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Self-enhancement motivational bias in attributions of causality and responsibility to a target other : situational and dispositional determinants

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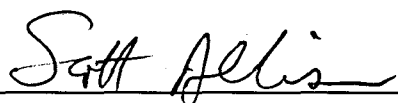

By

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Master of Arts in Psychology

University of Richmond, May 1998

Prior research has shown that people often self-enhance to protect their self-concept from harm. The present research was designed to investigate situational and dispositional determinants of people's tendency to make self-enhancing attributions to a partner to whom they either do or do not feel psychologically connected to. In Experiment 1, participants who had been induced to self-extend to a partner made greater attributions of causality to the partner when the partner's fate was positive than when it was negative. Experiment 2 provided evidence for a dispositional component of self-extension, and indicated that perceivers' attributions to a partner are further influenced by the perceivers' contribution to a joint outcome. The results of the two studies provide support for a self-enhancement bias in evaluations of a connected target other, and offer evidence that these biased evaluations do in fact play a role in determining behavior towards the target of the evaluation.
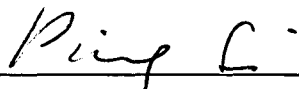
I certify that I have read this thesis and find that, in scope and quality, it satisfies the requirements for the degree of Master of Arts.

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Scott T. Allison, Ph.D., Thesis Advisor

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Self-Enhancement Motivational Bias in Attributions of Causality and

Responsibility to a Target Other: Situational and Dispositional Determinants

By

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Self-Enhancement Motivational Bias in Attributions of Causality and

Responsibility to a Target Other: Situational and Dispositional Determinants

A unique part of the human experience is the feeling of powerful, yet often

subtle and elusive urges which frequently influence and guide one's interaction

with the environment. According to the cognitive perspective, behavior is thought

to be driven by the cognitions of an individual. Yet one can deny neither the

reality of motivation, nor the profound influence it imparts on an individual's

actions within her social environment. The field of psychology has long been

involved in a debate concerning the nature of motivation and cognition and the

relationship between the two. When motivational forces come to bear on the

cognitive processes of a perceiver, it is possible that these processes will become

warped under the pressure of the perceiver's current motivations.

In this paper I begin by reviewing the historical roots of the cognition-

motivation schism, then move to discuss the recent reconciliation of the two

perspectives by Kunda (1990). I proceed to consider Sedikides and Strube's

(1997) motivationally-driven model of self-enhancement and specific evidence in

favor of the self-enhancement motive. Next I briefly discuss individual

differences in the self-enhancement motive as reflected by individuals' social

values. Finally, I offer self-extension theory as the primary link between self-

enhancement and assessments of others.

A Brief History of the Cognition-Motivation Debate

Many early social psychological theories recognized the importance of perceiver motivation in social cognition. Heider (1958) wrote that "We need only to recall how often the poor workman blames his tools to realize that the attribution of can, as well as its cognition, is not always as objective as might be desirable" (p. 98). Moreover, Festinger's (1957) account of cognitive dissonance is inherently motivational, positing that a discrepancy between a perceiver's attitudes and behaviors is inherently uncomfortable to the perceiver. Consequently, the perceiver is motivated to reduce the unpleasant arousal, usually by changing the incongruous attitude. Within the realm of attribution theory, both defensive attribution (Walster, 1966; Shaver, 1970) and just world theory (Lerner, 1980) use perceiver motivation to explain various self-protective attributional biases.

But rarely in social psychology is anything so simple. Beginning in the 1970's, research supportive of motivational influences on reasoning was scrutinized, and new interpretations of these studies were offered. Many of these reinterpretations suggested that the data from these studies could be better, more simply explained in purely cognitive, non-motivational terms (Miller & Ross, 1975; Nisbett & Ross, 1980). Other researchers (Brewer, 1977) reconceived attribution theory exclusively from a cognitive perspective. Miller and Ross

(1975) reviewed a number of attributional studies and concluded that the self-serving biases demonstrated by these studies could easily be explained in cognitive terms. Specifically, they argued that perceivers have greater expectations for success of their behavior. Consequently, perceivers tend to make internal attributions for expected events, and more external attributions for unexpected events (i.e. failures). Further, they argued that perceivers fail to appreciate adequately the covariation between behavior and outcome, more often in the case of increasing success than in the case of repeated failure. Finally, Miller and Ross claim that perceivers typically misunderstand the idea of contingency, and associate control with the occurrence of a desired outcome. Outraged motivation-based attribution theorists everywhere began frothing at the mouth, and the battle commenced.

Clearly attributions are subject to bias in certain circumstances. The vast debate in the 1970's over the precise nature of attributional biases centered on the motivation-cognition question. Certain attribution theorists (Bradley, 1978; Burger, 1981) argued that the attributional biases found in defensive attribution research could not be adequately accounted for by cognitive interpretations, while others decided that the controversy could never be resolved. Later research on attributional biases tended to be more cognitive in nature (Baron & Hershey, 1988; Alicke, 1990; Mitchell & Kalb, 1981), focusing on the ways in which social

perceivers failed to attend to information about an event, relying instead on the outcome to make attributions for an actor. Outcome-biases in social perception have been explained from a cognitive perspective in terms of systematic versus heuristic processing of information.

The paradox is that attributional biases, at various times in their history, have been explained in terms of both motivation (defensive attribution) and cognition (outcome biased attributions). This raises some interesting issues for consideration. Are there, in fact, two (or more) separate types of self-serving attributional biases? Or is there only one sort of bias which has both a motivational and a cognitive component? I submit that, in accordance with the work of Kunda (1990), the latter is the case. Kunda proposes that different perceiver motivations activate different levels of cognitive processes.

Cognitive and Motivational Paradigms Reconciled

Recently, Kunda (1990) resurrected the cognition-motivation debate and successfully integrated the two approaches to account for self-serving biases. Kunda suggested that such biases result from perceiver motivation triggering biased cognitive processes. She began by delineating the boundaries of directional motives, noting that they are not without constraint. Kunda re-stated an older allegation that perceivers draw a desired conclusion only as long as they have evidence to justify it to an uninvolved observer. This is similar in nature to the

"bounded hedonism" of Strube and Yost (1993), which claims that perceivers'

self-enhancing tendencies are curbed by their desire to appear as though they are

not actually making selfish, unjustified self-assessments. Regarding causal

attributions, Heider (1958) wrote "(1) The reason has to fit the wishes of the

person and (2) the datum has to be plausibly derived from the reason" (p. 172).

Paradoxically, the process by which the perceiver objectively justifies his or her

conclusion is illusory in nature. Though striving for objectivity, the perceiver fails

to recognize that he or she is accessing only a limited portion of relevant beliefs

and knowledge about the stimulus.

Allison, Messick, and Goethals (1989) identified three key factors that

affect the degree to which people will engage in self-serving exaggerations of their

own positive characteristics. They proposed that the illusion of objectivity of a

perceiver's positive self-beliefs is determined by the publicity, specificity, and

objectivity of the dimensions on which these beliefs are held. Because people

have far greater access to their own internal thought processes, they can give

themselves credit for resisting negative actions. But because internal motives of

others are relatively unknown, no such credit can be given for another's refraining

from a particular behavior, if in fact a perceiver even notices that another has

refrained from a given action. The fact that perceivers do not exaggerate their

positions or performance on all dimensions of the self-concept is another way in

which a more positive self-concept can be illusorily justified. If a perceiver were to consistently magnify her prowess in *all* areas of life, her credibility would be strained to the breaking point, since most people realize that a self-image which is above average in all realms is simply not believable. Finally, certain dimensions of the self-concept are more objective than others. A perceiver provides further evidence of her own objectivity when she allows that she does negative things and others do positive things. Claiming that one only engaged in positive activities would be highly unbelievable, and would serve only to further undermine the perceiver's credibility.

Moving beyond perceivers' illusions of objectivity, Kunda's (1990) assertions concerning motivated reasoning have much in common with the motivational models of Pyszczynski and Greenberg (1987) and Kruglanski (Kruglanski, 1980; Kruglanski & Klar, 1987). Terminology aside, Kruglanski's model differs only in that it depicts the same sort of thought sequence, which is halted at different points in time depending on the perceiver's goals. Kunda's position, on the other hand, acknowledges the potential for different motives to lead directly to different cognitive processes. For example, it is conceivable that, depending on their various motives, two perceivers may interpret particular data using either more systematic or heuristic processing style. The overreliance on heuristic versus systematic processing is thought to be the main mechanism in

outcome-biased inferences (Allison & Messick, 1987; Worth, Allison, & Messick, 1987; Allison, Worth, & King, 1990; Schroth & Messick 1994). Systematic processing is typically a careful, deliberate, effortful assessment of all information relevant to a particular decision. Heuristic processing, on the other hand, is a quicker, less effortful way of evaluating decision information, in which the perceiver typically relies on a rule of thumb to arrive at a conclusion. In the case of outcome-biased attributions, whether perceivers process information systematically or heuristically could depend on their individual motivations.

In a series of studies by Allison, Worth, and King (1990), motivation to process information about a group was manipulated to induce either more heuristic or more systematic processing. When perceivers were given the percentage of voters supporting a decision, the decision rule used by the community in which the vote was taking place, and the final group decision, they exhibited more outcome bias than perceivers who were given only the percentage of voter support and the decision rule used by the community. These perceivers were forced to used the decision information to determine the outcome of the vote. Allison, Worth, and King speculated that the need to calculate for themselves the outcome of the vote would compel perceivers to adopt a more systematic processing style, and this proved true. In a second study by Allison, Worth, and King, personal relevance was manipulated to provide different perceiver motivations. Perceivers for whom

a decision was high in personal relevance showed far less outcome bias than perceivers for whom the decision was low in personal relevance. Thus it is easy to see how motivation can guide the selection of cognitive processes that perceivers employ.

<u>The SCENT Model of Motivation</u>

Kunda (1990) does not discuss specific directional motivations, or how such perceiver motivations are represented. In a recent chapter on self-evaluation, Sedikides and Strube (1997) tackle the issue of specific motivations in the self-evaluation process. They propose a model of motivated self-evaluation, known as the Self-Concept Enhancing Tactician (SCENT) model. They begin by stating that because evidence abounds that self-evaluation is motivationally driven, they will operate on the assumption that such evidence is in fact indicative of the existence of motivational influences on self-evaluation and modification of self-concept. They begin their discussion by identifying four main motivational paradigms impacting self-evaluation: self-enhancement, self-verification, self-assessment, and self-improvement. Self-enhancement refers to the propensity of people to boost and maintain the positivity of their self-concept, as well as protect their self-concept from harm. Self-verification is the motive which drives perceivers to maintain consistency between their existing self-concepts and new self-relevant information. Self-assessment motivation is what drives individuals to

obtain an accurate perception of themselves. Finally, self-improvement

motivation compels people to improve their skills, health, traits, or abilities.

Sedikides and Strube's (1997) SCENT model integrates the four motives

and makes several key assumptions about the nature of the union. Namely, the

model proposes that the four motives of self-enhancement, self-verification, self-

assessment, and self-improvement act in an adaptive, pragmatic, and dynamic way

to influence self-perception and evaluation. Sedikides and Strube assume initially

that not only is the self-evaluation process adaptive for an individual in the first

place, but also that each of the four motives is adaptive in its own right. Further,

they interpret the adaptiveness of each motive as causal evidence for its

pervasiveness among humans. The model also assumes that the self-evaluation is

pragmatic, that is, recognized by the individual perceiver to be adaptive. The final

assumption of the SCENT model presumes that the four motives are dynamically

interrelated. The motives rarely operate independently of each other, instead

frequently serving complementary purposes in the overall self-evaluation process.

In addition to these main assumptions, Sedikides and Strube (1997) list

three more postulates of the SCENT model. The most basic of these states that the

adaptive, pragmatic, and dynamic functions of the SCENT model are served

primarily through strategic self-enhancement. In a similar vein to Kunda (1990),

Sedikides and Strube point out that self-enhancement is rarely a wild, florid

attempt by the perceiver to inflate his or her self-worth. Instead the self-enhancement process is typically quite subtle and is frequently attentive to the nature of rewards available (i.e. immediate versus delayed), as well as the social and cultural context in which the individual functions. Consistent with perceiver sensitivity to external constraints, self-enhancement can be accomplished through one of two routes. Candid self-enhancement consists of obvious attempts on the part of an individual to raise the positivity of his or her self-concept. Tactical self-enhancement relies instead on more indirect routes to increased positivity of one's self-concept. Sedikides and Strube identify the three other self motives (self-verification, self-assessment, and self-improvement) as examples of processes that ultimately serve a self-enhancing purpose.

The second postulate of the SCENT model suggests that the process of self-evaluation consists of two parts: information and action (Strube & Yost, 1993). The information component acts to develop and test hypotheses about the fit of the self with the environment in which it operates. Based on the results of this hypothesis testing, candid or tactical self-enhancing action can then be taken by the individual. The action component, then, is a sort of behavioral reaction to environmental conditions gathered in the information process. The action taken by an individual serves to modify the environment in such a way as to make it either more conducive to positive outcomes, thereby increasing the positivity of

the self-concept, or reduce the likelihood of negative outcomes that would threaten an individual's self-concept.

The third and final postulate of the SCENT model states that when self-enhancement is undertaken successfully, self-esteem, control, certainty, and a sense of progress will be high for the individual. This assumption is predicated on the idea that the other three self motives are assumed to produce higher or lower levels of control, certainty, and sense of progress. Self-verification is thought to raise the individual's sense of control, self-assessment is understood to lower uncertainty, and self-improvement is assumed to give the individual a feeling of accomplishment.

Evidence Supporting the Self-Enhancement Motive

Although Sedikides and Strube's (1997) SCENT model identifies self-enhancement as the primary motive relative to the other three self-evaluative motives, they are careful to stress the importance of the other three motives. They propose that these motives serve an ultimately self-enhancing purpose, an example of which is tactical self-enhancement. This is often accomplished by perceiver reliance on the three motives of self-verification, self-assessment, and self improvement.

Before I present evidence for the self-enhancement motive, let me clarify exactly what I mean when I employ the term "self-enhancement." Sedikides and

Strube (1997) use self-enhancement to refer to attempts by an individual to increase the positivity of his or her self-concept, as well as attempts to reduce the negativity of one's self-concept. For the purposes of this research, I will use the same definition.

The self-enhancement motive has been demonstrated in research from a variety of domains. From a recall perspective, people distort memories in such a way as to aggrandize their own performance (Crary, 1966), recall positive self-relevant attitudes better than negative ones (Kuiper & Derry, 1982; Kuiper & MacDonald, 1982; Skowronski, Betz, Thompson, & Shannon, 1991), and remember feedback about success more than feedback concerning failure (Silverman, 1964).

Research from the information processing arena has also demonstrated the self-enhancement motive. Perceivers tend to process positive self-relevant information faster than negative self-relevant information (Kuiper, Olinger, MacDonald, & Shaw, 1985; Skowronski et al., 1991) and often exhibit self-protective behavior when making a variety of decisions (Larrick, 1993; Liberman & Chaiken, 1992; Kramer, Newton, & Pommerenke, 1993). In addition, perceivers tend to perceive their physical attractiveness or performance with less accuracy than objective observers and generally see themselves in a more positive light than others (John & Robins, 1991; Staats & Skowronski, 1992; Sanitioso,

Kunda, & Fong, 1990; W.M. Klein & Kunda, 1993). Related to this perceptual inaccuracy is the fact that perceivers typically see themselves as above average in a huge number of personal traits and activities (Freedman, 1978; Cross, 1977; Baumhart, 1968; Alicke, 1985). This phenomenon is supported by Kunda's (1990) theory that people are motivated to construct self-enhancing theories of causality.

Yet another area rich with self-enhancing motivational biases is the realm of causal attributions. A perfect example is the inclination of perceivers to attribute favorable outcomes more to the self, and unfavorable outcomes to people or things outside the self (Fiedler, Semin, & Koppetsch, 1991; Mirels, 1980). This self-serving bias is often the key process in a number of coping mechanisms, including excuse making (C. R. Snyder & Higgins, 1988), affirmation of self (Steele, 1988), interpretation of ambiguous feedback as positive (Jacobs, Berscheid, & Walster, 1971), and denial (Janoff-Bulman & Timko, 1987).

A more indirect type of evidence in favor of the self-enhancing motive comes from studies investigating the self-relevance of failure. In keeping with the self-enhancing motive, perceivers often view tasks at which they have failed as less relevant to the self than tasks at which they have succeeded. Similarly, perceivers frequently see their weaknesses as common, but their strengths as matchless (J. D. Campbell, 1986; Marks, 1984).

The self-enhancing motive is also reflected in the social comparison domain, particularly in research studying downward social comparison (Wills, 1981, 1983, 1991; Wood, Taylor, & Lichtman, 1985; Levine & Green, 1984; Taylor, Falke, Shoptaw, & Lichtman, 1986). Downward social comparison serves to increase psychological adjustment (Affleck, Tennen, Pfeiffer, Fifield, & Rowe, 1987), diminishes feelings of upset (Hakmiller, 1966), and elevates self-esteem (Reis, Gerrard, & Gibbons, 1993). In fact, people tend to avoid making comparisons when they anticipate the outcome will be negative (Brickman & Bulman, 1977) or when the comparison involves an important facet of the self (Tesser, 1988).

Finally, impression management provides numerous opportunities for individuals to self-enhance. People use direct self-presentational tactics, such as boasting, making excuses, or self-handicapping in order to present a more positive image of themselves (Arkin & Baumgardner, 1985; Godfrey, Jones, & Lord, 1986; Shepperd & Arkin, 1989). They also use indirect tactics to improve their self-image. These include sharing the good feelings resulting from accomplishments of a friend, putting down the accomplishments of an enemy, or playing down the negative qualities of a person with whom one has been associated (Cialdini, Borden, Thorne, Walker, Freeman, & Sloan, 1976; Finch & Cialdini, 1989).

Individual Social Value Orientation

As Sedikides and Strube's (1997) SCENT model illustrates, the four major

motivational forces within an individual operate in a dynamic fashion, typically

serving an ultimately self-enhancing function. The dynamic nature of these four

self-evaluation motives is strongly influenced by the various situations that

individuals find themselves in. It seems likely that a snub at a cocktail party will

activate a different combination of self-enhancement processes than will a loss of

a tennis match.

Yet situational factors are not the only important element in perceiver self-

enhancement. McClintock (1972) identified what he called "social values" and

proposed that a person's social values determine his or her preferences for the

outcome of a given social situation. Social values are stable dispositional

characteristics of individual perceivers, which reflect the weights given to their

own versus other's outcomes. Maki, Thorngate, & McClintock (1979) described

eight primary social motives, the three main motives, and the additional ones

relevant to this research: cooperation, competition, and individualism.

Cooperative individuals seek to maximize the joint gain for themselves and

another individual. Competitive individuals seek to maximize relative gain, that

is, maximize the difference between their own outcome and another's.

Individualistic persons seek to maximize their own gain, regardless of the

outcomes of others. In addition, it has been demonstrated (McClintock & Allison, 1989; van Lange & Liebrand, 1991) that competitive and individualistic people both tend to act in self-enhancing ways.

Self-Extension Theory

Sedikides and Strube (1997) claim that self-enhancement is the dominant self-evaluation motivation, and maintain that it is often triggered by certain situations in which the perceiver finds him or herself. In addition, they note that the type of situation that activates the self-enhancement motivation also determines how self-enhancement will be achieved. McClintock (1972), on the other hand, argues that there are individual differences in the way in which self-enhancement is manifested. The present research proposes that self-enhancement motivation can be "extended" beyond the corporeal self to include other entities which are psychologically bound to the self. I turn next to a discussion of how such entities come to be recognized as a part of the self.

While much of the empirical self research defines "self" in terms of a physical demarcation between the body and all things outside the body, several psychologists have recently expanded this definition (Lancaster & Foddy, 1988; Belk, 1988; Rudmin, 1991). Lancaster and Foddy (1988) submit that although things outside the boundaries of one's physical body are not part of the self as it has historically been defined, they may come to be incorporated into one's self-

concept. They point out that various psychologists have suggested this very same idea over the years (James, 1890; Allport, 1955; Rosenberg, 1979). James (1890) succinctly defines a man's self as "the sum total of all that he can call his" (p. 291), and Allport (1955) used the term "ego-extension" to refer to the expansion of the self-concept beyond the bounds of the body. Rosenberg (1979) identified six possible categories of self-extensions: people, groups, material objects, institutions, geographical region, and work. Self-extension has also been explored at length in the context of close relationships (Aron & Aron, 1986; Aron, Aron, Tudor, & Nelson, 1991; Berscheid, Snyder, & Omoto, 1989).

Beggan (1992) demonstrated in a series of studies that the simple act of owning an object predisposes people to treat that object as a social entity. This mere ownership effect results from a psychological association between the person and object. Both James (1890) and, more recently, Belk (1988) have suggested that possessions assist in defining one's self. Beggan found that participants who were given a plastic drink insulator rated the drink holder as significantly more attractive compared to participants who evaluated the holder in the absence of ownership. Furthermore, he illustrated that increased liking for an owned object does not necessarily result from greater exposure to or contact with the object. Beggan suggested that the mere ownership was the result of a self-enhancement bias directed towards one's material possessions, and he found that when

participants were presented with failure feedback, the mere ownership effect was more pronounced as compared to participants who received success feedback.

Cialdini and DeNicholas (1989) suggested that even a trivial association with another can have significant psychological impact on self-presentational strategies. They proposed that just as people present information about themselves in modest and compensatory ways, people also present information about their connections to others in similar ways. Though the focus of their research was on self-presentational strategies employed under conditions of success or failure, their findings are relevant to the present experiment. Cialdini and DeNicholas found that when presented with positive public feedback concerning their social abilities, participants modestly attempted to connect themselves more strongly with another who was not socially skilled as opposed to another was quite socially skilled. In contrast, participants were more self-aggrandizing when given the opportunity to connect themselves with another who was described as either skilled or unskilled in a domain unrelated to social skills (e.g. intellect).

What is remarkable about the findings of Cialdini and DeNicholas is not that people vary their self-presentational strategies by differential associations with others, but rather that these associations can be superficial in nature. In the Cialdini and DeNicholas study, the object of subjects' associations was a fictional undergraduate who was described as having the same birthday as the subject.

Intuitively, birthdate seems a relatively trivial piece of information in determining the psychological similarity of two individuals. And yet, participants in the Cialdini and DeNicholas study treated both positive and negative information about a birthdate-connected other in the same way they dealt with positive and negative information about themselves. Their self-presentational strategies were managed in the same way for self as for a connected other.

Lancaster and Foddy (1988) focused their attentions on the manner in which other individuals serve as extensions of one's self. They began by stating that every individual occupies a number of roles. A woman, for example, can be a girlfriend, soccer player, daughter, friend, and college student. Lancaster and Foddy went on to argue that many roles have what they call a role-other. That is, a particular role will often lend itself to another, complimentary role associated with it (e.g. doctor-patient, husband-wife, professor-student). They proposed that whatever befalls the role-other and whatever evaluations are made of the role-other have the same impact on one's self that direct experiences or evaluations would have on one's self-concept.

Clearly, then, reflections of other people have considerable impact on the process and outcome of self-evaluation. Evidence from Sedikides and Strube's (1997) SCENT model in the form of indirect self-enhancement tactics illustrates the role of others in modifying one's self-concept. Research on the phenomenon

of basking in reflected glory and cutting off reflected failure (Cialdini, et al., 1976; Snyder, Lassegard, & Ford, 1986), social comparison theory (Festinger, 1954), and Tesser's (1988) self-evaluation model further emphasizes the importance of perceiver's relationships with and connections to others who share their social environment. Findings from research in these areas are consistent with the notion of an extended self, and emphasize the affective consequences, namely positivity of self-concept, resulting from the inclusion of significant others in the self-evaluation process.

Overview of the Present Research

The present research is designed to investigate the impact of self-enhancement motivated reasoning on attributions of responsibility. Specifically, I intend to demonstrate that a perceiver's self-enhancement bias will distort responsibility attributions for her partner's fate. Consistent with self-extension theory and the work of Lancaster and Foddy (1988), I suggest that to the extent that perceivers often see others as an extension of themselves, they will make judgments about others as they would make judgments about themselves.

Researchers have neglected the pervasive roll that self-enhancement motives play in shaping judgments of others. Virtually all previous self-enhancement studies have used dependent variables that are self-oriented. Because by definition self-enhancement is a process which focuses on the

augmentation of the self, the emphasis on self-oriented dependent variables is understandable. I argue that self-enhancement affects judgments of others, and the dependent variables in these studies reflect this new direction in research. Both studies described here ask the participants to make attributions of responsibility for an outcome experienced by their partner in a separate scenario in which the participant is uninvolved.

Self-extension theory posits that perceivers frequently view significant others as an extension of themselves and evaluate them accordingly. Experiment 1 of this research emphasizes the importance of the situation in self-evaluation, and creates conditions either conducive to or aversive to the incorporation of the partner into the participant's self-concept. Experiment 2 focuses instead on the individual difference variable of social values and the cooperative or competitive natures of participants in their evaluation of a partner. According to Thibaut and Kelley (1978), cooperators tend to come to view others as similar to themselves, while competitors come to see others as different than themselves. Thibaut and Kelley use the term "transformations" to describe what is in effect greater or lesser amounts of self-extension by different individuals. Transformations are essentially cognitive maneuvers on the part of perceivers to mentally reconfigure a given situation such that it reflects their individual desires. In the case of cooperators, social situations are transformed cognitively into mental

representations which reflect their desire to maximize collective gain. Competitors, on the other hand, transform social situations in a way that reflects their motive to increase relative gain between themselves and another. Thibaut and Kelley's research demonstrated that people exhibit different preferences for social outcomes, and that these different motives help determine the manner in which perceivers process social outcomes.

As Kunda (1990) noted, people are motivated to use different levels of cognitive processes depending on their motivation in a given situation. Therefore, I propose that in relationships where the perceiver and partner have an strong, positive, affective bond, the perceiver will view the partner as an extension of the self. Further, I predict that the perceiver will be reluctant to hold the partner accountable for his or her negative outcome, but will instead make more global, external attributions. Consistent with a proximal self idea, any internal attributions made to the partner effectively apply to the perceiver as well. Thus, holding the partner accountable for his or her misfortune lowers the positivity of the perceiver's self-concept by suggesting that the perceiver would be responsible for his or her fate in similar situations.

When the perceiver and partner do not have a positive relationship, but instead have a strongly negative relationship characterized by dislike and hostility, I propose that the perceiver will not view the partner as an extension of the

perceiver's self. Accordingly, the perceiver should be considerably more willing to attribute responsibility to the partner for his or her misfortune, since this increased attribution does not represent a threat to the perceiver's own self-esteem. When the partner experiences a positive outcome, the perceiver should be inclined to assign less responsibility to the partner for his or her outcome. To admit that a person one dislikes and with whom one has previously had hostile encounters is capable of achieving success presents a threat to the self, therefore encouraging more external attributions.

Finally, although attribution theory has traditionally focused on how perceivers attribute causality, there is evidence that social perceivers often go beyond attributions of causality and also assign responsibility or blame to a target for an outcome (Heider, 1958; Fincham & Jaspars, 1980). An attribution of responsibility identifies who or what may be held accountable for a given event or outcome (Shaver, 1975, 1985; Shaver & Drown, 1986). Blame is attributed to a target only when the target is a causal agent in a negative outcome and is singled out for censure or punishment. Typically, attributions of responsibility presuppose a judgment of causality (McGraw, 1987b), and attributions of blame presuppose both assignments of causality and responsibility.

Experiment 1

<u>Overview</u>

Experiment 1 is a 2 (Self-extension: low, high) X 2 (Scenario outcome valence: negative, positive) factorial design. Participants engaged in either a collaborative or competitive task in order to establish a relationship history that was predominantly competitive (low self-extension) or collaborative (high self-extension). After the establishment of such a relationship, participants were asked to complete a questionnaire. Dependent variables measured included attributions of responsibility of the participant's partner for a fictional outcome experienced by that partner, affective response to one's partner, and a manipulation check to ensure that the relationship established between each set of participants did, in fact, promote high or low self-extension.

<u>Method</u>

<u>Participants</u>. Participants in the study were 48 introductory psychology students at the University of Richmond. They received class credit for their participation in the study.

<u>Establishment of Relationship</u>. Participants were run in same sex pairs. Upon arrival, paired participants in the high self-extension condition were ushered into the same room, whereas paired participants in the low self-extension condition were introduced briefly, then shown to separate rooms. After signing

consent forms and completing a basic demographic questionnaire designed to determine whether the participant knew his partner, all participants were informed that they would be taking part in a study investigating how college students work together. Participants were instructed to wait while the experimenter spoke briefly with their partner. They were then given a task either collaborative or competitive in nature to establish a relationship history. Participants in the high self-extension condition were given 15 minutes to collaboratively complete the task of building a fictional object, described as a Swiss farmhouse. It was hypothesized that participants should be familiar enough with farmhouses in general, but not Swiss farmhouses in particular. The specific direction to build a Swiss farmhouse was to ensure that participants were sufficiently ignorant of the exact details in order that they would believe subsequent equality feedback given to them by the experimenter. They were told that if they completed the task successfully, they would win $4 to split between them. At the end of 15 minutes, the high self-extension participants were informed that they had been successful at the building task, and were told they would receive $4 to split between themselves. Participants were told that their success was due to two actions performed by one participant, and two actions done by the other participant. These actions were identified from a script prepared ahead of time by the experimenter, and served only to emphasize that each participant contributed equally to the outcome. This

equality of contribution should further strengthen the collaborative nature of the participant's relationship. The monetary reward was an added incentive to perform the building task to the best of each participant's ability, as well as an indication that each participant's potential for gain was dependent on his or her partner.

Participants in the low self-extension condition arrived in pairs, but were shown to separate rooms upon arrival, and remained unseen by their partners for the rest of the study. The separation of the two participants was intended to have a depersonalizing effect which theoretically should contribute to the adversarial nature of their relationship. Low self-extension participants were then informed that they and their partners would be competing with each other in a resource sharing task. Participants were shown a bowl filled with 10 marbles and informed that each marble was worth ten cents. Participants were told that their partner had been randomly selected to choose first, and that he may choose as many marbles as he wanted. After the participant's partner had chosen, the participant was asked to select his share from the remaining marbles. All participants were told that there would be eight trials, and at the end of the study participants may keep all the money they had accumulated.

In the low self-extension condition, feedback to the participants was manipulated such that each participant chose last in six of the eight trials and was

consistently left with zero to three marbles to choose from in these trials where the partner has chosen first. This resulted in a possible gain of $.00 to $.30 for six trials, and the knowledge that the participant's partner had deliberately taken an enormous share of the marbles at the expense of the participant. In addition, it gave the participant the opportunity to retaliate in the two trials where she chose first. After the eight trials, participants in the low self-extension condition were presented with a handwritten tally sheet detailing the number of marbles taken by the participant, their partner, and the total amount of money obtained by each. The discrepancy in total earnings between the participant and his or her partner was quite large.

After the establishment of either a high self-extension or low self-extension relationship, participants remained separated (in the case of low self-extension participants) or were separated (in the case of high self-extension participants).

Manipulation Check. Participants were given a questionnaire containing items on a 7-point Likert scale designed to assess their affective responses to their partner and the amount of cooperation/competition experienced in their relationship with their partner, as well as equality of contribution to the task and perceived co-dependence of the task. (See Appendix A for complete stimulus materials.)

Attributional Measures. Participants were then informed that in addition to

investigating how college students work together, the experimenter was interested

in students' perceptions of summer job experiences. Participants were told that

the experimenter had obtained information from their partner regarding previous

summer employment during the pre-experimental interview. Further, the partner

had indicated to the experimenter that such information could be used in future

research. The participant then read a description of a summer job incident their

partner recently experienced. The scenario depicted the partner working as a

cashier at a local grocery store. During training, the partner was told that their

register may be either $4 short at the end of a probationary week (negative

outcome) or $6 short at the end of the week (positive outcome). For both the

positive and negative outcomes, the partner comes up $5.06 short, resulting in his

firing or reward. After reading the scenario, participants were asked to make

attributions of causality and responsibility to the partner for the outcome. They

were also asked to assess a variety of related concepts such as intent, forseeability,

and control of the partner regarding the outcome of the cash register incident.

After completing the questionnaire, both participants in each pair were brought

together and fully debriefed as to the purpose and method of the experiment.

Results

<u>Manipulation Check</u>

A principal components factor analysis with varimax rotation was conducted on the five items measuring self-extension. The results revealed one factor accounting for 78.4% of variance (eigenvalue=3.92). Cronbach's alpha for the five items was .93 and these five items were averaged to create an overall index of self-extension. The correlation between this self-extension scale and self-extension as manipulated by task was statistically significant (r=.66, $\underline{p}$<.001). A one-way ANOVA revealed significant mean differences between the manipulated high ($\underline{M}$=5.09) and low ($\underline{M}$=3.30) self-extension conditions, $\underline{F}$(1,46)=35.22, $\underline{p}$<.001. Nine participants in the low self-extension condition scored above the midpoint of the self-extension measure and thus their data were removed from future analyses. This reflects a general positivity bias among all participants when evaluating their partner immediately after the relationship establishment task.

<u>Causal Attributions</u>

The questions assessing causality and responsibility of the partner for his or her fate were analyzed in separate 2 (Self-extension: low, high) X 2 (Outcome valence: negative, positive) factorial ANOVAs. For causality, there was a main effect for Valence, $\underline{F}$(1,33)=8.28, $\underline{p}$<.01, such that participants in the negative outcome condition were reluctant to make causal attributions to the partner for his

or her fate ($\underline{M}$=3.63) whereas participants in the positive outcome condition made more causal attributions to the partner ($\underline{M}$=5.28). There was also a significant two-way Self-extension by Valence interaction, $\underline{F}$(1,33)=4.26, $\underline{p}$<.05. Participants in the low self-extension condition made approximately equal causal attributions for their partner in both the negative ($\underline{M}$= 4.56) and positive ($\underline{M}$=5.00) outcome conditions. Participants in the high self-extension conditions, however, made significantly more causal attributions to their partner when the partner's fate was positive ($\underline{M}$=5.50) than when it was negative ($\underline{M}$=2.80). See Figure 1 for a graphical representation of this interaction.

In an attempt to further equate both the low and high self-extension participants, twelve participants who knew each other prior to the experiment were dropped from future analyses of causality. Once again, two separate 2 (Self-extension: low, high) X 2 (Outcome valence: negative, positive) were performed for both the causality and responsibility measures. For causality, there was a significant main effect for Valence, $\underline{F}$(1,24)= 9.77, $\underline{p}$<.01, such that participants in the negative outcome condition ($\underline{M}$=3.67) made fewer causal attributions for the partner's fate than did participants in the positive outcome condition ($\underline{M}$=5.31). There was also a significant Valence by Self-extension interaction, $\underline{F}$(1,24)= 5.83, $\underline{p}$<.05. Participants in the low self-extension condition made approximately equal causal attributions for their partner in both the negative ($\underline{M}$= 4.56) and positive

(M=5.00) outcome conditions. Participants in the high self-extension conditions, however, made significantly more causal attributions to their partner when the partner's fate was positive (M=5.80) than when it was negative (M=2.33).

Responsibility Attributions

For the question regarding responsibility of the partner for his or her fate, there was a significant main effect for valence, $F(1,33)= 39.99$, $p<.001$, such that participants in the negative outcome condition held the partner much less accountable for his or her fate (M=2.21) than did participants in the positive outcome condition (M=5.22). In addition, the Self-extension by Valence interaction found for the question regarding causality was marginally significant for responsibility, $F(1,33)= 3.40$, $p=.074$, $r=.31$. Participants in the low self-extension, negative outcome condition were reluctant to hold their partner accountable for his or her outcome (M=2.66) but attributed increased responsibility to their partner for a positive outcome (M=4.75). Participants in the high-self-extension condition were highly reluctant to attribute responsibility to their partner for the negative outcome (M=1.80) but much more willing to attribute responsibility to the partner for a positive outcome (M=5.60). See Figure 2 for a graphical representation.

When the 12 participants who knew each other were dropped from the analysis, there was once again a main effect for Valence, $F(1,24)= 38.08$, $p<.001$,

such that participants in the negative outcome condition (M=2.00) attributed less

responsibility to the partner than did participants in the positive outcome condition

(M= 5.08). In addition, there was a significant Valence by Self-extension

interaction, F(1,24)= 5.40, p<.05. Participants in the high self-extension

conditions were polarized in their responsibility attributions. Participants in the

negative outcome condition attributed no responsibility at all to the partner for the

firing (M=1.00) whereas participants in the positive outcome condition attributed a

high degree of responsibility to the partner for his or her success (M=5.60).

Participants in the low self-extension condition were not nearly so extreme in their

responsibility attributions. The partner was still considered to be relatively free of

responsibility in the negative outcome (M=2.66) but much more responsible for

the successful probationary week (M=4.75).

<div align="center">Discussion</div>

Clearly, as seen from the Valence by Self-extension interaction, valence of

an event and self-extension influence perceivers' causal and responsibility

attributions to others. In situations where participants were induced to

psychologically connect to their partner, participants made attributions for the

partner's fate in much the same way that they would make attributions for

themselves in a similar situation. Consistent with research which shows that

people tend to accept credit for successes and deflect blame from failure (D.T.

Miller & Ross, 1975), participants in the high self-extension condition held their partner more accountable for his commendation and attributed significantly less causality and responsibility for his firing. Participants in the low self-extension condition, who had not been induced to consider their partner as connected to their self in any way, showed no such attributional biases. Similarly, from an outcome bias perspective, participants who were not motivated to see their partner as an extension of the self were not outcome biased. They focused instead on the criterion for success or failure, and the approximately equal causal attributions for their partner in both the positive and negative outcome conditions reflects this fact. Participants who were motivated to incorporate their partner into their own self-concept, however, focused on whichever piece of information in the scenario portrayed the partner in the best possible light. When the partner was commended for a successful probationary week, high self-extension participants focused on the outcome when making causal attributions. But when the partner was fired, participants in the high self-extension condition were motivated to focus more on criterion for failure than the outcome itself. The refusal of these participants to hold the partner accountable for her firing reflects the greater weight placed by participants in the high self-extension conditions on situational constraints of success and failure.

Experiment 2

Overview

Experiment 1 indicates that people can be induced to incorporate another person into their self-concepts, even on the basis of a relatively brief association. While still employing an outcome-bias paradigm for the measurement of causal and responsibility attributions to a partner, Experiment 2 departs from Experiment 1 in several ways. Building on the findings of the first study, the second experiment attempts to determine whether there is a dispositional component to self-extension. In Experiment 2, there was no situational manipulation of self-extension. Instead, self-extension was assessed in Experiment 2 by a measure of individual differences in social values (McClintock, 1972). In addition, Experiment 2 attempts to evaluate the effect of different levels of contribution to an outcome on attributions to a partner.

Experiment 2 is a 2 (Social Values: cooperative, non-cooperative) X 2 (Valence of Outcome: negative, positive) X 2 (Contribution to outcome: low contribution, high contribution) factorial design. Dependent variables include attributions of causality and responsibility for a partner, as well as participants' desired split of a $2.25 award.

Method

Participants. Participants in the study were 76 introductory psychology students and paid volunteers at the University of Richmond. Introductory students received class credit for their participation in the study, whereas volunteers were paid $6 for their participation.

Procedure. Participants arrived in same-sex pairs and were informed that they would be taking part in two short studies. In reality they participated in only one study. They were told that the first study simply concerned decision making, and were given the social values measure by a confederate of the experimenter. After completing the social values measure, the experimenter entered the room and described the "second" experiment as an investigation of how college students work together. Each participant was given a vocabulary test consisting of 15 items. Half of the subject pairs were told that their pair must get 15 items correct between the two of them to win $4 (positive outcome), and the other half of participants were told that their pairing must have 17 items correct between the two of them to win the money (negative outcome). Participants were then given 15 minutes to complete the test. At the end of the 15 minutes, the participants were separated. Participants were then given a questionnaire containing items on a 7-point Likert type scale designed to assess their affective responses to their partner and the amount of cooperation/competition experienced in their

relationship with their partner, as well as perceived co-dependence of the task.

(See Appendix B for complete stimulus materials.)

After completing these measures, participants received false feedback about

their performance on the test and about their partner's performance. Every

participant was told that their pair received 16 items correct between the two of

them. Participants in the negative outcome condition were reminded they needed

17 correct to succeed, and that 16 correct was not enough to win the $4.

Participants in the positive condition were reminded that they needed only 15

items correct, and thus had succeeded in winning $4. In the low contribution

condition, participants were told they got seven items correct while their partner

got nine items correct. In the high contribution condition participants were

informed that they got nine items correct while their partner got only seven

correct.

Participants then completed a questionnaire assessing the causality and

responsibility of themselves and their partner for the outcome, affective response

to their partner, and perceived positivity or negativity of the outcome. They were

also asked, as a manipulation check, how many questions they and their partner

actually got correct, as well as the number of correct items needed to succeed at

the task. Finally, participants were given $2.25 in quarters and told to split this

money with their partners in any way they saw fit. The subsequent division of the

$2.25 served to indicate whether self-enhancement had a behavioral as well as cognitive-affective component. Participants were instructed to wait until the experimenter had left the room, then make their decision. They were instructed to put their partner's share in a large padded envelope and put their share out of sight, either in their pocket or bookbag. The fact that the experimenter would not know how much the participant allocated to their partner was emphasized. Participants were also told they would not be seeing their partner again after the study. The experimenter then left the room and returned two minutes later. After leaving the room again, ostensibly to deliver the envelope to the partner, the experimenter returned and thoroughly debriefed the participant regarding the purpose and method of the study.

Results

A 2 (Valence: negative, positive) X 2 (Social Values: cooperator, competitor) X 2 (Contribution: low, high) X 2 (Target: self, partner) mixed factorial ANOVA was conducted on the questions assessing causal attributions for self and partner. The last factor, Target, was treated as a within subjects factor. There was a significant main effect for Valence, $F(1,68)=19.93$, $p<.001$, such that participants in the negative outcome condition held both themselves and their partners much less accountable ($M=3.86$) for the outcome than did participants in the positive outcome condition ($M=4.96$).

In addition, there was a significant Valence by Target interaction, $F(1,68)=16.46$, $p<.001$. Participants attributed more causal influence to their partners in the positive condition ($M=5.21$) than in the negative outcome condition ($M=3.44$), whereas participants made approximately equal attributions for themselves in both the negative ($M=4.28$) and positive ($M=4.71$) conditions. There was also a significant Valence by Contribution by Target interaction, $F(1,68)=12.30$, $p<.01$. Overall, participants generally attributed more causality to both themselves and their partners in the positive condition than in the negative condition regardless of contribution. However, participants in the negative, high contribution condition attributed much less causality to both themselves ($M=3.60$) and their partner ($M=3.53$). See Figure 3 for a graphical depiction.

A 2 (Valence: negative, positive) X 2 (Social Values: cooperator, competitor) X 2 (Contribution: low, high) X 2 (Target: self, partner) mixed factorial ANOVA was conducted on the questions assessing responsibility attributions for self and partner, repeated measures on the last factor. There was a significant main effect for Valence, $F(1,68)=18.95$, $p<.001$, such that participants in the negative outcome condition ($M=4.12$) attributed significantly less responsibility to both themselves and their partners than did participants in the positive outcome condition ($M=5.27$). There was also a significant between subjects Valence by Contribution interaction, $F(1,68)=4.14$, $p<.05$. Participants

attributed approximately equal responsibility to themselves and their partners in

the positive outcome condition regardless of level of contribution. In the negative

condition, however, participants attributed more responsibility to themselves and

their partners in the low contribution condition ($\underline{M}$=4.53) than in the high

contribution condition ($\underline{M}$=3.71).

Further, there was a significant Valence by Target interaction,

$\underline{F}$(1,68)=8.82, $\underline{p}$<.01, such that participants attributed approximately equal

amounts of responsibility to themselves in both the positive and negative outcome

conditions ($\underline{M}$=5.02 and $\underline{M}$=4.37 respectively), but attributed more responsibility

to their partners in the positive outcome condition ($\underline{M}$=5.50) than in the negative

outcome condition ($\underline{M}$=3.87). Finally, there was also a significant Valence by

Contribution by Target interaction, $\underline{F}$(1,68)=19.80, $\underline{p}$<.001. Participants seemed to

ignore their partners' contributions when making attributions of responsibility for

both the negative and positive outcome. However, when participants themselves

were the targets of the attributions, contribution seemed to be taken into account

more. In the negative outcome condition, participants attributed significantly

more responsibility to themselves when they contributed seven items ($\underline{M}$=5.16)

than when they contributed nine items ($\underline{M}$=3.58). In the positive outcome

condition, this pattern of means was reversed, with participants attributing more

responsibility to themselves for the outcome when they contributed nine items

($\underline{M}$=5.37) than when they contributed seven items ($\underline{M}$=4.68). See Figure 4 for a graphical depiction.

<u>Scaled Self-Extension</u>

Individual social value orientation was predicted to be a sound indicator of dispositional tendencies to self-extend. Cooperators were expected to manifest a higher degree of self-extension than were competitors. An independent samples t-test, $\underline{t}$(1,74)=2.82, $\underline{p}$<.01, revealed that participants identified as cooperators by the social values scale did indeed show greater tendency to self-extend ($\underline{M}$=4.15) than did those participants identified as competitors ($\underline{M}$=3.55). Thus I initially conducted analyses of causality and responsibility with social value orientation dichotomized to identify cooperators and competitors. However, several predicted interactions involving individual social values narrowly failed to approach statistical significance. In an attempt to obtain a purer indicator of dispositional tendencies to self-extend, we calculated an overall self-extension score from the five item self-extension measure. The preceding analyses were then rerun using a median split to identify high and low self-extenders.

<u>Self-Extension Factor Analysis.</u> A principal components factor analysis with varimax rotation was conducted on the five items making up the self-extension measure. The results revealed one factor accounting for 55.6% of the variance (eigenvalue=2.78) and Cronbach's alpha was .79. This justified

averaging participants' scores on the five self-extension items to obtain an overall index of self-extension. The resulting scores were divided using a median split technique to determine high and low self-extenders. The mean self-extension score for low self-extenders was 3.18 and the mean self-extension score for high self-extenders was 4.75.

Causal Attributions

A 2 (Valence: negative, positive) X 2 (Self-extension: low, high) X 2 (Contribution: low, high) X 2 (Target: self, partner) mixed factorial ANOVA was conducted on the questions assessing causal attributions for self and partner. The last factor, Target, was treated as a within subjects factor. There was a significant main effect for Valence, $F(1,68)=21.42$, $p<.001$, such that participants attributed less causal influence when the outcome was negative ($M=3.87$) than when it was positive ($M=4.96$). There was also a significant Contribution by Self-extension interaction, $F(1,68)=5.10$, $p<.05$. Low self-extension participants in the low contribution condition attributed more causality to both self and partner ($M=4.66$) than low self-extension participants in the high contribution condition ($M=3.86$). This pattern was reversed for high self-extenders. Participants in the high self-extension-low contribution condition attributed less causality to self and partner ($M=4.31$) than did participants in the high self-extension-high contribution condition ($M=4.72$).

Additionally, there were a number of intriguing within-subjects effects. The analysis revealed a marginally significant Contribution by Target interaction, $F(1,68)=3.63$, $p=.06$, $r=.23$, such that participants attributed approximately equal causality to their partners, regardless of how much they contributed themselves ($M=4.32$ for low contribution, $M=4.34$ for high contribution). Contribution seemed to influence self attributions, however, with participants in the low contribution condition attributing greater causal influence to themselves ($M=4.71$) than participants in the high contribution condition ($M=4.28$). The analysis also revealed a significant Valence by Target interaction, $F(1,68)=20.19$, $p<.001$. Participants attributed approximately equal amounts of causality to themselves in both the negative ($M=4.28$) and positive ($M=4.71$) outcomes. Attributions of causality to a partner were more extreme, with participants in the negative outcome condition ($M=3.45$) attributing less causal influence to their partners than participants in the positive outcome condition ($M=5.21$).

Of particular interest is a significant Self-extension by Target interaction, $F(1, 68)=4.83$, $p<.05$. Low self-extenders' attributions of causality were approximately equal for both self ($M=4.25$) and partner ($M=4.35$). High self-extenders, however, attributed greater causal influence to themselves ($M=4.76$) than to their partners ($M=4.31$).

Also of interest are two higher-order interactions. First, there was a significant three-way Contribution by Valence by Target interaction, $F(1,68)=12.35$, $p<.01$. Participants in the negative outcome condition attributed greater causality to themselves when they contributed seven items ($M=4.95$) than when they contributed nine items ($M=3.61$). This pattern of means was reversed for participants in the positive outcome condition, with participants in the low contribution condition attributing less causality to themselves ($M=4.47$) than participants in the high contribution condition ($M=4.95$). Participants' attributions of causality to their partners revealed a different pattern of means. In the negative outcome conditions, causal attributions were approximately equal in both the low ($M=3.37$) and high contribution ($M=3.53$) conditions. This pattern also held true for participants in the positive outcome condition ($M=5.26$ low contribution and $M=5.16$ high contribution). See Figure 5 for a graphical depiction.

Finally, there was a significant Contribution by Self-extension by Target interaction, $F(1,68)=4.67$, $p<.05$. Low self-extenders attributed more causality to the self in the low contribution condition ($M=4.59$) than in the high contribution condition ($\underline{3}.83$). On the other hand, high self-extenders attributed approximately equal amounts of causal influence to themselves in both the low ($M=4.88$) and high contribution ($M=4.68$) conditions. The pattern of means was somewhat different for attributions of causality to a partner. Here, low self-extenders also

attributed greater causality to their partner in the low contribution ($\underline{M}$=4.73) than in the high contribution ($\underline{M}$=3.89) condition. However, high self-extenders attributed less causality to their partners when they themselves contributed seven items ($\underline{M}$=3.75) than when they contributed nine items ($\underline{M}$=4.75). See Figure 6 for a graphical depiction.

<u>Responsibility Attributions</u>

A 2 (Valence: negative, positive) X 2 (Self-extension: low, high) X 2 (Contribution: low, high) X 2 (Target: self, partner) mixed factorial ANOVA was conducted on the questions assessing responsibility attributions for self and partner. The last factor, Target, was treated as a within subjects factor. There was a significant main effect for Valence, $\underline{F}$(1,68)=19.79, $\underline{p}$<.001, such that participants attributed less responsibility when the outcome was negative ($\underline{M}$=4.12) than when it was positive ($\underline{M}$=5.27). There was also a marginally significant Contribution by Valence interaction, $\underline{F}$(1,68)=3.31, $\underline{p}$=.07, r=.22. Overall, participants in the positive outcome condition attributed higher amounts of responsibility than participants in the negative outcome condition. In the positive outcome condition, participants attributed approximately equal amounts of responsibility in both the low ($\underline{M}$=5.16) and high contribution ($\underline{M}$=5.37) conditions. In the negative outcome conditions, participants made greater attributions of responsibility in the

low contribution condition ($\underline{M}$=4.53) than in the high contribution condition ($\underline{M}$=3.71).

Further, the analysis revealed a number of within-subject effects. First, there was a significant Valence by Target interaction, $\underline{F}$(1,68)=11.68, $\underline{p}$<.01. Overall, participants seemed to assign greater responsibility for the positive outcome than the negative outcome. Participants in the positive outcome condition attributed greater responsibility to their partners ($\underline{M}$=5.50) than themselves ($\underline{M}$=5.03). In the negative outcome condition, participants held themselves more accountable ($\underline{M}$=4.37) than their partners ($\underline{M}$=3.87). There was also a significant Self-extension by Target interaction, $\underline{F}$(1,68)=4.32, $\underline{p}$<.05. Low self-extenders attributed greater responsibility to their partners ($\underline{M}$=4.80) than themselves ($\underline{M}$=4.55). The opposite pattern was found for high self-extenders, who attributed greater responsibility to themselves ($\underline{M}$=4.86) than their partners ($\underline{M}$=4.56). Finally, there was a significant three-way Contribution by Valence by Target interaction, $\underline{F}$(1,68)=18.05, $\underline{p}$<.001. For attributions of responsibility to a partner, contribution seemed to have little effect. Participants in the positive outcome condition made approximately equal attributions of responsibility in both the low contribution ($\underline{M}$=5.63) and high contribution conditions ($\underline{M}$=5.37). Though generally attributing less responsibility than participants in the positive outcome condition, participants in the negative outcome condition also attributed

approximately equal amounts of responsibility to their partner in both the low

contribution ($\underline{M}$=3.89) and high contribution ($\underline{M}$=3.84) conditions. For self

attributions of responsibility, participants in the negative outcome condition

attributed greater responsibility in the low contribution condition ($\underline{M}$=5.16) than in

the high contribution condition ($\underline{M}$=3.58). This pattern of means was reversed in

the positive outcome condition, where participants attributed greater responsibility

to themselves in the high contribution condition ($\underline{M}$=5.37) than in the low

contribution condition ($\underline{M}$=4.68). See Figure 7 for a graphical depiction.

<u>Behavioral Manifestations of Self-Enhancement</u>

In an effort to determine whether self-enhancement was manifested through

behavior as well as attributional evaluations, a 2 (Valence: negative, positive) X 2

(Social Values: cooperator, competitor) X 2 (Contribution: low, high) between-

subjects ANOVA was conducted on the number of quarters taken by each

participant. The results of the analysis revealed no significant effects.

Accordingly, since it was hypothesized that participants' scores on the self-

extension measure would be a more pure indicator of self-enhancing tendencies,

the analysis was rerun as a 2 (Valence: negative, positive) X 2 (Self-extension:

low, high) X (Contribution: low, high) between-subjects ANOVA. The analysis

revealed a significant main effect for Contribution, $\underline{F}$(1,68)=4.02, $\underline{p}$<.05, such that

participants in the low contribution condition took fewer quarters ($\underline{M}$=3.61) than

did participants in the high contribution condition (M=4.32). There was also a significant three-way Contribution by Valence by Self-extension interaction, F(1,68)=4.63, p<.05. In the low contribution condition, low self-extenders took more quarters in the negative outcome condition (M=4.09) than in the positive outcome condition (M=3.64). High self-extenders took fewer quarters in the negative outcome condition (M=2.38) than in the positive outcome condition (M=4.13). This pattern was reversed in the high contribution condition. When they contributed nine items, low self-extenders took more quarters in the positive outcome condition (M=4.38) than in the negative outcome condition (M=4.10). In contrast, high self-extenders took more quarters in the negative outcome condition (M=4.89) than in the positive outcome condition (M=4.00). See figure 8 for a graphical depiction.

Discussion

Perhaps the most interesting finding of Experiment 2 is the tendency for participants to accept responsibility for failure to pass the vocabulary test when they contributed fewer correct items than their partner. The Valence by Target interaction, which indicated that people typically assigned less causality and responsibility to a partner for a negative outcome and more causality and responsibility to a partner for a positive outcome, was apparently tempered by contribution of the participant. When contribution of the participant to the

outcome is considered, the picture changes somewhat. In the negative outcome-low contribution condition, participants attribute higher levels of both causality and responsibility to themselves than to their partners. This finding refutes my hypothesis that people faced with failure would self-enhance at the expense of their partner. Clearly, this is not happening here. Participants are passing up the opportunity to self-enhance in a situation where some sort of effort would seem to be in order to protect one's self-concept. Participants seem particularly sensitive not only to the fact that they failed to pass the vocabulary test, but also to the fact that they contributed less to the outcome than their partner. I will return to this issue shortly in the general discussion.

Another striking result is the lack of significant effects involving social values. Although competitors scored significantly lower on the self-extension measure than did cooperators, social values proved uninformative in attempting to explain the patterns of participants' attributions. This was surprising given that cooperators scored significantly higher on the self-extension measure than did competitors. However, when the factor of social values was replaced in the analyses by an overall self-extension score, several significant effects emerged. This suggests that while individual social values may be a reflection of a general tendency to self-extend, the social values scale may not be the purest indicator of people's inclination to do so.

Further evidence for the superiority of the self-extension scale in measuring participants' proclivity for self-extension can be found in the analysis of behavioral manifestations of self-enhancement. Once again, using social values as a factor in the analysis of how many quarters participants took, there were no significant findings. Yet when we replaced social values in the analysis with the overall self-extension score, we found a significant Contribution by Valence by Self-extension interaction. Overall, participants who contributed nine correct items to the outcome took more quarters for themselves than did participants who only contributed seven correct items. In the low contribution condition, low self-extenders took more quarters for themselves in the negative outcome than in the positive outcome. High self-extenders showed considerable generosity in the negative outcome condition, as if recognizing not only the negative nature of the outcome but also their smaller contribution to it.

<center>General Discussion</center>

<u>Summary of Results</u>

The results of Experiment 1 indicate that valence of an outcome and amount of self-extension to a target other do affect attributions of causality and responsibility to that other. In effect, participants in the high self-extension condition evaluated their partner more like they would evaluate themselves under similar circumstances, crediting the partner with her success but refusing to hold

her accountable in the negative outcome. Experiment 2 revealed that participants were willing to accept responsibility for a negative outcome, particularly when they contributed fewer correct items than their partner. In addition, individual social values appeared not to play a role in the participants' attributional evaluations of their partner. Furthermore, there seems to be a behavioral component to people's attributional assessments of others as indicated by a significant difference in the number of quarters taken by participants. Finally, it would appear that the self-extension measure is a more pure indicator of people's tendencies to self-extend than the social values measure.

<u>Contributions of the Research</u>

One of the key contributions of these two studies to the social psychological literature is the notion that people do, in fact, make outcome-biased attributions. Several studies, notably the work of Alicke and his colleagues(Alicke, Weingold, & Rogers, 1990; Alicke, Davis, & Pezzo, 1994) have previously suggested that perceivers are overly influenced by the outcome of an event in making attributions for that event. The studies reported in this paper provided even stronger evidence in support of this claim, due primarily to the fact that each used an objective, quantifiable criterion for success and failure. Alicke used vignettes depicting positive and negative outcomes, but the behavior of the stimulus person was not necessarily described identically in the two conditions. In

contrast, both the positive and negative outcomes in each experiment reported here depicted the stimulus person's behavior identically. Moreover, the behavior was not only identical, it was expressed in objective, numerical terms in both conditions. This allowed one to conclude with greater certainty that the outcome itself affected participants' attributions, and not the manner in which the stimulus person's behavior was portrayed.

Not only do people make outcome-biased attributions, but, under certain circumstances, they do so in ways which self-enhance. Participants who were induced to view their partner as an extension of their self in Experiment 1 evaluated their partners accordingly. Just as people take credit for their successes and deflect blame from their failures, participants in the high self-extension condition of Experiment 1 credited their partners in successful outcomes, but were reluctant to hold them accountable for unsuccessful outcomes. In keeping with my predictions, this seemed to reflect a concern on the part of the participant to present himself and his associate in the best possible light. Conversely, participants who were discouraged from incorporating their partners into their self-concept showed no evidence of self-enhancing attributions, evaluating their partners in a similar manner for both positive and negative outcomes.

Contrary to predictions, however, participants who self-enhanced appeared not to do so at the expense of their partner. That is, participants in both high and

low self-extension conditions were hesitant to hold their partner accountable for his or her negative fate. One would expect high self-extension participants to display leniency in their evaluations of a partner, since attributing a negative outcome to a partner with whom one has incorporated into one's self-concept threatens one's own self concept. On the other hand, low self-extension participants were predicted to show no such leniency in their judgments of a partner's negative outcome since their own sense of self was not as dependent on their partner's fate. However, the results showed that low self-extension participants displayed remarkable restraint in the degree to which they held their partners a causal agent of and responsible for their negative fates. They were very reluctant to make internal attributions to the partner for the negative outcome, and scores on the seven-point scales used to measure causality and responsibility typically hovered at or below the midpoint of the scale, with lower scores indicating more external attributions for the outcome.

A striking contrast becomes apparent when one considers the results of Experiment 2. Although Experiment 1 and Experiment 2 were designed to elicit the same types of self-enhancing attributions to a partner, the results of Experiment 2 were in precisely the opposite direction as the findings of Experiment 1. In Experiment 1, participants in the high self-extension condition were reluctant to hold their partners' accountable for a negative outcome, in effect

exonerating not only their partner, but by association, themselves as well. In Experiment 2, however, participants in the high self-extension condition readily accepted significantly more causal influence and responsibility for a negative outcome than for a positive outcome. This flies in the face of Sedikides and Strube's (1997) claim that individuals possess an inherent motivation to self-enhance. Why then did participants in the negative outcome condition of Experiment 1 readily self-enhance, while participants in same condition of Experiment 2 cried *mea culpa*?

The answer can be found in work by Allison and his colleagues (Allison, Messick, & Goethals, 1989) on the Muhammed Ali effect. The Muhammed Ali effect (so named because of Muhammed Ali's assertion that he was "the greatest, not the smartest.") describes the tendency of people to view themselves as substantially more moral than others, but not necessarily more intelligent. Participants in their studies indicated that they would be more likely than their peers to perform moral behaviors, but equally likely to perform intellectual behaviors. In a similar vein, Reeder and Brewer (1979) suggested that behaviors in different domains (e.g. achievement vs. moral domains) are processed with systematically different attributional principles.

Although Experiments 1 and 2 were designed to investigate the self-enhancement bias and attributions to a partner, these attributions were made for

two different domains: a moral domain in Experiment 1 and an intellectual domain in Experiment 2. In Experiment 1, participants were asked to make attributions to their partners who had either been congratulated for a successful probationary week at work, or fired for their register being short a given number of dollars. In effect, participants' attributions for partners' fates centered on why exactly the register was short the specified amount of money. While participants may have explained the lack of money in the register in terms of the partners' lack of intelligence, it seems probable that other explanations, such as carelessness or theft, would be used more frequently. It is doubtful participants explained the successful or unsuccessful week in intellectual terms.

Experiment 2, on the other hand, asked participants to make attributions for themselves and their partners for the outcome of a vocabulary test. Many people, particularly the college students who comprised the sample in Experiment 2, view the size of one's vocabulary as a direct measure of one's intelligence. Furthermore, college students spend a significant amount of time taking exams for grades which, theoretically, are indicators of their critical thinking abilities and knowledge of various domains. The experimental milieu of Experiment 2, in which participants were asked to take a vocabulary quiz, served to emphasize the intellectual nature of the experimental task.

Allison et al.'s (1989) Muhammed Ali effect would account well for the discrepant results between Experiments 1 and 2. In Experiment 1, participants were essentially asked to make attributions for a moral outcome experienced by the partner. In Experiment 2, the outcome experienced by the partner was purely intellectual. The Muhammed Ali effect suggests that people tend to see themselves as less intelligent than others, and there is some evidence that participants in Experiment 2 viewed themselves this way. In keeping with the predictions of the Muhammed Ali effect, a paired samples t-test revealed that participants felt their vocabularies ($\underline{M}$=4.29) were significantly smaller than their partner's vocabularies ($\underline{M}$=4.68). While participants in Experiment 1 were not asked to evaluate their morality compared to that of their partner, it is likely that they would have claimed to be more moral than their partner. Accordingly, the different pattern of results for Experiments 1 and 2 could be explained in terms of the domains in which participants were asked to evaluate their partner.

Another central contribution of the research is the finding from Experiment 2 that there is, under certain circumstances, a behavioral manifestation of both outcome-biased judgments and self-extension. Participants who contributed nine correct items to the vocabulary test took approximately equal numbers of quarters regardless of valence or self-extension. Among participants who contributed only seven correct items to the vocabulary test, self-extension and valence seemed to

impact the number of quarters these participants took. With the exception of

Allison and Kerr (1994), no other research has found evidence that outcome-

biased inferences affect people's behavior. Equally striking, though perhaps not

as surprising, is the fact that self-extension is also implicated in the behavior of

people when faced with money to share with a partner. McClintock (1972)

originally conceived of individual social values as the preferences people have for

the outcome of a given social situation, and social value research has historically

focused on how people allocate resources in social settings. Experiment 2 failed

to find an effect of social values on division of quarters by participants, but

revealed a significant Contribution by Valence by Self-extension interaction. This

non-finding for an effect involving social values is easily explained by the manner

in which competitors and cooperators were identified. Typically, participants

must answer six of the nine items on the social values scale in a manner consistent

with either competitor, cooperator, or individualist to be classified as such. In the

present research, participants were classified as competitors or cooperators if they

answered only four questions in the same way. This criterion was used in an

attempt to reduce the disparity between the number of competitors and cooperators

in the study, but had the unwanted side effect of diluting the true nature of

participants' social values. Had a more strict criterion been used, such as six of

the nine items answered consistently, it seems probable that social values would have been found to affect division of quarters by participants.

The finding of a behavioral manifestation of self-extension is related to another important contribution of this work to the psychological literature. Both studies reported here attempt to quantify, and in the case of Experiment 1, manipulate self-extension. As is evident by now, Experiment 2 failed to demonstrate that participants' social values impacted their attributions or their behavior in any way. However, when the factor of social values was replaced by the variable of self-extension as derived from the self-extension measure, numerous significant effects were found for both attributions to self and partner and division of quarters. Although social values were hypothesized to reflect an individual's tendency to self-extend, it appears as though the self-extension measure was a much purer indicator of motivation to self-extend. Though the self-extension measure has yet to be evaluated in terms of reliability and validity, I feel that it is, if nothing else, a first step towards identifying the true processes behind self-extension and developing an accurate, reliable instrument to assess individual differences in self-extension.

Future Directions

While the two experiments reported here make significant contributions to the social psychological literature, they also suggest two primary directions for

future inquiry. Most obviously, a replication of Experiment 2 using a moral manipulation instead of an intellectual task would prove informative. We have put forth the Muhammed Ali effect to explain the findings of Experiment 2, but a direct moral-intellectual manipulation would allow for direct comparison of self-enhancing attributions across two different domains. In addition, an effort might be made to systematically develop a measure of self-extension. The five items used in this study were a crude first step in attempting to define and measure the precise nature of self-extension. Almost certainly self-extension is a complex construct which may well be composed of a number of psychological components, such as liking, intimacy, or empathy. The development and testing of a self-extension scale would be invaluable as researchers attempt to tease out the effects of self-extension on a variety of social psychological processes.

References

Affleck, G., Tennen, H., Pfeiffer, C., Fifield, J. & Rowe, J. (1987).
Downward comparison and coping with serious medical problems. <u>American
Journal of Orthopsychiatry, 57,</u> 570-578.

Ali, M. (1975). <u>The greatest: My own story</u>. New York: Random House.

Alicke, M. D. (1985). Global self-evaluation as determined by the
desirability and controllability of trait adjectives. <u>Journal of Personality and Social
Psychology, 49,</u> 1621-1630.

Alicke, M. D., Weigold, M. F., & Rogers, S. L. (1990). Inferring intentions
and responsibility from motives and outcomes: Evidential and extra-evidential
judgments. <u>Social Cognition, 8,</u> 286-304.

Alicke, M. D., Davis, T. L., & Pezzo, M. V. (1994). A posteriori
adjustment of a priori decision criteria. <u>Social Cognition, 12,</u> 281-308.

Allison, S. T., & Messick, D. M. (1987). From individual inputs to group
outputs, and back again: Group processes and inferences about members. In C.
Hendrick (Ed.), <u>Review of personality and social psychology.</u> (Vol. 8). Beverly
Hills: Sage.

Allison, S. T., Messick, D. M., & Goethals, G. R. (1989). On being better
but not smarter than others: The Muhammed Ali effect. <u>Social Cognition, 7,</u> 275-
296.

Allison, S. T., & Kerr, N. L. (1994). Group correspondence biases and the provision of public goods. Journal of Personality & Social Psychology, 66, 688-698.

Allison, S. T., Worth, L. T., & King, M. W. C. (1990). Group decisions as social inference heuristics. Journal of Personality and Social Psychology, 58, 801-811.

Allport, G. W. (1955). Becoming. New Haven: Yale University Press.

Arkin, R. M., & Baumgardner, A. H. (1985). Self-handicapping. In J. H. Harvey & G. Weary (Eds.), Attribution: Basic issues and applications (pp. 169-202). San Diego, CA: Academic Press.

Aron, A., & Aron, E. N. (1986). Love as the expansion of self: Understanding attraction and satisfaction. New York: Hemisphere.

Aron, A., Aron, E.N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. Journal of Personality and Social Psychology, 60, 241-253.

Baron, J., & Hershey, J. C. (1988). Outcome bias in decision evaluation. Journal of Personality and Social Psychology, 54, 569-579.

Baumhart, R. (1968). An honest profit. New York: Prentice-Hall.

Beggan, J. K. (1992). On the social nature of nonsocial perception: The mere ownership effect. Journal of Personality and Social Psychology, 62, 229-237.

Belk, R. W. (1988). Possessions and the extended self. Journal of Consumer Research, 15, 139-168.

Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 6, pp. 1-63). New York: Academic Press.

Berscheid, E., Snyder, M., & Omoto, A. M. (1989). The relationship closeness inventory: Assessing the closeness of interpersonal relationships. Journal of Personality and Social Psychology, 57, 792-807.

Bradley, G. W. (1978). Self-serving biases in the attribution process: A reexamination of the fact or fiction question. Journal of Personality and Social Psychology, 36, 56-71.

Brewer, M. B. (1977). An information-processing approach to attribution of responsibility. Journal of Experimental Social Psychology, 13, 58-69.

Brickman, P., & Bulman, R. J. (1977). Pleasure and pain in social comparison. In J. M. Suls & R. L. Miller (Eds.), Social comparison processes: Theoretical and empirical perspectives (pp. 149-186). Washington, D. C.: Hemisphere.

Burger, J. M. (1981). Motivational biases in the attribution of responsibility for an accident: A meta-analysis of the defensive attribution hypothesis. Psychological Bulletin, 90, 496-512.

Campbell, J. D. (1986). Similarity and uniqueness: The effects of attribute type, relevance, and individual differences in self-esteem and depression. Journal of Personality and Social Psychology, 50, 281-294.

Cialdini, R. B., Borden, R. J., Thorne, A., Walker, M. R., Freeman, S., & Sloan, L. R. (1976). Basking in reflected glory: Three (football) field studies. Journal of Personality and Social Psychology, 34, 366-375.

Cialdini, R. B., & DeNicholas, M. E. (1989). Self-presentation by association. Journal of Personality and Social Psychology, 57, 626-631.

Crary, W. G. (1966). Reactions to incongruent self-experiences. Journal of Consulting Psychology, 30, 246-252.

Cross, P. (1977). Not can but will college teaching be improved. New Directions for Higher Education, 17, 1-15.

Festinger, L. (1954). A theory of social comparison processes. Human Relations, 2, 117-140.

Festinger, L. (1957). A theory of cognitive dissonance. Evanston, IL: Row, Peterson.

Fiedler, K., Semin, G. R., & Koppetsch, C. (1991). Language use and attributional biases in close relationships. Personality and Social Psychology Bulletin, 17, 147-155.

Finch, J. F. & Cialdini, R. B. (1989). Another indirect tactic of (self) image management: Boosting. Personality and Social Psychology Bulletin, 15, 222-232.

Fincham, F. D. & Jaspars, J. M. (1980). Attributions of responsibility: From man the scientist to man as lawyer. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 13, pp. 82-139). New York: Academic Press.

Fiske, S. T. (1992). Thinking is for doing: Portraits of social cognition from daguerreotype to laserphoto. Journal of Personality and Social Psychology, 63, 877-889.

Freedman, J. (1978). Happy people: What happiness is, who has it, and why. New York: Harcourt Brace Jovanovich.

Godfrey, D. K., Jones, E., & Lord, C. G. (1986). Self-promotion is not ingratiating. Journal of Personality and Social Psychology, 50, 106-115.

Hakmiller, K. L. (1966). Threat as a determinant of downward comparison. Journal of Experimental Social Psychology (Suppl. 1), 32-39.

Heider, F. (1958). The psychology of interpersonal relations. New York: Wiley.

Jacobs, L., Berscheid, E., & Walster, E. (1971). Self-esteem and attraction. Journal of Personality and Social Psychology, 20, 208-213.

James, W. (1890/1950). The principles of psychology. New York: Dover.

Janoff-Bulman, R., & Timko, C. (1987). Coping with traumatic events: The role of denial in light of people's assumptive worlds. In C. R. Snyder & C. E. Ford (Eds.), Coping with negative life events: Clinical and social psychological perspectives (pp. 135-159). New York: Plenum.

John, O. P., & Robins, R. W. (1994). Accuracy and bias in self-perception: Individual differences in self-enhancement and the role of narcissism. Journal of Personality and Social Psychology, 66, 206-219.

Kelley, H. H., & Thibaut, J. W. (1978). Interpersonal relations. New York: Wiley.

Klein, W. M., & Kunda, Z. (1993). Maintaining self-serving social comparisons: Biased reconstruction of one's past behaviors. Personality and Social Psychology Bulletin, 19, 732-739.

Kramer, R. M., Newton, E., & Pommerenke, P. L. (1993). Self-enhancement biases and negotiator judgment: Effects of self-esteem and mood. Organizational Behavior and Human Decision Processes, 56, 110-133.

Kruglanski, A. W. (1980). Lay epistemology process and contents. Psychological Review, 87, 70-87.

Kruglanski, A. W., & Klar, Y. (1987). A view from the bridge: Synthesizing the consistency and attribution paradigms from a lay epistemic perspective. European Journal of Social Psychology, 17, 211-241.

Kuiper, N. A., & Derry, P. A. (1982). Depressed and nondepressed content self-reference in mild depression. Journal of Personality, 50, 67-79.

Kuiper, N. A., & MacDonald, M. R. (1982). Self and other perception in mild depressives. Social Cognition, 1, 233-239.

Kuiper, N. A., Olinger, L. J., MacDonald, M. R., & Shaw, B. F. (1985). Self-schema processing of depressed and nondepressed content: The effects of vulnerability on depression. Social Cognition, 3, 77-93.

Kunda, Z. (1990). The case for motivated reasoning. Psychological Bulletin, 108, 480-498.

Lancaster, S., & Foddy, M. (1988). Self-extensions: A conceptualization. Journal for the Theory of Social Behavior, 18, 77-94.

Larrick, R. P. (1993). Motivational factors in decision theories: The role of self-protection. Psychological Bulletin, 113, 440-450.

Lerner, M. J. (1980). The belief in a just world: A fundamental delusion. New York: Plenum.

Levine, J. & Green, S. (1984). Acquisition of relative performance information: The roles of intrapersonal and interpersonal comparison. Personality and Social Psychology Bulletin, 10, 385-393.

Lieberman, A., & Chaiken, S. (1992). Defensive processing of personally relevant health messages. Personality and Social Psychology Bulletin, 18, 669-679.

Marks, G. (1984). Thinking one's abilities are unique and one's opinions are common. Personality and Social Psychology Bulletin, 10, 203-208.

McClintock, C. G. (1972). Social motivation - A set of propositions. Behavioral Science, 17, 438-454.

McClintock, C. G., & Allison, S. T. (1989). Social value orientation and helping behavior. Journal of Applied Social Psychology, 19, 353-362.

McGraw, K. M. (1987b). Conditions for assigning blame: The impact of necessity and sufficiency. British Journal of Social Psychology, 26, 109-117.

Miller, D. T., & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction? Psychological Bulletin, 82, 213-225.

Mirels, H. L. (1980). The avowal of responsibility for good and bad outcomes: The effects of generalized self-serving biases. Personality and Social Psychology Bulletin, 6, 299-306.

Mitchell, T. R., & Kalb, L. S. (1981). Effects of outcome knowledge and outcome valence on supervisors' evaluations. Journal of Applied Psychology, 66, 604-612.

Nisbett, R. E., & Ross, L. (1980). Human inference: Strategies and shortcomings of social judgment. Englewood Cliffs, NJ: Prentice-Hall.

Pyszczynski, T., & Greenberg, J. (1987). Toward an integration of cognitive and motivational perspectives on inferential bias: A biased hypothesis-testing model. In L. Berkowitz (Ed.), Advances in experimental social psychology, (Vol. 20, pp. 297-340). New York: Academic Press.

Reeder, G. D., & Brewer, M. B. (1979). A schematic model of dispositional attribution in interpersonal perception. Psychological Review, 86, 61-79.

Reis, T. J., Gerrard, M., & Gibbons, F. X. (1993). Social comparison and the pill: Reactions to upward and downward comparison of contraceptive behavior. Personality and Social Psychology Bulletin, 19, 13-20.

Rosenberg, M. (1979). Conceiving the Self. New York: Basic Books.

Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 10). New York: Academic Press.

Ross, M., & Fletcher, G. J. O. (1985). Attribution and social perception. In

G. Lindzey & E. Aronson (Eds.), Handbook of social psychology (3rd ed., Vol. 2,

pp. 73-122). New York: Random House.

Ross, L., Greene, D., & House, P. (1977). The false consensus

phenomenon: An attributional bias in self-perception and social perception

processes. Journal of Experimental Social Psychology, 13, 279-301.

Rudmin, F. W. (1991). "To own is to be perceived to own": A social

cognitive look at the ownership of property. Special issue: To have possessions:

A handbook on ownership and property. Journal of Social Behavior and

Personality, 6, 85-104.

Sanitioso, R., Kunda, Z., & Fong, G. T. (1990). Motivated recruitment of

autobiographical memories. Journal of Personality and Social Psychology, 59,

229-241.

Schroth, H. A., & Messick, D. M. (1994). Attribution of group attitudes

from active versus passive decisions. Unpublished manuscript, Northwestern

University, Chicago.

Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self

be good, to thine own self be sure, to thine own self be true, and to thine own self

be better. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol.

29, pp. 209-269). New York: Academic Press.

Shaver, K. G. (1970). Defensive attributions: Effects of severity and relevance on the responsibility assigned for an accident. Journal of Personality and Social Psychology, 14, 101-113.

Shaver, K. G. (1975). An introduction to attribution processes. Cambridge, MA: Winthrop Publishing.

Shaver, K. G. (1985). The attribution of blame: Causality, responsibility, and blameworthiness. New York: Springer-Verlag.

Shaver, K. G. & Drown, D. (1986). On causality, responsibility, and self-blame: A theoretical note. Journal of Personality and Social Psychology, 50, 697-702.

Shepperd, J. A., & Arkin, R. M. (1989). Self-handicapping: The moderating roles of public self-consciousness and task importance. Personality and Social Psychology Bulletin, 15, 252-265.

Silverman, I. (1964). Self-esteem and differential responsiveness to success and failure. Journal of Abnormal and Social Psychology, 69, 115-119.

Skowronski, J. J., Betz, A. L., Thompson, C. P., & Shannon, L. (1991). Social memory in everyday life: The recall of self-events and other events. Journal of Personality and Social Psychology, 60, 831-843.

Snyder, C. R., & Higgins, R. L. (1988). Excuses: Their effective role in the negotiation of reality. Psychological Bulletin, 104, 23-35.

Snyder, C. R., Lassegard, M., & Ford, C. E. (1986). Distancing after group

success

and failure: Basking in reflected glory and cutting off reflected failure. Journal of

Personality and Social Psychology, 51, 382-388.

Staats, S., & Skowronski, J.J. (1992). Perceptions of self-effect: Now and in

the future. Social Cognition, 10, 415-431.

Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the

integrity of the self. In L. Berkowitz (Ed.), Advances in experimental social

psychology (Vol. 21, pp. 261-302). New York: Academic Press.

Strube, M. J., & Yost, J. H. (1993). Control motivation and self-appraisal.

In G. Weary, F. Gleicher, & K. Marsh (Eds.), Control motivation and social

cognition (pp. 220-254). New York: Springer-Verlag.

Taylor, S. E. (1981). The interface of cognitive and social psychology. In J.

Harvey (Ed.), Cognition, social behavior, and the environment (pp. 88-114).

Hillsdale, NJ: Erlbaum.

Taylor, S. E., & Fiske, S. T. (1975). Point-of-view and perceptions of

causality. Journal of Personality and Social Psychology, 32, 439-445.

Taylor, S. E., Falke, R. L., Shoptaw, S. J., & Lichtman, R. R. (1986). Social

support, support groups, and the cancer patient. Journal of Consulting and Clinical

Psychology, 54, 608-615.

Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 21, pp. 181-227). New York: Academic Press.

Tetlock, P. E., & Levi, A. (1982). Attribution bias: On the inconclusiveness of the cognition-motivation debate. Journal of Experimental Social Psychology, 18, 68-88.

van Lange, P. A. M., & Liebrand, W. B. G. (1991). The influence of other's morality and own social value orientation on cooperation in the Netherlands and the USA. International Journal of Psychology, 26, 429-447.

Walster, E. (1966). The assignment of responsibility for an accident. Journal of Personality and Social Psychology, 3, 73-79.

Wills, T. A. (1981). Downward comparison principles in social psychology. Psychological Bulletin, 90, 245-271.

Wills, T. A. (1983). Social comparison in coping and help-seeking. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), New directions in helping (Vol. 2, pp. 109-141). New York: Academic Press.

Wills, T. A. (1991). Similarity and self-esteem in downward comparison. In J. Suls & T. A. Wills (Eds.), Social comparison: Contemporary theory and research (pp. 51-78). Hillsdale, NJ: Erlbaum.

Wood, J. V., Taylor, S. E., & Lichtman, R. R. (1985). Social comparison in adjustment to breast cancer. Journal of Personality and Social Psychology, 49, 1169-1183.

Worth, L. T., Allison, S. T., & Messick, D. M. (1987). Impact of a group's decision on perceptions of one's own and other's attitudes. Journal of Personality and Social Psychology, 53, 673-683.

Figure Captions

<u>Figure 1</u>. Mean causal attributions by Self-Extension and Valence.

<u>Figure 2</u>. Mean responsibility attributions by Self-Extension and Valence.

<u>Figure 3</u>. Mean causal attributions by Valence, Contribution, and Target.

<u>Figure 4</u>. Mean responsibility attributions by Valence, Contribution, and Target.

<u>Figure 5</u>. Mean causal attributions by Valence, Contribution, and Target (self-extension analysis).

<u>Figure 6</u>. Mean causal attributions by Contribution, Self-Extension, and Target.

<u>Figure 7</u>. Mean responsibility attributions by Valence, Contribution, and Target (self-extension analysis).

<u>Figure 8</u>. Mean number of quarters taken by participants by Contribution, Valence, and Self-Extension.

Figure 1.

Figure 2.

Outcome Valence

Figure 3.

Self   Attributions

Outcome Valence

Partner   Attributions

Outcome Valence

Figure 4.

Self   Attributions

Partner   Attributions

Figure 5.

Self   Attributions

Partner   Attributions

Figure 6.

Self   Attributions

Partner   Attributions

Figure 7.

Self   Attributions

Partner   Attributions

Figure 8.

7   Items

9   Items
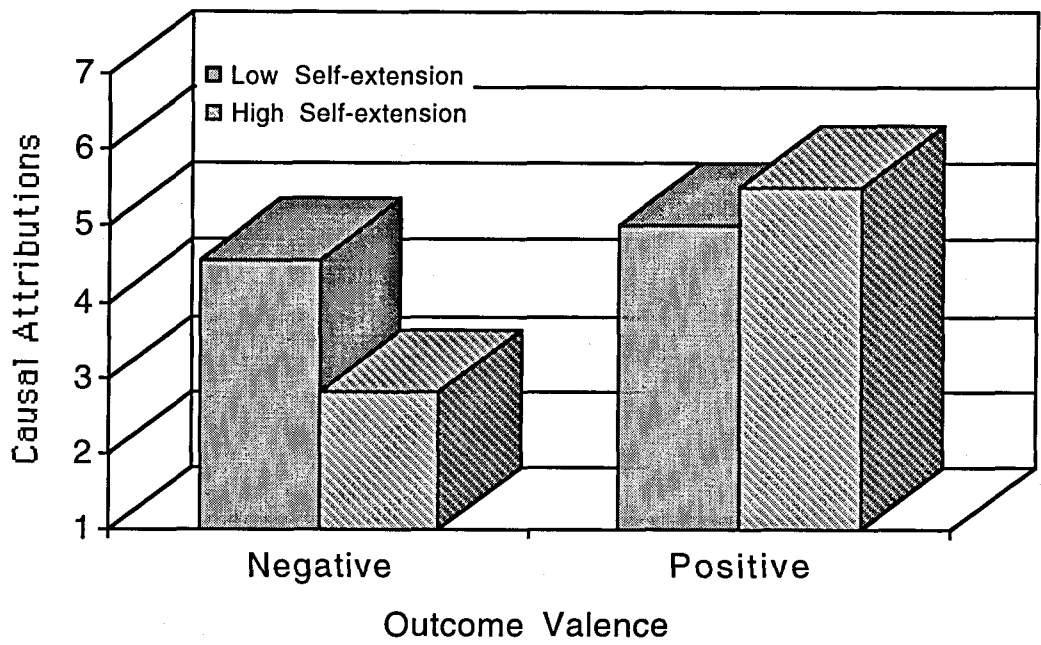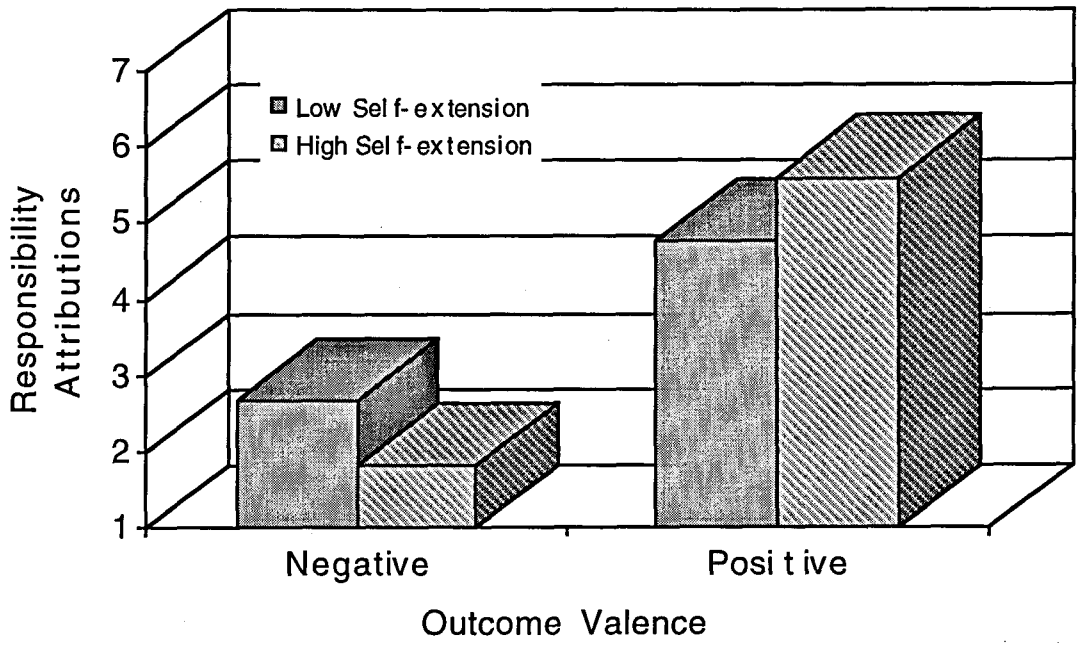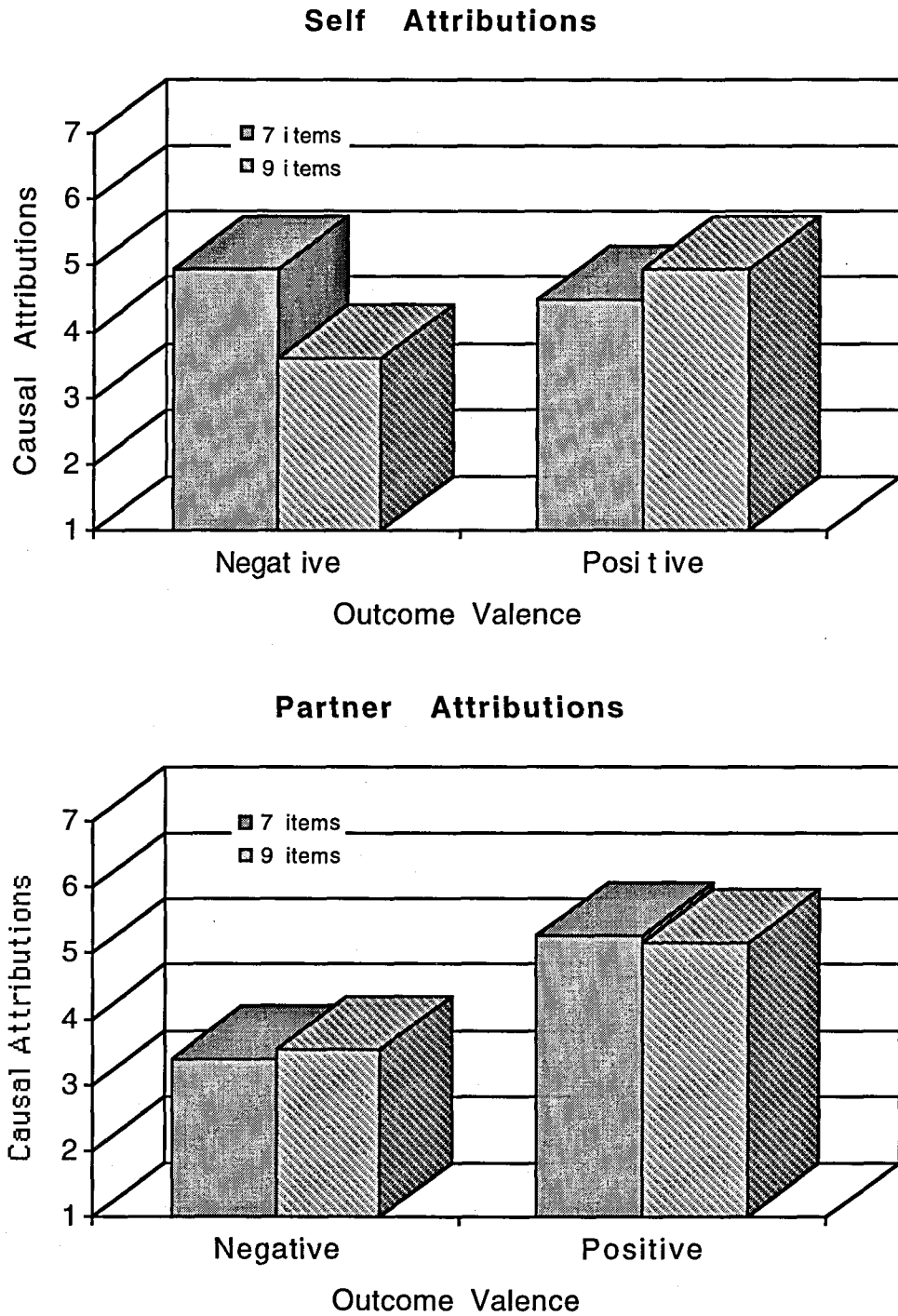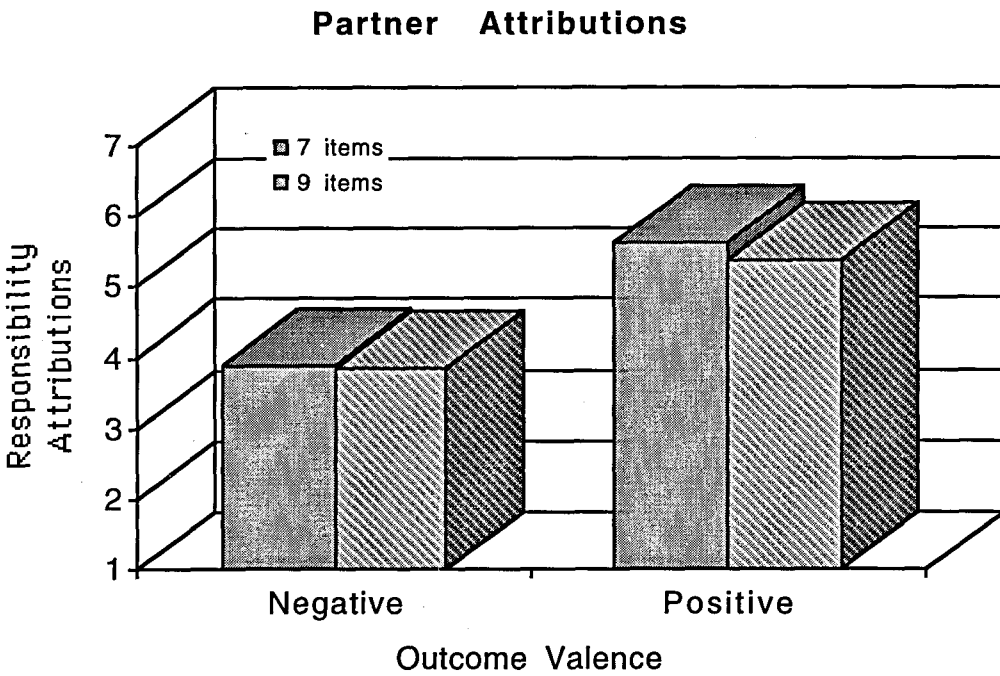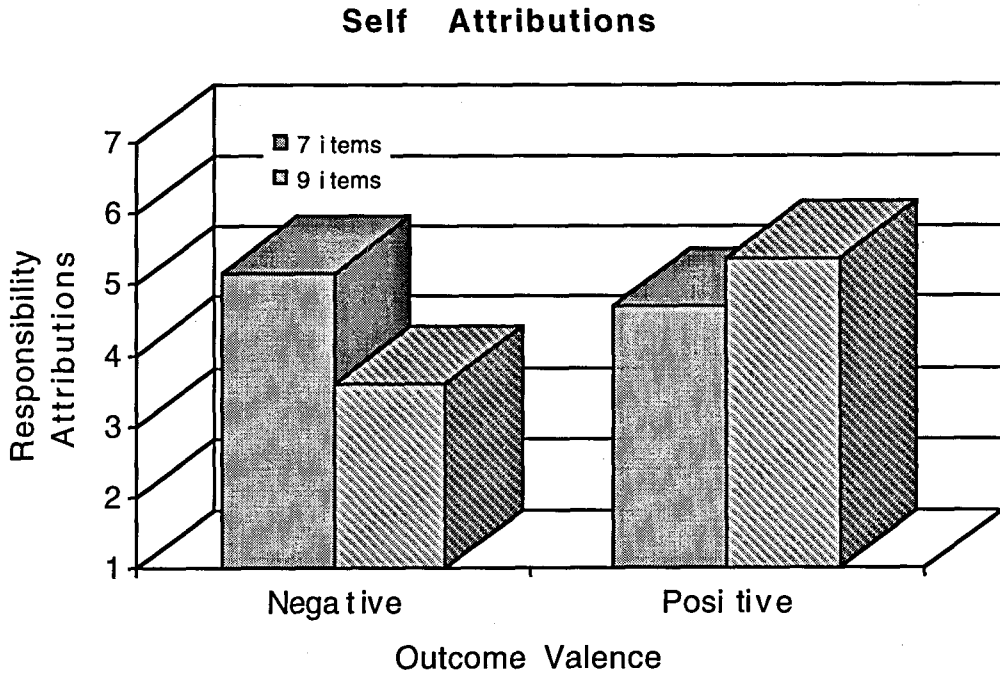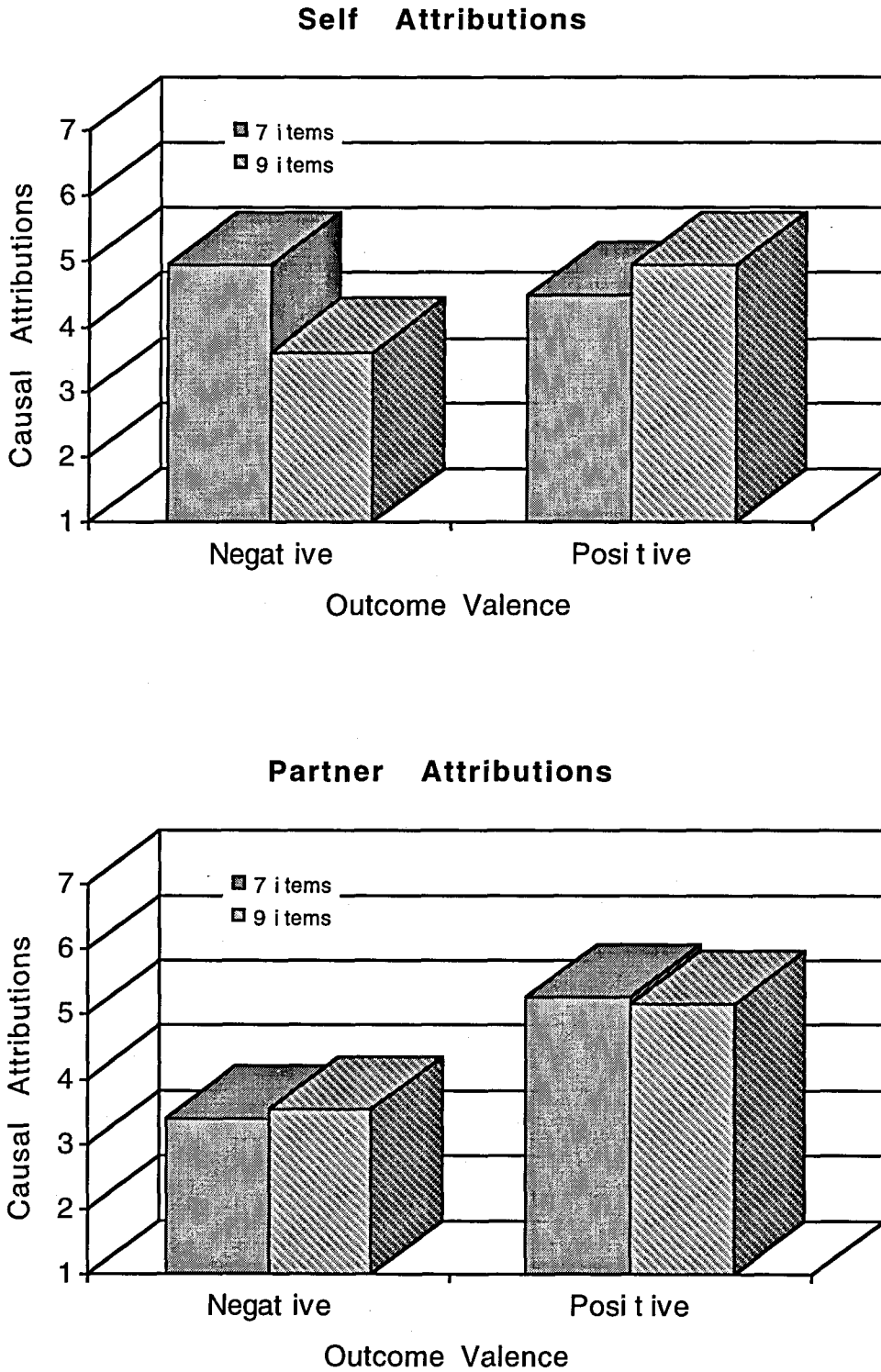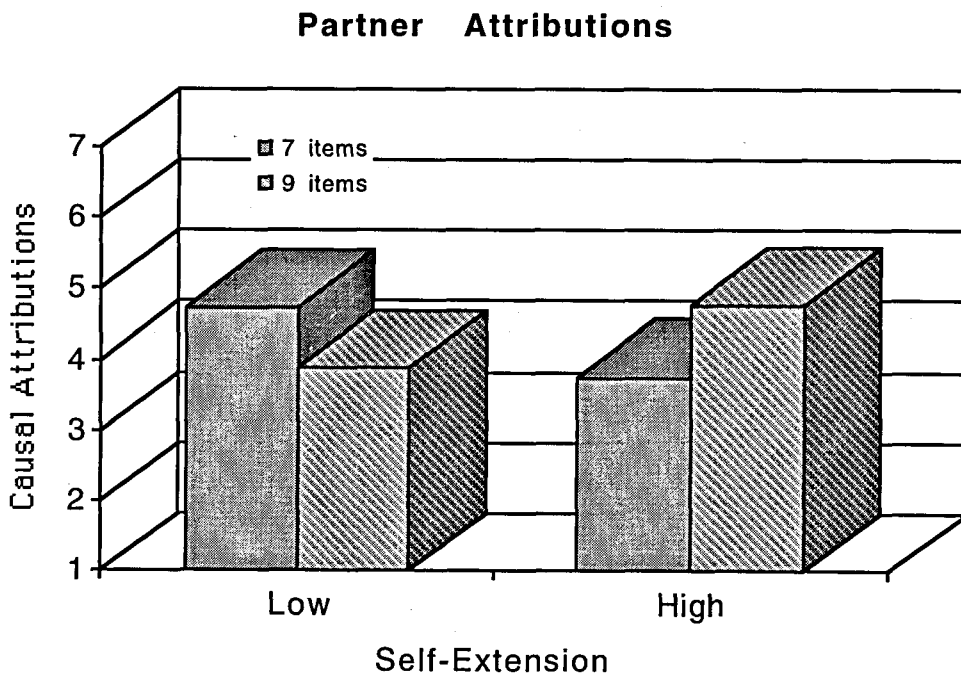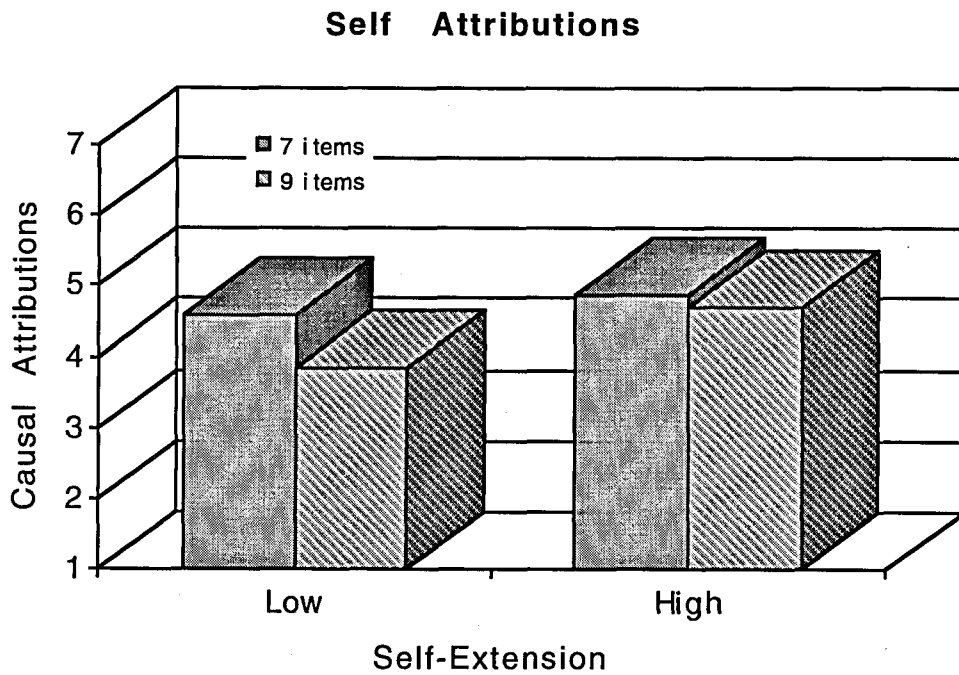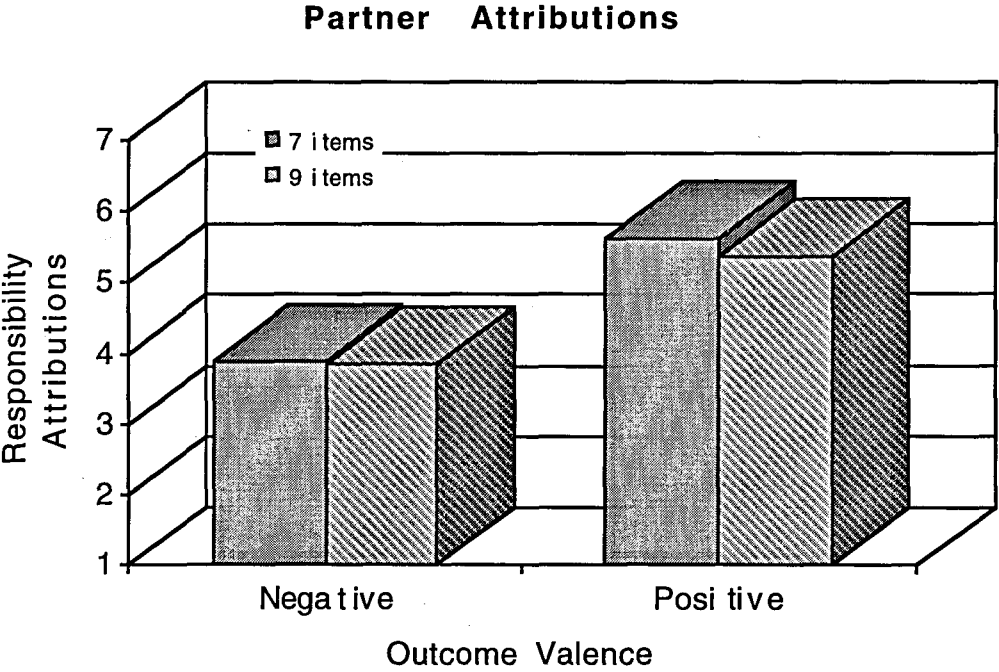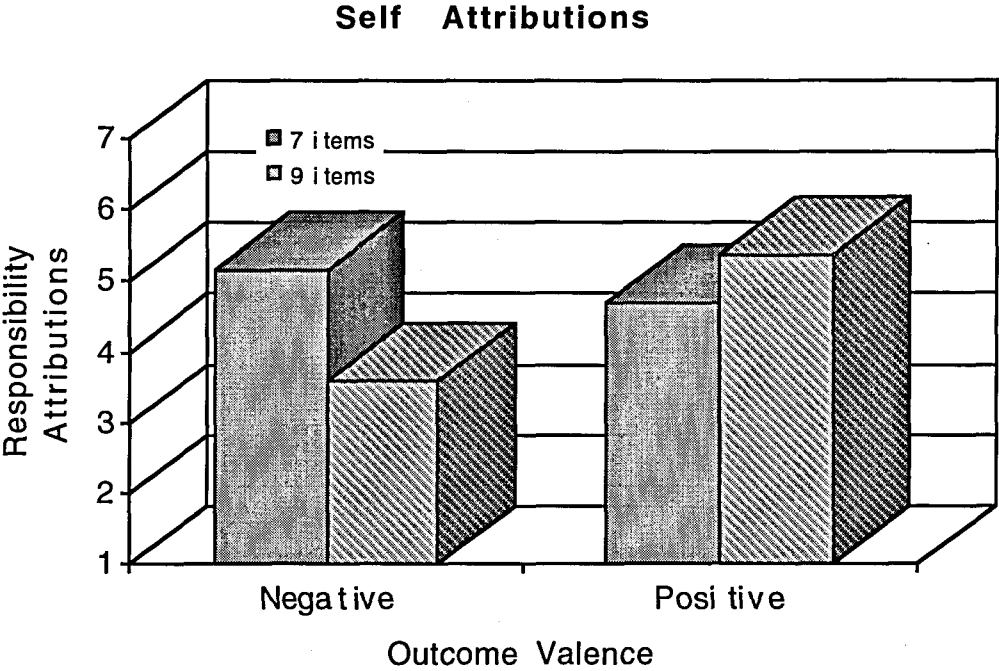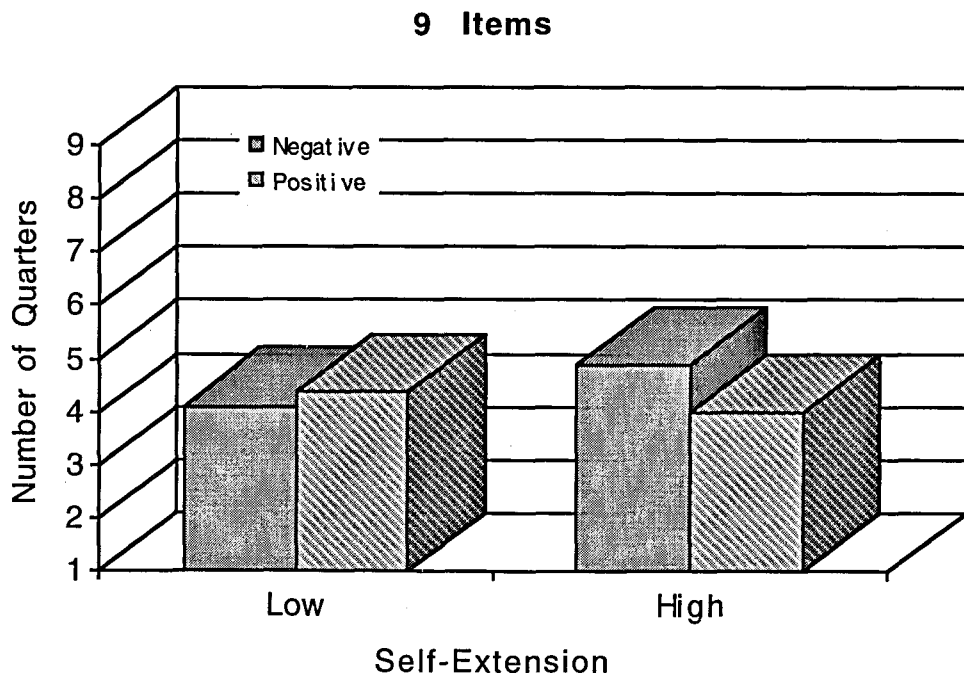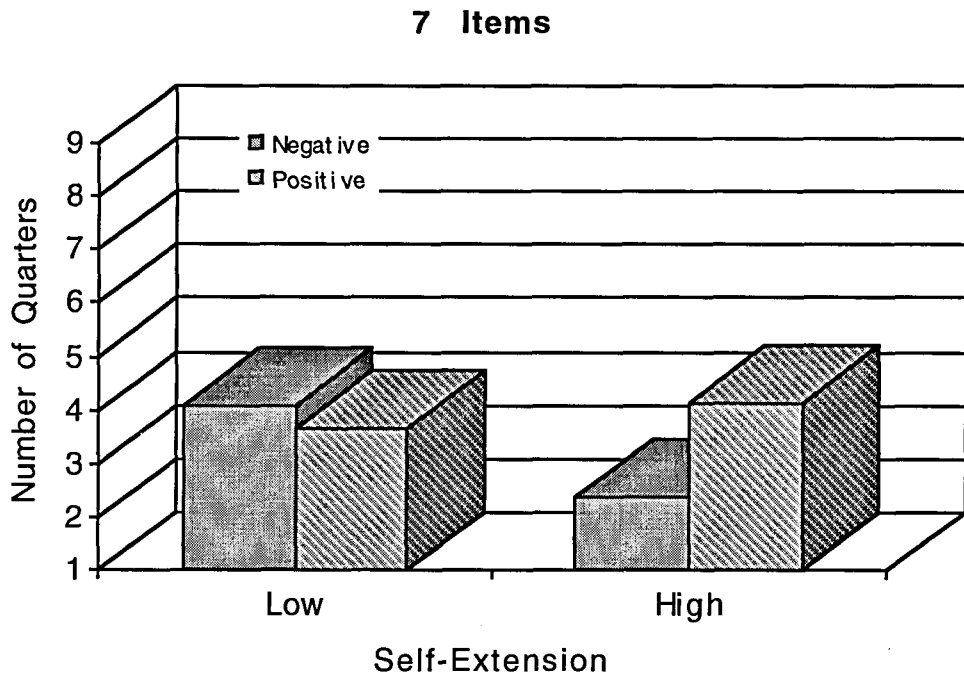
Appendix A

Stimulus Materials for Experiment 1

After establishment of relationship:

<u>Familiarity Rating</u>

Name:
Gender:
Age:
Year:
Major:
Hometown:

Please place an **X BETWEEN** two of the hashmarks for each of the following questions:

How well do you know your partner?

|_____|_____|_____|_____|_____|_____|_____|_____|

don't know   know
at all   very well

If you know your partner, how much do you like him or her? (If you don't know your partner, leave this question blank.)

|_____|_____|_____|_____|_____|_____|_____|

don't like   like
at all   very much

<u>Manipulation Checks</u>

Please place an X **BETWEEN** two of the hashmarks for each of the following questions:

My partner and I contributed:

|_____|_____|_____|_____|_____|_____|_____|_____|

    unequally   equally
    to the task   to the task

My relationship with my partner is:

|_____|_____|_____|_____|_____|_____|_____|_____|

    not at all   very
    cooperative   cooperative

The outcome of the task depended on:

|_____|_____|_____|_____|_____|_____|_____|_____|

  the individual efforts   the combined efforts
  of my partner and me   of my partner and
me

My relationship with my partner is:

|_____|_____|_____|_____|_____|_____|_____|_____|

    not at all   very
    competitive   competitive

I like my partner:

|___|___|___|___|___|___|___|___|

don't like   like
at all   very much

My partner and I have:

|___|___|___|___|___|___|___|___|

nothing   a lot
in common   in common

I would like to spend:

|___|___|___|___|___|___|___|___|

less time   more time
with my partner   with my
partner

I :

|_____|_____|_____|_____|_____|_____|_____|

don't value my   value highly
partner's opinions   partner's opinions

I :

|_____|_____|_____|_____|_____|_____|_____|

don't feel close   feel very close
at all to my partner   to my partner

Dependent Variables

Cash register scenario:

PARTNER recently began working as a cashier at a local grocery store.

When PARTNER was hired, he/she spent a day taking part in an employee

training program. As part of the program, PARTNER was told that the store had a

strict policy regarding register totals at the end of the week. PARTNER was

informed that if his register came up less than $4/$6 short at the end of the week,

the manager would let it slide. But if the register was missing more than $4/$6 at

the end of the week, PARTNER would be subject to disciplinary action for

stealing from the store. PARTNER was then told that his first week on the job

would be probationary.

Negative outcome-   At the end of PARTNER'S probationary week on the job,

the manager tallied up the register receipts. He called PARTNER into his office

and told him that his/her register had come up $5.06 short. He pointed out that

PARTNER had been informed of the policy regarding register totals and then fired

him/her.

Positive outcome- At the end of PARTNER'S probationary week on the job, the

manager tallied up the register receipts. He called PARTNER into his office and

told him that his/her register had come up $5.06 short. He informed PARTNER

that he/she had stayed within an acceptable limit, and rewarded him/her with a gift

certificate to a local restaurant.

Attributional measures for cash register scenario:

Negative Outcome:

Directions: Based on the material you have just read, please respond to the following items. **Read each item carefully!** Please indicate your opinion by placing an X **in the box** that best represents your degree of agreement or disagreement with each item. Please mark your judgments without re-reading the materials. You may find it difficult to answer some items based on such limited information; nonetheless, please answer every item.

STR = Strongly; MOD = Moderately; SLI = Slightly

	Disagree			Agree		
	STR	**MOD**	**SLI**	**SLI**	**MOD**	**STR**
PARTNER caused his firing.						
PARTNER was short $5.06 from his drawer because he was careless.						
PARTNER could have avoided his firing by being more careful.						
PARTNER was morally responsible for his firing.						
PARTNER could have prevented his firing.						
PARTNER'S probationary week of work resulted in a negative outcome.						
PARTNER is likely to be fired from his future jobs.						
PARTNER was short $5.06 from his drawer because he deliberately took the						

money.						
PARTNER should have known he would be fired.						

How many dollars could PARTNER'S register have been short for the manager to let it slide? _____

Positive Outcome:

Directions: Based on the material you have just read, please respond to the following items. **Read each item carefully!** Please indicate your opinion by placing an X **in the box** that best represents your degree of agreement or disagreement with each item. Please mark your judgments without re-reading the materials. You may find it difficult to answer some items based on such limited information; nonetheless, please answer every item.

STR = Strongly; MOD = Moderately; SLI = Slightly

	Disagree			Agree		
	STR	MOD	SLI	SLI	MOD	STR
PARTNER was the cause of his successful probationary week.						
PARTNER was short $5.06 from his drawer because he was careless.						
PARTNER was morally responsible for his successful probationary week.						
PARTNER'S probationary week resulted in a positive outcome.						
PARTNER was short $5.06 from his drawer because he deliberately took the money.						
PARTNER'S is likely to be rewarded for his work in the future.						

PARTNER should have known his probationary week would be successful.						

How many dollars could PARTNER'S register have been short for the manager to let it slide? _____

Appendix B

Stimulus Materials for Experiment 2

Social Values Measure:

This is a mini-study in decision making. You will be making choices by circling either the letter A, B, or C. Your choices determine the points you and someone else will receive. An example of a trial is displayed in the box below:

	A	B	C
You get	500	500	550
Other gets	100	500	300

In this example, if you chose A you would receive 500 points and the other person would receive 100 points; if you chose B, you would receive 500 points and the other 500; and if you chose C, you would receive 550 points and the other 300. There are nine trials. Please **circle** only **one** choice (A or B or C) for each trial

1)

	A	B	C
You Get	480	540	480
Other Gets	80	280	480

2)

	A	B	C
You Get	560	500	500
Other Gets	300	500	100

3)

| | A | B | C |

	A	B	C
You Get	520	520	580
Other Gets	520	120	320

4)

	A	B	C
You Get	500	560	490
Other Gets	100	300	490

5)

	A	B	C
You Get	560	500	490
Other Gets	300	500	90

6)

	A	B	C
You Get	500	500	570
Other Gets	500	100	300

7)

	A	B	C
You Get	510	560	510
Other Gets	510	300	110

8)

	A	B	C
You Get	550	500	500

Other Gets   300   100   500

9)

	A	B	C
You Get	480	490	540
Other Gets	100	490	300

Vocabulary Test - Version 1

Please circle the letter corresponding to the definition of the CAPITALIZED words.

1) VERACITY:

    A. mendacity
    B. plausibility
    C. intuition
    D. opposition
    E. accuracy

2) SPURIOUS:

    A. cautious
    B. fantastic
    C. modest
    D. counterfeit
    E. pertinent

3) PROVIDENT:

    A. mindful
    B. prodigal
    C. thankful
    D. tidy
    E. refuted

4) CAPITULATE:

    A. initiate
    B. yield
    C. defame
    D. exonerate
    E. repeat

5) SALUBRITY:

    A. wholesomeness
    B. insolvency

6) TANTAMOUNT:

    A. negotiable
    B. ambitious
    C. evident
    D. relevant
    E. equivalent

7) APEX:

    A. smallest amount
    B. clearest view
    C. lowest point
    D. broad plateau
    E. bright color

8) DISINGENUOUS:

    A. naive
    B. hostile
    C. witty
    D. insincere
    E. polite

9) FECUND:

    A. prolific
    B. comprehensible
    C. grave
    D. sane
    E. considerate

10) ANIMUS:

    A. hospitality
    B. hostility

11) PROSAIC:

    A. commonplace
    B. hesitant
    C. contradictory
    D. disorderly
    E. redundant

12) DOLTISH:

    A. immature
    B. coarse
    C. stupid
    D. unstable
    E. clever

13) RECALCITRANCE:

    A. dependability
    B. submissiveness
    C. apathy
    D. eloquence
    E. stubbornness

14) INDIGENOUS:

    A. affluent
    B. native
    C. serene
    D. parochial
    E. inimical

15) BEDECK:

    A. adorn
    B. isolate

C. dissatisfaction

D. diffidence

E. rigidity

C. anonymity

D. insularity

E. probity

C. cleanse

D. strip

E. erect

Vocabulary Test - Version 2

Please circle the letter corresponding to the definition of the CAPITALIZED words.

1) AMELIORATION:

    A. cancellation
    B. improvement
    C. forgetfulness
    D. bribe
    E. consideration

2) DISPUTATIOUS:

    A. quarrelsome
    B. repugnant
    C. conciliatory
    D. infamous
    E. composed

3) RETICENCE:

    A. irascibility
    B. patience
    C. surrender
    D. loquaciousness
    E. reserved

4) APOSTATE:

    A. laggard
    B. martinet
    C. traitor
    D. skeptic
    E. predecessor

5) FULMINATE:

    A. authorize
    B. dominate
    C. edify

6) TYRO:

    A. zealot
    B. prodigal
    C. braggart
    D. novice
    E. nihilist

7) ECOMIUM:

    A. prodigality
    B. eulogy
    C. sacrifice
    D. disability
    E. abbreviation

8) SERVILITY:

    A. resilience
    B. wickedness
    C. fawning
    D. independence
    E. righteousness

9) LATENT:

    A. prior
    B. tardy
    C. devious
    D. astronomical
    E. dormant

10) TURBID:

    A. opaque
    B. vigorous
    C. turgid

11) DISPARAGE:

    A. resemble
    B. vacillate
    C. belittle
    D. annoy
    E. appear

12) PRECIPITOUS:

    A. hasty
    B. cautious
    C. formal
    D. simplistic
    E. inaccurate

13) INCONGRUOUS:

    A. geometric
    B. prudent
    C. legitimate
    D. efficacious
    E. inappropriate

14) FELICITOUS:

    A. ineffable
    B. irrational
    C. atypical
    D. certain
    E. appropriate

15) TOPICAL:

    A. fallacious
    B. isolated
    C. general

D. condemn
E. illuminate

D. viscous
E. rancid

D. chronological
E. local

After vocabulary test:

<u>Manipulation Checks</u>

Please place an X **BETWEEN** two of the hashmarks for each of the following questions:

My relationship with my partner is:

|_____|_____|_____|_____|_____|_____|_____|_____|

not at all   very
cooperative   cooperative

The outcome of the task depended on:

|_____|_____|_____|_____|_____|_____|_____|_____|

the individual efforts   the combined efforts
of my partner and me   of my partner and me

My partner and I have:

|_____|_____|_____|_____|_____|_____|_____|_____|

nothing   a lot
in common   in common

I would like to spend:

|_____|_____|_____|_____|_____|_____|_____|_____|

less time   more time
with my partner   with my partner

I :

|_____|_____|_____|_____|_____|_____|_____|

don't value   value highly my
my partner's opinions   partner's opinions

My relationship with my partner is:

|_____|_____|_____|_____|_____|_____|_____|

not at all   very
competitive   competitive

I :

|_____|_____|_____|_____|_____|_____|_____|

don't feel close   feel very close
at all to my partner   to my partner

After false feedback:

Dependent Variable Measures

Concerning our _____ on the vocabulary test, I am:

|_____|_____|_____|_____|_____|_____|_____|_____|

    not at all   very
    responsible   responsible

The test was:

|_____|_____|_____|_____|_____|_____|_____|_____|

    not at all   very
    difficult   difficult

Concerning our _____ on the vocabulary test, I am:

|_____|_____|_____|_____|_____|_____|_____|_____|

    not at all   very much
    the cause   the cause

My vocabulary is:

|_____|_____|_____|_____|_____|_____|_____|_____|

    very small   very large

Concerning our _____ on the vocabulary test, my partner is:

|_____|_____|_____|_____|_____|_____|_____|_____|

not at all   very
responsible   responsible

My partner and I contributed:

|_____|_____|_____|_____|_____|_____|_____|_____|

unequally   equally
to the task   to the task

Concerning our _____ on the vocabulary test, my partner is:

|_____|_____|_____|_____|_____|_____|_____|_____|

not at all   very much
the cause   the cause

My partner's vocabulary is:

|_____|_____|_____|_____|_____|_____|_____|_____|

very small   very large

I like my partner:

|_____|_____|_____|_____|_____|_____|_____|_____|

don't like   like very
at all   much

How many questions did you and your partner **together** need to answer correctly to win the $4? _____

Did you and your partner succeed or fail at the vocabulary test? _____

How many questions did you get correct? _____

How many questions did your partner get correct? _____

Biography

The author, a native Virginian, graduated from the College of William and Mary in May 1995 with a double major in Psychology and Religion with High Honors. After graduating with her M. A. in General Psychology from the University of Richmond in May, 1998, she will pursue her Ph. D. in social psychology at the University of North Carolina-Chapel Hill. When not working, Ms. Dent enjoys reading, chasing men, jumping out of planes, drooling over trout, and whacking people with hockey sticks.