positive outcome group. If the self-perception explanation were correct (i.e., individuals infer their attitudes and dispositions from observing their own overt behavior and/or the circumstances in which this behavior occurs), then subjects in both groups should have formed similar self-attributions and complied equally to the second request. Obviously, similar behaviors on the part of subjects in these two treatment groups were not observed. Subjects in the positive outcome group were twice as likely to acquiesce to the second interview as those in the negative outcome group.

The outcome of the minor request-positive outcome (control) condition provides further support for this alternative interpretation. Subjects in this control variation were induced to participate in the initial interview under the same conditions as those of the positive and negative outcome experimental groups. This control condition varied from the positive outcome treatment in terms of the interviewer's apparent competence, and the apparent importance or utility of the subjects' contribution; it was similar in that positive reinforcement for participation was provided. The differences that characterized these two

conditions were apparently unimportant, as acquiescence rates were nearly identical between the two groups.

When comparing the results of the positive outcome (control) group with that of the negative outcome subjects, however, a very different picture emerged. These groups differed only in terms of the interviewer's behavior after the subject had been informed that her participation was of no utility. Subjects in both conditions must have formed similar perceptions of the interviewer's competence, and it was made clear to both groups that their time had been wasted. Yet, the provision of reinforcement for participation in the positive outcome (control) condition resulted in a significantly greater acquiescence rate than that observed in the minor request-negative outcome group. Thus, it appears that the outcome of the initial interview was the important factor in subjects' decisions to acquiesce to or to refuse the second interview.

Self-perception theory cannot account for the importance of the outcome factor because the theory places unique emphasis on the behavior emitted in a situation, rather than the result of the behavior per se. Bem's (1965, p. 199) well-known "brown bread" example is a clear illustration of this emphasis: "When the answer to the question, 'Do you like brown bread?' is, 'I guess I do, I'm always eating it,' it seems unnecessary to invoke a fount of privileged self-knowledge to account for the

reply." Notice that the outcome of the behavior--relief of hunger, the pleasant taste of the bread, etc.--plays no role in the explanation.

According to the theory, outcomes that are internal states (e.g., positive affect in the present research) cannot influence self-perceptions directly because they are also self-inferences. Thus, self-perception theory cannot, without major modification, be made to account for the findings of Experiment 1.

By way of contrast, the results of this experiment are easily explained in terms of social reinforcement. There is ample evidence that people find it pleasant to help others, especially if their altruistic activity is of the low cost variety (see Gruder & Cook, 1971; Howard & Crano, 1974; Schwartz, 1968). If subjects in the initial (minor) request group of the typical foot-in-the-door experiment find their participation to be rewarding, then they should prove susceptible to later requests of a similar nature--as is observed in this area of research. If this reasoning is correct, then blocking the hypothesized reinforcement mechanism, as in the negative outcome condition of Experiment 1, should reduce subjects' compliance to the level of the untreated control group. This result was also observed.

A comparison of the major request group and control subjects also favors the social reinforcement model over the self-perception approach. In the major request treatment,

the subject's initial (refusal) response was neither reinforced nor punished. These subjects were therefore functionally equivalent to the untreated control group when contacted two days later. Under such circumstances, the social reinforcement position predicted no differences in later acquiescence between these two groups, and none were observed. The failure to detect a difference between the major request and control conditions of Experiment 1 is contrary to the results reported earlier by Cann et al. (1975) and Snyder and Cunningham (1975). A possible insight into this between-study variation is provided in the interview termination procedures prescribed in the present experiment. Recall that experimenters were carefully instructed to end the major request interview in a neutral manner: Subjects in this condition were not thanked for their consideration (and ultimate refusal) of the large request. In the previous experiments, however, those refusing the large request might well have been reinforced by a positive interviewer response at the completion of the interaction (e.g., "We appreciate your consideration of our request," or "Sorry you're unable to help out. Thanks anyway, and have a nice day," etc). Under such conditions, subjects' refusal behavior would be reinforced, and thus greater resistance to future requests (relative to an untreated group) would be expected. This is exactly the result reported in previous research. In the present experiment,

however, where refusals were not reinforced, no differences between major request and control subjects would be predicted by the social reinforcement orientation, and none were observed. In summary, the results of experiment 1 fit the expectations of the social reinforcement model much better than does self-perception theory.

Experiment 2 provided a second, more sensitive, test to the two competing models. If the social reinforcement explanation is correct, then subjects who are strongly reinforced for their prosocial behavior should be more likely to repeat such behavior than those who have been mildly reinforced, who should in turn be more acquiescent than untreated control subjects. The self-perception approach makes no distinction between these two groups, in that both perform the identical initial behavior and therefore generate the same altruistic self-inferences. Even if different "internal states" were induced by the variation in the reinforcement levels accompanying the initial interview of Experiment 2, it seems apparent that these differences would not be discriminable according to the theory, given our severely limited ability to discriminate these states (Bem, 1972, p. 40).

An alternative reading of Bem's theory would suggest a somewhat different outcome. Unlike the first investigation of this report, the experimental arrangements of Study 2 called for the provision of a series of positive

reinforcement for subjects in the minor request-extensive condition, concurrent with their participation in the initial interview. The reinforcement in this situation, that is, was part of the surrounding conditions of these subjects' behavior, available for all to see. According to the theory, the greater the reward one is offered to perform a behavior, the less likely one is to conclude that the behavior reflects his or her true disposition. Thus, greater effects on self-perception might be expected in the minor request-normal reinforcement condition on the basis of Bem's theory.

Contrary to either of the self-perception possibilities, the results of the second experiment found extensively reinforced subjects more susceptible to a later request than mildly reinforced participants, who were in turn more acquiescent than the untreated control subjects.

A summary consideration of the total data pattern of this research area suggests the adoption of the social reinforcement orientation. This approach has been shown to explain previous findings generated within the self-perception framework, and to predict successfully outcomes in the present research inconsistent with those of the self-perception model.

CHAPTER IV

CONCLUDING REMARKS ON SELF-PERCEPTION THEORY

In 1972 Bem suggested that a shift in paradigm was taking place in social psychology. Whereas the research emphasis of the Sixties was focused on evaluative needs and drives toward consistency, Bem observed that we were " . . . emerging into the Seventies as less driven, more contemplative creatures, thoughtful men and women whose only motivation is the willingness to answer the question, 'How do you feel?' as honestly and as carefully as possible after calmly surveying the available internal and external evidence." This observation of the field was quite correct; attributional approaches are the current zeitgeist in social psychology. However, the abandonment of motivational constructs in favor of information processing models may have been unfortunate, given that self-perception theory was the most compelling factor in this radical change of emphasis. The present review of the theory, along with the empirical investigations contained herein, suggest that self- and interpersonal perception are separate, motivated processes, rather than objective, isomorphic ones as Bem contends.

The following discussion therefore reconsiders the case for motivational processes and concludes that current attributional approaches, such as self-perception theory, must attend more closely to such processes.

Self-perception theory postulates that individuals do not have direct knowledge of their internal states, and must therefore infer them from their behaviors as might dispassionate outside observers. Both parts of this proposition run contrary to common sense as well as the bulk of psychology's empirical findings. Let us first examine Bem's tenet that we cannot determine our internal states directly.

No general class of internal states has received more attention from social psychologists than attitudes. While attitudes are generally conceived of as evaluative responses which can influence behavior, there is much dispute over their formation and change. Self-perception theory takes the radical position that behavior causes attitudes. That is, we presumably observe our overt behaviors, and then implicitly infer our attitudes from them so long as the behaviors were not emitted under conditions of duress. Bem (1965) argues that while we often think that we know our attitudes directly, this belief is illusory. Consider the theory's account of the Festinger-Carlsmith (1959) experiment. Subjects in this study labored on tasks which were, by design, quite boring. While it

would seem that one should form an opinion about such tasks after suffering through them for an hour, the self-perception position denies that these subjects could determine how they "felt" about the tasks until they witnessed their own advocacy (under differing levels of payment). The irony of this "radical behavioristic" explanation is that it makes light of operant conditioning. Individuals are said to determine whether their behavior is manding reinforcement when inferring their attitudes, but little emphasis is placed on the result of the behavior per se. This discounting of the importance of the outcome of the behavior is critical to self-perception theory--to acknowledge its importance would be to concede direct knowledge of internal states! This point was elaborated in the previous discussion of the foot-in-the-door phenomenon. Recall that self-perception theory was unable to account for the importance of this outcome factor. (The social reinforcement formulation is also more parsimonious than the self-perception model because it does not require a modification of the self-concept to account for changes in behavior.) Similarly, the literature on interpersonal attraction also suggests that we can determine our inner states in a direct manner (cf. Byrne, 1971). For example, an individual can easily determine his affect for a kindly or belligerent stranger without having to observe his own behavior towards this other. (This individual may even form his opinion prior to

emitting a relevant behavior.) In short, these examples suggest that (1) individuals can determine their attitudes directly, and (2) one's attitude toward a person or issue usually reflects the valence of his interactions with it.

The second element of self-perception theory suggests that individuals objectively observe their own behavior to determine their internal states. This amounts to considering self- and interpersonal perception to be isomorphic. Thus, " . . . Self-perception theory lacks any motivational construct other than an implicit assumption that individuals are willing to answer inquiries concerning their internal states." (Bem, 1972, p. 42). But one must question the practical and heuristic value of a theory that denies motivational constructs because social psychology is replete with evidence to the contrary. A decade of cognitive dissonance research, for example, suggests that an individual will change his attitudes in order to view his behavior as consistent with his self-concept (cf. Aronson, 1968; Bramel, 1962). That is, a person does not view his own behavior (significant behaviors at least), objectively, but rather in a manner that is consistent with his (positive) self-image. For example, individuals have been shown to project their negative attributes onto others (Bramel, 1962), as well as rationalize their negative (i.e., aggressive) behaviors (Glass, 1964).

Milgrim's (1962) classic study on obedience also depicts the individual's tendency to view his behavior in a

manner consistent with his self-concept. It will be recalled that Milgrim's contemporaries criticized his research on the grounds that it probably severely altered the subjects' self-concepts in a negative way. A longitudinal check on this, however, revealed that the induced harmdoing had no such negative effect. Thus, it appears that Milgrim had no trouble convincing his subjects that their aggression was caused by the social situation, rather than their sadistic dispositions. Similarly, the present foot-in-the-door research suggests that subjects will attribute their refusals to help another externally, to the magnitude of the request, rather than to their own negative dispositions. For other subjects in this research the interviewer's expressed appreciation following their initial acquiescence was probably reinforcing because it was consistent with their (positive) self-concepts.

There also exists evidence that interpersonal perception is not a wholly objective process. The Regan et al. (1974) research discussed earlier in this report indicates that observers tend to assign causality for an actor's positive or negative behavior in a manner that is consistent with their liking for him. This effect has also been observed with fictitious stimulus persons in simulated juror experiments, most notably by Landy and Aronson (1969). The fact that so few studies can be cited in support of this plausible attributional bias probably reflects that

social psychologists have disregarded motivational processes, and focused their attention on information processing approaches.

Conclusions

Self-perception theory and other attributional approaches currently enjoy a high degree of popularity. This trend might well reflect that people can be shown to behave predictably, as problem solvers, when presented with an uninvolved task. However, the ecological validity of attributional information that is collected in such "as if" experiments is suspect. On the basis of the evidence presented herein, it seems likely that individuals' motivations do enter into their self- and interpersonal perceptions in their day-to-day interactions with others. Future investigations of attribution processes should therefore attempt to integrate the information processing approach with the consistency research of the past decade.

FOOTNOTES

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¹Orne & Evans (1965) suggest that little fear can be generated in the context of psychological research, since subjects believe precautions have been taken for their safety, e.g., they have induced subjects to place their hands in "fuming nitric acid," and to handle "venomous" snakes, etc.

²Bem (1968) concedes this point in a reply to dissonance theorists.

³No effect for Sex of Subject was predicted.

⁴Brehm & Cohen (1962) suggest that this is a plausible interpretation of the Brehm & Croker (1962) hunger study.

⁵The brief telephone interview, a typical arrangement of much research in this area of research, might provide a subject with both primary and secondary reinforcements. As noted, we are socialized in such a manner that altruistic behaviors are themselves reinforcing. In addition, another's expressed appreciation of our altruism might also provide a potent reward, as it affirms the implicit view of the self that most of us entertain.

⁶In all comparisons of this research, p values are one-tailed.

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