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Attitudes about disabled people and evaluations of a disabled or nondisabled task partner after success or failure

Bailey, Joan Weisenfeld, Ph.D.

City University of New York, 1988

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ATTITUDES ABOUT DISABLED PEOPLE AND EVALUATIONS OF A DISABLED OR NONDISABLED TASK PARTNER AFTER SUCCESS OR FAILURE

by

JOAN W. BAILEY

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

1988

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This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

4/26/88 — Irwin Katz

Date — Chair of Examining Committee

4/26/88 — Hubert D. Abelson

Date — Executive Officer

Professor R. Glen Hass

Professor Greg Herek

Supervisory Committee

The City University of New York

Abstract

ATTITUDES ABOUT DISABLED PEOPLE AND EVALUATIONS
OF A DISABLED OR NONDISABLED TASK PARTNER
AFTER SUCCESS OR FAILURE

by

Joan W. Bailey

Adviser: Professor Irwin Katz

This study examined the issue of ambivalence-induced behavioral amplification as applied to physically disabled individuals. The theory maintains that: (a) attitudes toward the disabled tend to be ambivalent rather than hostile, sympathetic or indifferent; (b) under certain conditions behavior toward disabled individuals may be more extreme than behavior toward nondisabled individuals; and (c) the extreme behavior is mediated by individual differences in ambivalence about disabled people in general. These three notions were tested. Internally consistent, independent scales of pro and anti attitudes toward the physically disabled were developed, supporting the notion of a high potentiality for ambivalence in attitudes toward the disabled. These scales were administered to college undergraduates who later worked at joint tasks with a nondisabled or apparently disabled confederate who was responsible for the group's success or failure. It was predicted that the disabled confederate would be evaluated more favorably than the nondisabled confederate in the success condition, and more negatively than the nondisabled confederate in the failure condition. It was also predicted that individual differences in attitudinal ambivalence (i.e., tendency to get high scores on both the pro and anti attitude scales) would be correlated with the extremity of ratings of the disabled confederate, but that neither pro nor anti scores alone would be related to the evaluation of the confederate. Contrary to prediction, it was

found that the disabled confederate was evaluated more favorably than the nondisabled confederate regardless of the game outcome. That is, evaluations reflected a sympathy effect rather than an extremity effect. Attitudinal ambivalence was unrelated to the evaluation of the confederate. Individuation of the disabled target, the avowal of the disability and the negative self-presentation of the confederate in the failure condition are discussed as possible explanations of the results.

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1. INTRODUCTION

Physical disability has become a prevalent problem in recent years. It has been estimated that 31.5 million Americans are limited in some way by a chronic health problem and an estimated 7.9 million are considered severely disabled (DeJong & Lifchez, 1983). The dramatic increase in physical disability since the turn of the century has been due in large part to two interrelated trends – an increase in the size of the population 65 years and older and major advances in medical interventions. Increased life expectancy increases the probability that one will acquire a disease or disability and medical advances make it possible to save lives, often at the price of long term and severe residual problems (DeJong & Lifchez, 1983). The result is a growing disabled population faced with problems of adjustment to their disability and acceptance by the nondisabled population.

In recent years, disabled individuals have insisted on equal access to employment and educational opportunities and on the removal of architectural barriers preventing access to public facilities. Significant social changes have occurred as the physically disabled have demanded the right to lead full and productive lives. For example, The Education for all Handicapped Children Act of 1975 mandates free appropriate education for disabled children in the least restrictive setting possible; The Architectural Barriers Act of 1968 requires that public buildings financed with federal funds or leased to the federal government provide access to the physically disabled; and The Rehabilitation Act of 1973 prohibits discrimination against qualified disabled people in programs, services and benefits that are federally funded. The aim of these laws is to help disabled individuals gain access to the nondisabled world.

Increased contact with nondisabled individuals however, often leads to interpersonal problems. These problems can take the form of interactional difficulties, prejudicial or overly positive attitudes and discriminatory or preferential treatment. Physical disability then becomes

more than an individual's personal struggle to adapt to physical impairment; it emerges as a social issue in which the adjustment of physically impaired individuals is inextricably tied to a social context. These issues bring the problem of physical disability into the social psychological arena.

Investigations of societal reactions to individuals with physical abnormalities reveal a mixture of positive and negative sentiment. The public endorses humane and compassionate treatment of the disabled on the one hand, but on the other hand, the disabled are avoided and assumed to possess a host of undesirable qualities. This dual perspective has led Katz (1981) to formulate a theory of ambivalence-induced behavioral amplification. The theory as applied to reactions to the disabled, maintains that sympathetic and aversive feelings for the disabled generate conflict in individuals in contact situations with physically impaired persons. The nondisabled individual for example, may find himself having negative feelings for one who has experienced extreme misfortune or he may feel compassion for one who is socially stereotyped as being self-pitying, aggressive and overly sensitive. Both cognitions, the theory proposes, pose a threat to the nondisabled person's self-image as one who is compassionate yet judicious in the treatment and evaluation of others.

The sense of threat that arises from holding conflicting views leads to threat reductive-actions which can take the form of extremely positive or negative behavior toward the attitudinal object. The valence of the behavior depends upon the relative cost and availability of behavioral options. That is, a possible consequence of ambivalent feelings and the resulting tension is that behavior toward physically disabled persons tends to be amplified, that is, more extreme than behavior toward a similar nondisabled person in a similar situation. (The theory of ambivalence-induced behavioral amplification is also applicable to other marginal groups --e.g., racial minorities, former mental patients, the aged, and drug addicts-- who are perceived as both deviant, in the sense of possessing some disqualifying attribute of body or mind, and disadvantaged, either by the intrinisic nature of the attibute itself--e.g., blindness-- or by the

social rejection and discrimination that having it entails.)

The present study examines the relationship between attitudes and responses toward the physically disabled. The proposed research seeks to do the following: (a) develop a questionnaire to measure individual differences in positive and negative attitudes toward the physically disabled, (b) demonstrate in an experimental setting that behavior toward a physically disabled person may be more extreme than behavior toward the nondisabled, (c) demonstrate that the extreme behavior is mediated by individual differences in ambivalence about disabled people in general.

Studies of Positive and Negative Attitudes Toward the Disabled

Positive atitudes

Positive attitudes about the physically disabled revolve around two themes. The first concerns socially approved norms of kindness and compassion for physically disabled persons. The existence of this social responsibility norm ensures that the nondisabled will endorse humane treatment of the disabled. In support of this view, Weinberg and Sebian (1980) found that 81% of a sample of nondisabled college students agreed that people have a moral obligation to help the physically disabled. Factor analytic studies of the structure of attitudes toward disability conducted by Siller and associates, also provides support for this view. A factor labeled Authoritanian Virtuousness emerges as a consistent dimension of attitudes toward such disabilities as blindness, deafness, paralysis and amputation (Ferguson, 1970; Siller, 1970; Siller, Ferguson, Vann & Holland, 1967; Vann, 1970). One component of this dimension is the advocacy of tolerant attitudes toward the disabled and the endorsement of preferential treatment.

Several behavioral studies also provide support for the view that the physically disabled are entitled to favorable and preferential treatment. Doob and Ecker (1970), for example, found that an experimenter wearing an eye patch elicited more compliance than a nondisabled experimenter when housewives were asked to complete a questionnaire and return it by mail. (No differences in compliance were found, however, when the request was to participate in a 20

minute interview.) A similar study by Levitt and Kornhaber (1977) investigated the effect of permenent and temporary disabilities on compliance. A confederate in a field setting asked passing pedestrians for money. The confederate wore either a leg cast and used crutches in order to appear temporarily disabled or wore a leg brace and used orthopedic crutches in order to appear permanently disabled. A nondisabled condition was also included. Compliance was highest for the two disability conditions and no difference was found between the temporary and permanent disability conditions. A third study by Kleck, Ono and Hastorf (1966) found that college students gave longer interviews to an interviewer who sat in a wheelchair as opposed to a nondisabled interviewer when they believed that a longer interview would help the interviewer perform his job better. Subjects also rated the disabled interviewer more favorably and made attempts to agree with what they thought would be his opinions.

A second type of favorable attitude reflects the belief that the physically impaired possess exceptional personality characteristics. Mussen and Barker (1944), for example, asked college students to rate orthopedically impaired individuals on 24 personality traits. Several of the ratings tended to be very favorable, with the orthopedically impaired described as self-reliant, religious, kind, conscientious, unselfish and intelligent. In a similar study, Weinberg (1976) had subjects rate a variety of targets on personality traits. These stimulus persons included nondisabled targets, liked targets, wheelchair bound targets, and blind and deaf targets. Although the disabled stimulus persons were perceived somewhat negatively, they were nevertheless described as more religious, less impulsive and more conscientious than the nondisabled targets.

Comer and Piliavin (1975) also found that publicly expressed attitudes toward the disabled were favorable. Nondisabled subjects in a field setting rated photographs of two able-bodied targets and a target in a wheelchair. The disabled target was rated more favorably than the nondisabled target on such traits as unselfish, kind, friendly, trustworthy and likeable. Similarly, Kleck (1968) found that a confederate simulating a left leg amputation was evaluated

more positively than when he appeared to be nondisabled. Siller et. al.'s factor analytically derived dimensions of attitudes toward the disabled also provide support for the escription of favorable traits to the disabled. A second aspect of their Authoritarian Virtuousness dimension endows the physically disabled with exceptional personality characteristics. These items characterize the disabled as sensitive to others and in touch with the important things in life. Similarly, Kent, Cartwright and Ossario (1984) found that undergraduates reported admiration and respect for paraplegic individuals.

Compassion for the disabled and preferential treatment may be based in part on New Testament teachings in which disability is seen as a moral virtue (Barker, Wright, Meyerson & Gonick, 1953; Gellman, 1959). According to this view, the disabled occupy a privileged position, since biblical teachings hold that salvation can be found through suffering. Positive images of the disabled may also be based on the assumption of an association between suffering and deep understanding and wisdom (Wright, 1983). A general belief exists that it is only through tribulation and frustration that wisdom can be achieved. Nondisabled individuals feel that adjustment to disability makes a person superior and capable of achievements that might otherwise be beyond reach (Meyerson, 1959). According to this view, disability has a positive effect on the person.

Positive attitudes toward the disabled may also develop through the process of anormalization. According to Wright (1983) anormalization occurs when the perceiver is faced with a discrepancy between expectations and reality. Nondisabled individuals often insist for example that the physically disabled habitually suffer as a result of their impairment. When a disabled person does not appear to be suffering, however, expectation discrepancy has occurred and the discrepancy can be reconciled through anormalization. The nondisabled individual attributes to the disabled person unusual characteristics, even supernatural ones (e.g. the attribution to blind people of a sixth sense) so that ordinary expectations do not apply (Wright,

1983). In this way the nondisabled come to see the disabled as extraordinary individuals able to surmount impossible obstacles.

Negative attitudes

Negative attitudes and avoidance of the disabled have also been reported. The nondisabled, for example, reject the idea of close intimate relationships with disabled individuals. In a study by Shears and Jensema (1969), adults rated the social acceptability of individuals with such disorders as blindness, deafness, cerebral palsy, amputation and paralysis. It was found that as the hypothetical level of intimacy increased, the acceptability of the various disabled persons decreased. Ninety-three percent of the subjects, for example, accepted a person in a wheelchair as a work partner but only seven percent indicated that they would marry a wheelchair-bound individual. Similarly, Tringo (1970) had high school students, college undergraduates, graduate students and rehabilitation workers indicate their willingness to enter into a variety of personal relationships with individuals having different types of illness or disability. It was found that all of these groups were rejected to some extent. Cerebral palsy victims, epileptics, dwarfs, hunchbacks and paraplegics were judged to be unacceptable even as next door neighbors. Rejection of intimate associations with disabled individuals also arises as an attitude dimension in the work of Siller et al. A dimension labeled Rejection of Intimacy emerges as a consistent attitude toward disabled persons for a variety of disabilities.

Richardson, Goodman, Hastorf and Dornbusch (1961) examined the reactions of 11 and 12 year old children to various disabilities. Children from diverse backgrounds were asked to judge pictures of a normal child, a child with crutches and a brace, a child with an amputated left hand, a child in a wheelchair, a child with facial disfigurement, and an obese child. The children were asked to indicate in order of preference the children they thought they would like best. It was found that the nondisabled target was preferred over all of the disabled targets.

Another component of negative attitudes concerns the assignment of unfavorable traits to the physically impaired. Titley and Cooley (1969) hypothesized that disabled individuals would be characterized as alienated and introverted by the nondisabled. Subjects rated a normal stimulus person and an orthopedically impaired or facially disfigured stimulus person. Regardless of the level of severity of the disability, the disabled stimulus persons were perceived to be more introverted and alienated than the nondisabled target. Weinberg (1976) found that blind, deaf and paralyzed stimulus persons as compared to nondisabled targets, were rated as less enjoyable to be with, less likeable, popular, happy, attractive, and intelligent. Siller et. al.'s factor analytic study also provides support for the notion that negative traits are often imputed to the disabled. A dimension entitled Inferred Emotional Consequences characterizes the disabled as maladjusted, ill tempered, self-pitying, bitter, angry at the world, and inwardly unhappy.

Evidence of discrimination against the disabled also exists. Rickard, Triandis and Patterson (1963) found that disabled job applicants were more likely to be rejected for the job of accountant and third grade teacher than nondisabled applicants. In a study by Russell, Lenel, Spicer, Miller, Albrecht and Rose (1985) female college students evaluated the performance of either a nondisabled or wheelchair-bound third grader who performed either above or below average on a mathematics test. Regardless of the level of performance, the disabled student was evaluated more negatively than the nondisabled student. Discrimination against the disabled is further revealed in investigations of helping behavior toward disabled and nondisabled help-seekers. In a field experiment by Piliavin, Piliavin and Rodin (1975), a confederate with a cane fell to the floor of a subway car. When the victim had a facial disfigurement, he was helped less than when he appeared unmarked. Similarly, Pomazal and Clore (1973) found that hitchhikers wearing a sling and knee brace were offered fewer rides than nondisabled hitchhikers.

It has been suggested that disabled help-seekers are less likely to receive aid when it

involves prolonged face-to-face contact than when it does not involve contact (Doob & Ecker, 1970). This may occur because nondisabled individuals experience uneasiness and discomfort in the presence of the disabled. Several studies attest to the fact that the nondisabled find interaction with physically impaired individuals to be unpleasant. Greater emotional arousal, restrained behavior and a desire to avoid the disabled have been noted in interaction situations.

Goffman (1963) and Davis (1961) have discussed the problems involved in interactions between disabled and nondisabled individuals. Goffman notes that nondisabled individuals are uncertain about how to behave in mixed interactions. Self-consciousness and other-consciousness occur as each individual furtively monitors own and other's behavior. The result is what Goffman calls "the pathology of interaction-uneasiness." Davis too calls attention to the discomfort involved in disabled-nondisabled contact:

> This imputation usually expresses itself in a pronouncestickiness of interactional flow and in the embarrassment of the normal by which he conveys the all too obvious message that he is having difficulty in relating to the handicapped person as he would to "just an ordinary man or woman." (Pp. 121-122).

These observations have been confirmed by empirical tests conducted by Kleck and associates using college students as subjects. Kleck, Ono and Hastorf (1966) had subjects interact in an interview situation with an apparently disabled or nondisabled confederate. Subjects interacting with the disabled confederate showed greater signs of emotional tension as measured by GSR, terminated the interaction sooner and demonstrated less variability in their behavior than subjects who interacted with a nondisabled confederate. In a similar experiment, Kleck (1966) found that subjects reported less emotional comfort when interacting with a disabled as opposed to a nondisabled confederate. Kleck (1968) also found greater motoric inhibition when subjects interacted with a disabled confederate. Siller et. al.'s work also provides support for the notion of interaction discomfort. A factor labeled Interaction Strain refers to the nondisabled

person's uneasiness in the presence of disabled persons. These feelings of discomfort are likely to lead to avoidance of disabled individuals.

Snyder, Kleck, Strenta and Mentzer (1979) found that undergraduate subjects will avoid the disabled when a plausible pretext for the avoidance is available. Subjects avoided sitting with a disabled confederate more often if the choice to do so was also a decision between two movies and avoidance could masquerade as a movie preference. In addition to avoiding the disabled, a study by Kleck, Buck, Goller, London, Pfeiffer and Vukcevic (1968), demonstrates that undergraduate subjects maintain greater interpersonal distance from disabled targets than from nondisabled individuals. In a first study, subjects were asked to place figures representing the self next to figures representing various types of people including a black person, an epileptic, a blind person and an amputee. The self was placed furthest away from figures representing stigmatized individuals. In a second study, subjects sat further away from an "epileptic" confederate than from a nondisabled confederate.

Factors Underlying Negative Attitudes

Several factors probably contribute to the development of negative attitudes toward the disabled. The following are mentioned in the literature.

Religious beliefs and the just world notion. Negative attitudes toward the disabled in addition to positive attitudes, can be justified by biblical tenets. Old Testament teachings state that disease and physical disability are punishments sent by God for immoral behavior. Disease and disability may occur as a result of one's own immoral conduct or as a result of ancestral wrongdoing. These biblical teachings associating religious impropriety and physical disability are accepted by a surprising number of people. Weinberg and Sebian (1980) found that 23% of a sample of college students agreed that sin and an individual's immoral behavior can cause physical illness or disability. The authors note that since people with less education are even more

accepting of literal interpretations of the Bible, the percentages obtained in this study probably underestimate what would be found in a random sample of the population. General acceptance of this Biblical view means that people with physical defects may be feared, distrusted and avoided because they will be seen as sinners (Weinberg & Sebian, 1980).

The just world notion operates in a fashion similar to religious beliefs. According to this view (Lerner, 1970), we have a need to believe that rewards and punishments are distributed fairly. The idea that people can be afflicted with physical disabilites at random threatens our belief in a just universe. In order to protect this view, we are motivated to believe that the disabled deserve their fate. Believing in a just world also defends us from the threatening idea that the fate of a disabled person could befall us. Disabled individuals remind us of our own vulnerability to physical disorders. The fear and anxiety aroused by this thought leads us to avoid the disabled and initiate attempts to isolate and segregate them (Livneh, 1982).

Socialization practices. Early socialization practices stress the association betweeen illness and the infringement of health rules (Wright, 1983). Children are taught that disability and illness occur when these health rules are disregarded. This leads to the view that disability and injury result from a lack of care and the result is aversion toward the sick and disabled (Gellman, 1959; Livneh, 1982).

Sociocultural conditioning. Cultural emphasis on physical beauty and bodily perfection attested to, for example, by an abundance of commercial products designed to improve personal appearance, helps maintain negative feelings about those who deviate from accepted standards of beauty (Livneh, 1982).

The spread phenomenon. Wright (1983) accounts for the attribution of negative traits to the disabled in terms of the notion of spread. This refers to the association of a negative attribute such as disability with other negative characteristics. By virtue of their disability then, the

physically impaired are considered inferior on a variety of dimensions.

Psychodynamic mechanisms. Meng (reported in Barker et. al., 1953) attributes fear and avoidance of the disabled to three factors: (a) belief that physical disability is a punishment for evil and therefore the disabled person is evil and dangerous; (b) belief that a disabled person has been unjustly punished and hence is under pressure to do an evil act in order to balance the injustice and is therefore dangerous; (c) projection of one's own unacceptable desires onto the disabled, and hence the belief that he or she is evil and dangerous. The psychoanalytic concept of castration anxiety has been invoked to explain the formation of negative attitudes toward persons with disabilities (Livneh, 1982). This view stresses the reawakening of castration fears in the presence of individuals who have lost a body part or function. The concept of separation anxiety has also been advanced as an unconscious source of negative attitudes (Livneh, 1982). Seeing an individual who has lost a body function or body part according to this view triggers concerns and unresolved anxieties about separation from parental figures.

The Notion of Ambivalence and Response Extremity

The foregoing discussion documents the dual nature of the majority's attitudes, beliefs and behavior toward disabled people. The disabled are seen as having both positive and negative attributes--even as being imbued with saintly and demonic characteristics, and they are accorded both preferential and discriminatory treatment. Although the evidence of positive and negative attitudes about the disabled comes from aggregated data, it seems reasonable to assume that most people tend to have both types of sentiments about the disabled, i.e., are ambivalent about them. The conflictual nature of subjects' feelings and reactions is sometimes evident within the same experimental situation. Kleck et. al. (1966), for example, found that nondisabled college students who interacted with a disabled confederate in a wheelchair terminated the interaction sooner, showed greater motoric inhibition and were more emotionally aroused than subjects who interacted with a nondisabled confederate. These same subjects, however, indicated greater liking

for the disabled confederate, expressed opinions of which they believed he would approve and (when told the confederate's interview skills were being evaluated) tried to help him perform his job well by giving him longer interview responses than subjects in the nondisabled condition.

An important question concerns the behavioral implications of holding pro and anti attitudes toward the disabled. The theory of ambivalence-induced behavioral amplification maintains that these ambivalent attitudes may lead to extreme behavior in situations of contact with disabled others.

Studies of Reactions to Disabled Stimulus Persons: Evidence of Extremity Effects

A number of experimental studies have examined how the majority group responds to stimulus persons who are physically disabled or otherwise stigmatized (i.e., blacks and the mentally ill) in situations designed to elicit either positive or negative behavior toward the target. The usual finding has been that reactions to the outgroup target are more extreme than reactions to a nonstigmatized counterpart, in the direction consonant with the valence of the situation. These studies are reviewed below.

An early investigation conducted by Gergen and Jones (1963), reported a tendency on the part of normal adults to give polarized appraisals of a mentally ill stimulus person. Subjects interacted with an apparently normal or mentally ill confederate. It was found that evaluation of the mentally ill target was more extreme on the average than evaluation of the "normal" target when the confederate's behavior had favorable or unfavorable consequences for the subject. Gergen and Jones assumed that the extremity effet occurred because subjects had ambivalent feelings about the mentally ill, and resolved their ambivalence by amplifying the response that was consonant with the situation. However, these investigators did not attempt to test this mediation hypothesis directly by measuring attitudes toward the mentally ill. Another early investigation of polarized appraisals of outgroup members was done by Dienstbier (1970). White high school students read personality profiles of a white and a black stimulus person. One profile

portrayed a person with socially desirable traits while the other portrayed a person with undesirable qualities. The black stimulus person tended to be rated more positively than the white counterpart in the favorable condition and more negatively than the white in the unfavorable condition. More recently, Lineville and Jones (1980) had white college students evaluate the qualifications of black or white law school applicants with strong or weak credentials. If the credentials were strong, black applicants received more favorable assessments than white applicants; whereas if the applicants' credentials were weak there were differences in the opposite direction. Lineville and Jones ascribed the polarization phenomenon to a difference in the complexity of prior knowledge structures concerning the (black) outgroup and one's own (white) ingroup, but they provided no direct evidence in support of this cognitive complexity explanation.

Katz and associates have examined conditions under which amplified positive or negative responses are made to outgroup targets. In parallel studies that employed disabled versus nondisabled or black versus white stimulus persons it was shown that unintentional harm-doing can lead to either extreme denigration or extreme compensatory helping of an outgroup victim, depending on which type of response is made available to the harm-doer. Here we describe only the studies by Katz and others that used a disabled (always depicted as wheelchair-bound) stimulus person.

Katz, Glass, Lucido and Farber (1979) investigated the effect of unintentional harming on subsequent willingness to help a victim. In one study, adult subjects were induced to deliver noxious or mild noise signals to a disabled or nondisabled confederate for "errors" on an ESP task. Eventually subjects were handed a note from the confederate asking if the subject could help the confederate finish a research project by performing a very tedious task. There was a tendency for more help to be given to the confederate in the noxious noise/wheelchair condition than in any other condition. However, the interaction effect was significant only for older subjects. In a follow-up study a disabled or nondisabled tester, posing as a graduate research assistant,

administered a "personality test'" to college students. Later, all subjects were informed that the test contained a covert "lie scale" based on the principle of improbable responses to certain self-description items. In addition, half the sample received private feedback that their questionnaires were not usable because of high "lie" scores and the other half were told that their questionnaires were usable. It was conveyed to all subjects that unusable questionnaires meant the experimenter would have to find time to run additional subjects. When subjects later had an opportunity to do a favor for the confederate, there was a significant interaction effect in which those led to believe they had inconvenienced the disabled tester volunteered more assistance than subjects in any other condition. A similar amplification effect was obtained in a study of unintentional harm-doing when instead of compensatory helping the available response option was an opportunity to denigrate the victim (Katz, Glass, Lucido and Farber, 1977). Undergraduate subjects were induced to deliver mild or noxious noise signals to a disabled or nondisabled confederate for "errors" during an ESP task. Post harm-doing impression ratings of the confederate revealed an interaction effect in which the greatest amount of denigration occurred in the noxious noise/wheelchair condition.

A few investigations have found evidence of positive but not negative response amplification when subjects were required to evaluate disabled or nondisabled persons who appeared to have socially desirable or undesirable traits. In a study conducted by Scheier, Carver, Schulz, Glass and Katz (1978), college students read transcripts of interviews with paraplegic or nonparaplegic persons who were depicted favorably or unfavorably. It was found that the disabled stimulus person was rated more positively than the nondisbled one in both the favorable and unfavorable transcript conditions. In addition, subjects were given Fenigstein, Scheier, and Buss' (1975) test of private and public self-consciousness. Private self-consciousness enhanced the tendency for the paraplegic target to be evaluated more positively than the nonstigmatized target. Public self-consciousness, however, was not related to impression ratings, suggesting that the

positive evaluations of the disabled target were not mediated by a need to present the self in a socially desirable manner.

Carver, Glass and Katz (1978) presented undergraduate subjects with unfavorable transcripts of an interview with either a nonstigmatized person or a paraplegic. Subjects were also randomly assigned to either a bogus pipeline or no bogus pipeline condition. The results indicated that the disabled target was rated more positively than the nonstigmatized target in both the bogus pipeline and no pipeline conditions. The similarity of results for both pipeline conditions, like the Scheier et. al. (1978) results for the public self-consciousness variable, suggest that the favorable evaluations were not controlled by a desire to behave in a socially approved way. (This study also employed a black stimulus person. In contrast to the other two targets, evaluations of the black were much less positive when subjects were on the pipeline than when they were off it.)

The positive prejudice toward the disabled found in these two studies has been called a sympathy effect by Carver et. al. (1978). Scheir et al. (1978) note that sympathy effects are likely to occur when individuating and personal information about a target is presented. Although an individual may have ambivalent feelings toward a disabled person, these authors maintain that the negative component of the attitude may lead to guilty feelings when the individual is faced with a personalized target. The individual may try to compensate for the guilt by denying his or her negative feelings and by rating the disabled target more positively than the nondisabled target. Scheir et. al (1978) also note that sympathy effects may occur when targets are individuated because personalization makes the subject aware of limiting factors which confront disabled individuals. According to Kelley's (1971) augmentation principle, the disabled individual is given credit for overcoming inhibiting environmental influences and is consequently accorded a more positive evaluation.

Gibbons, Stephan, Stephenson and Petty (1980) noted that the positivity effect obtained

by Scheier et. al. and Carver et. al. may have occurred in part because a relatively non-involving paper and pencil procedure was used. They reasoned that a more involving procedure would lead to amplification of both positive and negative responses. In a series of studies, Gibbons et. al. first replicated the interview transcript experiments, but using videotaped or live interviews instead of the transcripts. As in the transcript studies, subjects rated the disabled target more favorably regardless of whether the confederate had a negative or positive self-presentation. That is, observing a disabled person speaking about herself rather than reading an interview transcipt still produced a positivity efffect (which they attributed to sympathy). These results led Gibbons et. al. to reason that amplified responses rather than simple positivity would only occur if the disabled target's behavior had direct personal consequences for the subject (as in the Gergen and Jones, 1963, experiment where the behavior of a mentally ill person had satisfying or frustrating consequences for the subject). To test this notion, Gibbons et al. next had individual subjects interact with a disabled or nondisabled confederate who performed well or poorly at a cooperative task. The disabled confederate was evaluated more positively than the nondisabled one in the success condition and more negatively in the failure condition. The fourth study revealed that this amplification effect occurred only when the confederate's behavior had hedonic relevance for the subject. Hedonic relevance was manipulated by telling subjects that their scores would be combined with the confederate's to form a total team score. In the nonhedonically relevant condition subjects were told that their scores would be considered independently.

Thus it appears that in the experimental paradigm where the disabled or nondisabled stimulus person is presented in a favorable or unfavorable light that person's behavior must have hedonic relevance for the subject--as in the Gibbons et . al. and Gergen and Jones investigations--in order for amplification effects to occur. But although amplification of responses toward disabled individuals has been demonstrated , the role of ambivalence as a mediator of this phenomenon has not as yet been tested adequately. To do this it is necessary to

measure individual differences in ambivalence about disabled people and relate these differences to extremity of behavior toward a disabled target person. The study by Katz, Glass, Lucido, and Farber (1977) on denigration of a victim of unintentional harm-doing was a partially succesful effort of this sort. Ambivalence toward the disabled was measured by using split semantic differential scales for assessing traits. Subjects rated the group "The physically handicapped" on 16 unipolar evaluative scales. Half of the scales had positive trait labels and half had polar-opposite negative labels. It was found that individual differences in ambivalence scores, defined as the tendency to get high scores on both the positive and negative trait-attribution scales, were somewhat predictive of the extent to which subjects denigrated a disabled person whom they had just harmed.

The present research

Ambivalence measure

The Katz et. al. (1977) study just described represents the only previous attempt at investigation of the role of individual differences in ambivalence as a mediator of extreme responses toward the disabled. Since the role of conflicted attitudes in producing response extremity is a crucial tenet of the theory, it would seem that further evidence is needed to firmly establish the role of ambivalence as a mediator. In addition, developing a measure designed specifically to assess individual differences in ambivalence toward disabled persons is required since none presently exists. Most existing scales measure attitudes toward disabled individuals along a single dimension of acceptance-rejection (e.g. Yuker, Block & Younng, 1970; Cowen, Bobrove, Rockway & Stevenson, 1967; Cowen, Underberg, & Verrill, 1958). An exception is the multidimensional questionnaire developed by Siller et al. (1967), but this instrument is not specifically geared to measure ambivalent attitudes. In order to examine the role of individual differences in ambivalence as a mediator of behavioral extremity, a questionnaire designed to measure pro and anti attitudes toward the disabled as independent dimensions was constructed. The

two attitude scales proved to be internally consistent and uncorrelated (as described in the METHOD section). Ambivalence was defined as a subject's tendency to obtain high scores on both scales.

Experimental situation

The experimental situation employed was a modification of the design used by Gibbons et. al. in which a disabled or nondisabled confederate is responsible for subjects' success or failure on a team task. A situation high in hedonic relevance was used since Gibbons et. al found evidence of behavioral extremity only when subjects were personally affected by the confederate's actions. Subjects evaluated the personality of the confederate after experiencing success or failure on the team task. The use of the attitude scales in conjunction with the cooperative experimental task allows a direct test of the notion that individual differences in ambivalence toward disabled people in general may under certain conditions mediate response extremity toward a disabled stimulus person.

The disability chosen for this study was confinement to a wheelchair. This device was used because it is a convenient way of indicating major physicall dysfunction. The wheelchair is an internationally recognized symbol of disability, thereby reflecting a common understanding of the basic functional limitations of people who use wheelchairs. Moreover, in studies that asked nondisabled subjects to state their relative liking for people with various types of physical disorder, those depicted in wheelchairs tended to be ranked in the middle (e.g., Alessi & Anthony, 1969; Richardson & Emerson, 1970; Shears & Jensema, 1969). This suggests that reactions to a wheelchair-defined disability may be taken as reasonably representative of reactions to a range of physical disorders.

Hypotheses

Amplification effect. Since nondisabled people are assumed on average to be more ambivalent toward the disabled than the nondisabled, the first hypothesis states that there will be

an interaction effect of success/failure and disabled/nondisabled confederate on subjects' impression ratings such that the disabled confederate will receive more extreme ratings than the nondisabled confederate. That is, in the success condition the disabled confederate will be evaluated more positively than the nondisabled confederate and in the failure condition the disabled confederate will receive more negative evaluations than the nondisabled confederate.

Ambivalence-amplification effect. The second hypothesis states that individual differences in attitudinal ambivalence toward the disabled (defined as the tendency to get high scores on both the pro and anti scales) will be correlated with ratings of the disabled confederate. Ambivalence will be associated with favorable ratings of the confederate in the success condition and with unfavorable ratings of the confederate in the failure condition. In addition, it is predicted that neither pro nor anti scores alone will be related to the evaluation of the confederate.

2. METHOD

Construction of Pro and Anti Disability Scales

A questionnaire was developed to measure favorable and unfavorable attitudes toward the disabled. The various dimensions of attitude that emerged from the literature review in Chapter 1 were employed in the writing of items. The pool of Pro items for example were written to reflect research findings which indicate that disabled individuals are believed to possess certain favorable traits and are believed to be deserving of special care and consideration. Additional Pro items referred to findings which suggest that disabled persons are perceived to be similar in important respects to nondisbled persons. The pool of Anti items were based on findings that the disabled evoke anxiety in interpersonal contact, are thought to possess various negative characteristics, are rejected on an intimate level and are perceived to be different in important respects from nondisabled persons. Existing scales such as those by Yuker and Block (1986) and Sillar et. al. (1967) were also consulted in the writing of items. A Likert scale format was used in which respondents indicate the extent of their agreement or disagreement with each statement on a six point scale ranging from +3 ("Agree strongly") to -3 ("Disagree strongly").

A decision was made to measure attitudes toward physically disabled persons in general rather than toward specific disability groups. Although variables such as the severity and visibility of impairment influence reactions to disablilty, these reactions are probably general to some extent and cut across a diverse array of physical conditions. This assumption has also been made by Yuker, Block and Younng (1970) in the development of their Attitudes Toward Disabled Persons Scale. In addition, factor analytic studies conducted by Sillar and associates have shown that similar attitude dimensions emerge in investigations of attitudes towards specific disability groups (Ferguson, 1970; Siller, 1970; Siller, Ferguson, Vann and Holland, 1967; Vann, 1970). Similar attitudinal factors have been found for example for such conditions as amputation, blindness, cosmetic problems, deafness and obesity. Thus attitude dimension appears to be a more

potent organizer of attitudes than disability type. The pro and anti items on the present questionnaire then refer to physical disability in general although some items give examples of disabling conditions such as blindness, deafness, paralysis and extreme deformities. Additionally, the instructions for the questionnaire indicate that the term "disabled" refers to a variety of physical disorders.

Item analysis and reliabilities

Seventeen Pro and eleven Anti items were administered to a sample of 31 office workers. Items which were significantly correlated with the corrected total score on the scale for which they were written but were not correlated with the total score for the opposite scale were retained. This analysis resulted in 12 acceptable pro items but several anti items were omitted or revised and new Anti items were written.

Next, the 12 pro items and 18 rewritten and new anti items were administered to 50 Brooklyn College students along with the Marlowe-Crowne Social Desirability Scale during the summer session of 1986. Correlations between these versions of the pro and anti scales and the Marlowne-Crowne Social Desirablity Scale were near zero. After some further modifications, the final versions of the two scales, consisting of 10 pro and 12 anti items, were administered to a new sample of 70 Brooklyn College students during the fall semester of 1986. The resulting item-total scale correlations for the sample of 70 Brooklyn College students are shown in Appendix A on pages 51-54.

The pro items in the final scale deal with (a) civil rights issues (e.g.,"Big companies should make special efforts to hire qualifed disabled people" and "College students who are disabled are entitled to special facilities such as ramps, automatic doors, reserved elevators, etc"); (b) favorable personality attibutions (e.g., "Disabled people often make good friends because they are sympathetic and caring" and " Disabled people are often good people to hire because they try hard to succeed"); and (c) the notion that the physically disabled may be similar to the majority (e.g.,"

Except for their particular physical problem, some disabled people are the same as anyone else" and "There is no reason why people confined to wheelchairs should not be encouraged to become lawyers, doctors or teachers if they have the necessary intelligence").

Most of the anti items in the final scale refer to traditional negative stereotypes of the disabled. The disabled are described in these items as overly aggressive, moody, dissatisfied with themselves, easily discouraged, and expecting special treatment from others. A few additional items refer to the discomfort experienced by the nondisabled in the presence of those with physical impairments (e.g., "Even without meaning to, people with deformities often make me uncomfortable" and "People with severe disabilities sometimes insist on entering situations where they make others feel uncomfortable"). Internal consistency for the final scale as measured by Cronbach's alpha was .71 for the pro scale and .76 for the anti scale. The Product Moment correlation between the total pro and the total anti scores was -.10 indicating that two relatively independent dimensions of attitudes toward the disabled were identified. (See Appendix B for questionnaire on pages 55-59.)

Administration of The Positive and Negative Attitudes Toward Disabled Persons Questionnaire

The Positive and Negative Attitudes Toward Disabled Persons questionnaire was administered to the majority of introductory psychology students at Brooklyn College two to three weeks before the experimental portion of the study began. The questionnaire was completed by 109 males and 187 females during the spring semester of 1987 and by 16 males and 26 females during the summer semester of 1987. The average ages of these two samples were 20 and 21 years respectively. Of the total sample of 338 subjects, 191 were white (56.6%), 78 were black (23.08%), 28 were Hispanic (8.28%), 13 were Asian (3.85%), 16 were classified as other (4.73%), and racial data were not available for 12 subjects (3.55%).

The questionnnaire was administered in the Introductory Psychology classrooms by a 26 year old female who did not take part in the experimental portion of the study. She introduced the

questionnaire by telling subjects that the principal investigator was interested in assessing the public's attitudes toward disabled people since little research had been conducted in this area. After subjects had completed the questionnaire, they were asked to write the last four digits of their social security number on the front of the form. They were told that this information was required in case another questionnaire was administered at a later time and it became necessary to match the two. Subjects who participated in the experiment also wrote the last four digits of their social security number on the confederate evaluation form so that the attitude scores could be matched with the experimental ratings of the confederate. It was expected that this administration of the questionnaire would again yield two independent components of attitudes toward the disabled.

Experimental session

Overview

The experiment employed a 2 x 2 factorial design. Subjects interacted in a group setting with other experimental participants and an apparently disabled or nondisabled confederate (physical condition of the confederate variable). In half of the sessions the confederate helped the group to succeed on the experimental tasks and win a prize while in the other sessions the confederate was responsible for the group's failure (game outcome variable). After this portion of the experiment was completed subjects evaluated the personality of the confederate.

Subjects

The subjects were 45 male and 72 female undergraduates attending Brooklyn College durng the spring and summer semesters of 1987. They participated in the experiment in order to fulfill an experimental participation requirement for their Introductory Psychology course. One subject was omitted from the data analysis because he did not believe the confederate was disabled. Thus the total sample consisted of 117 subjects of whom 99 were from the spring semester and 18 from the summer semester.

Confederates

The confederates were two college-aged females judged to be above average in attractiveness by two consultants. In the disabled condition the confederate was seated in a manually operated wheelchair. She wore a long skirt so that her legs were almost completely covered and her feet and legs were positioned in such a way as to appear weak and atrophied. In the nondisabled condition the confederate did not use a wheelchair. All confederates wore a pair of horn-rimmed glasses and a minimal amount of make-up so they would appear less attractive than they did normally.

Procedure

Subjects were run in groups of two or three by a 27 year old female graduate student. The number of subjects run in a session depended on how many students signed up to participate in that particular session. When subjects arrived at the laboratory the confederate, posing as a subject, was already waiting outside the door. The experimenter opened the door and the confederate entered the room with the subjects. In the disabled condition the experimenter held the door open while the confederate wheeled herself into the room. This allowed subjects to see the confederate manipulate the wheelchair and helped to make the simulation of the physical disability more convincing.

Subjects were seated in chairs with writing arms which were placed in a circle in the center of the room. The disabled confederate was directed to position her wheelchair next to a vacant chair. In the nondisabled condition the confederate sat in one of the chairs. A card with a letter was displayed on the writing arm of each chair so that it could easily be seen by all subjects. This was done so that each subject could be identified by a letter.

When subjects were seated, they were given the following introduction:

> "This experiment is concerned with group performance. We are interested in whether individuals perform simple tasks better alone or in the presence of others. The theory we are testing is called Social Facilitation.

There hasn't been much recent work testing whether this theory is really correct or not and we're interested in finding out how strong the effect really is. We're going to have you work individually on some tasks and then we're going to compare your performance with the performance of individuals who worked on these tasks in isolation. This way we'll be able to determine how much of a performance difference there is when people work in the presence of others.

We're also interested in another factor which might affect your performance. Some research suggests that how well people are acquainted with individuals in a group may effect how hard they work and it may also effect their feelings about the tasks. For some of the groups that we're running we're going to have the group members engage in a get acquainted session. For other groups this session will be omitted. Groups which have a get acquainted session will later fill out a questionnaire which will ask questions about their impressions of the group members and their feelings about the tasks. We will then be able to determine whether some familiarity with group members is an influential factor in group performance on these tasks.

Your group is one of the groups that will have a get acquainted session. We'd like you to develop a general impression of your group members and we'll accomplish this by having each of you say a few words about yourself. You can briefly tell us what major area you have chosen to study and what you like to do in your spare time. This should be enough information for you to develop a general impression of each other. After this I'll describe the tasks to you."

The subjects then introduced themselves. The confederate always spoke second. In the nondisabled condition she said:

"My name is Grace. I'm a sophomore and I'm a film major. What do I like to do in my spare time? Well, I like to read a lot, I like going to the movies and I also play the guitar."

In the disabled condition the confederate said:

"My name is Grace. I'm a sophomore and I'm a film major. What do I like to do in my spare time? Well there are a lot of things I'd like to do but can't because of an illness I had as a child that left me in this wheelchair, but I do like to read a lot, I like going to the movies and I also play the guitar."

The disability was mentioned since some studies indicate that a more favorable impression of a disabled person is formed if the individual acknowledges her disability (Hastorf, Wildfogel & Cassman, 1979; Belgrave & Mills, 1981).

After the subjects introduced themselves, the experimenter said:

"The experiment as I said earlier concerns whether the presence of others has an effect on the performance of simple motivational tasks. I'm going to give you three separate tasks on which to work. These tasks are unrelated to intelligence; they reflect how hard an individual is willing to work. Previous

research has shown that everyone can do well on these tasks as long as they're willing to do their best.

In order to make things more interesting for you we decided that if the group's combined score exceeds a certain score, we'll give everyone a New York State lottery ticket and a chance to win a million dollars. If everyone does their best the group should have no problem winning the lottery tickets.

In our analysis of the results of the experiment we're going to see if individuals in the groups did better on these tasks than individuals who worked in isolation."

The experimenter then gave three booklets to each subject and went on to explain the tasks. Each booklet contained one task. The first task involved crossing out the letter "o" wherever it appeared in a printed paragraph. Subjects were told to put a cross through the letter in each word. The second task was a digit-letter substitution problem. At the top of the test sheet there was a key which paired nine digits and letters. Subjects were to fill in the appropriate letter for each digit in blank spaces arranged in rows. The last task was a connect-the-numbers problem. Subjects were told to draw a line connecting a series of numbers in order from the number one to the number eighty. Subjects were told that each task would be timed for three minutes. This was a sufficient amount of time so that subjects were able to perform a major portion of the tasks but no one was able to complete them (the tasks are presented in Appendix C on pages 60-68).

The experimenter then told the subjects to begin the first task. After three minutes had elapsed the experimenter told the subjects to stop working. She collected the task and told them she would score it while they worked on the next task. While the subjects worked on the second task the experimenter sat behind a partition that was in the back of the room to "score" the task. The partition was approximately six feet tall and six feet wide; it was large enough so that the subjects could not see the experimenter. At the end of the three minutes the second task was collected and the experimenter again told the subjects she would score it while they worked on the third task. After the third task had been completed and collected the experimenter told the subjects that she would need a few minutes to score the last task, compute a total score for each

subject and compute the group's score. The subjects were asked not to speak to each other during this time. This was done so they would not discuss their performance with each other. The experimenter then went behind the partition and shuffled papers so it would appear as if she were scoring the task and tabulating scores. This lasted for approximately three minutes.

After the "scoring and tabulation" had been done the experimenter told the group that she would give each person a summary sheet which contained information about the group's performance. She said the sheet would list each person's individual total score as well as the scores of the other subjects. The summary sheet each subject received indicated that the subject's total score for all three tasks was 92 points. The scores of the other subjects were also listed but without identifying information; subjects therefore did not know which group member received which score. In both the failure and success conditions the subject's score as well as all but one of the other scores were in the same range. The exceptional score was either above or below the others, depending on the experimental condition (see Appendix D on page 69 for scoring system).

In the failure condition the exceptional score was 58 points--appreciably lower than the other scores. After the subjects had read the scores, the experimenter said:

> "I'm sorry but the group did not win the lottery tickets. Your combined score was not high enough. Almost everyone scored within the average range but the score of 58 points was very low. If that score had been higher and similar to the other scores the group would have won the lottery tickets."

After the experimenter said this, the confederate addressed the group in a mildy negative manner by saying:

> "I guess I blew it with that low score. Oh well, it was only for a lottery ticket."

In the success condition the exceptional score was 126 points--appreciably higher than the other scores. After the scores had been read, the experimenter said to the group:

> "Congratulations! Your combined score was high enough for the group to win the lottery tickets. Everyone scored within the average range but that score of 126 points was very high and it helped push the group's score over the limit."

> Turning to the confederate she said: "I think you got that score. It 's probably the best score I've seen so far."

Post-task questionnaire

After the group had been informed of their success or failure, the experimenter continued:

> "I told you before that we were interested in whether familiarity with the group affects performance. I'd like to take some time now and have you indicate your general impression of the group members. Ideally we'd like to have you rate each person in the group but we realize that that would be too tedious and time consuming. Therefore, each of you will rate a different person. This way we'll have a recorded impression of everyone in the group but each of you will only have to rate one person. The letter corresponding to the person you are to rate will be written on the top of your form. The questionnaire also has a second part. This portion asks questions about your experience in the experiment."

The experimenter went on to explain the format of the post-task questionnaire and then told the subjects to begin. The letter assigned to the confederate was on each questionnaire so that all subjects rated the confederate.

The post-task questionnaire (found in Appendix E on pages 70-76) contained several parts. Part 1 consisted of nine 36-point bipolar trait scales. The scales consisted of a horizontal line of 36 dots with six labels representing various points on the scale. One scale for example had the following labels: "Extremely motivated, moderately motivated, somewhat motivated, somewhat unmotivated, moderately unmotivated, extremely unmotivated." The subject was instructed to circle the dot which most closely expressed his or her opinion. Four of the nine trait scales were reversed with the favorable trait presented on the left side of the scale. The bipolar traits were chosen to reflect evaluation along three a priori dimensions: perceived motivation (hardworking-lazy, motivated-unmotivated), perceived competence (competent-incompetent, intelligent-unintelligent) and perceived likeability (friendly-unfriendly, likable-unlikeable, considerate-inconsiderate, helpful-unhelpful, dependable-undependable).

Part 2 consisted of six bipolar adjectives which also employed a 36-point rating scale (items 10-15). These items were intended as a check on subjects' perceptions of the

confederate's physical condition. Five of the adjective pairs were a check on the disability manipulation. These adjectives were: similar to most people-different from most people, athletic-unathletic, strong-weak, active-passive and graceful-awkward. The sixth adjective pair, attractive-unattractive assessed perceptions of the confederate's level of attractiveness.

The third part of the post-task questionnaire (see Appendix E, pages 75-76) contained several items intended as additional manipulation checks. They assessed subjects' perception of the tasks as a measure of motivation, subjects' satisfaction with their own performance, and perceived difficulty of the tasks. Two filler items were also included. These items, with the exception of Item 5, employed a 36-point bipolar trait scale with four labels representing various points on the scale. One scale, for example, had the following labels: "Extremely satisfied, somewhat satisfied, somewhat unsatisfied, extremely unsatisfied". The fourth manipulation check item (Item 5) assessed attribution of responsibility for the game outcome. Subjects were presented with two possible reasons why the group might have won or lost the game and were told to check an alternative. One alternative attributed responsibility for the team outcome to the group as a whole while the other choice indicated that the team's success or failure was due to the performance of one or two people. The filler items (item 1 and Item 2) asked about subject's awareness of others in the room and assessed feelings of competition during the experiment.

After the questionnaire had been completed, experimental credit forms were given out and subjects who had been in the success condition received their lottery tickets. The subjects were then fully debriefed. They were told that the confederate was an experimental accomplice and subjects in the disabled condition were shown that she was not disabled. The confederate then left the room so she would not be informed of the experimental hypotheses. The experimenter went on to discuss why deceptive procedures are employed in experiments, and the true purpose of the experiment as well as all deceptions were then revealed. After the debriefing, subjects who had been in the failure condition received lottery tickets and all subjects were then dismissed.

3. RESULTS

Attitudes Toward Disabled Persons Questionnaire

It was expected that two independent dimensions of attitudes toward the disabled would again emerge in the new sample of Brooklyn College students. It was also expected that the item-total scale correlations for individual items would be similar to those obtained in the previous sample and that the scales would again prove to be internally consistent.

The Product Moment correlation between the total pro and total anti scores for the entire sample of 338 subjects was -.11 The independence of the pro and anti scales therefore was again demonstrated (the correlations for the spring and summer samples were -.13 and .06 respectively).

The item-total scale correlations for the total sample can be found in Appendix F on pages 77-80. These correlations are similar to those obtained in the earlier sample with the exception of pro items 2 and 4 which correlate more highly with the anti scale than with the pro scale in this sample. The item-total scale correlations for the separate spring and summer samples can be found in Appendix G on pages 81-84 and in Appendix H on pages 85-88.

Internal consistency for the total sample as measured by Cronbach's alpha was .69 for the pro scale and .80 for the anti scale thus indicating that the two scales again proved to be internally consistent (the alphas for the spring sample were pro=.69 and anti=.81; the alphas for the summer sample were pro=.70, and anti=.72).

Experimental Results

The number of subjects who participated in each of the four experimental conditions was not identical. One reason for this was that subjects were randomly assigned to each condition and this naturally resulted in an unequal distribution. In addition, more subjects were run in the disabled success and disabled failure conditions so that there would be a sufficient number of

subjects in these conditions to allow correlations to be computed between ambivalence scores and evaluation scores.

Manipulation Checks

Several items on the questionnaire served as manipulation check items. The ratings for these questions were analyzed using a 2 X 2 (physical condition of the confederate X game outcome) analysis of variance. The most important manipulation check question concerned whether subjects held the confederate responsible for the group's success or failure. The format of this item presented subjects with two alternatives; one alternative attributed responsibility for the team outcome to the group as a whole while the other alternative maintained that the team's success or failure was due to the performance of one or two people. In the failure condition 100 percent of the subjects indicated that the confederate was responsible for the group's failure. In the success condition 72 percent of the subjects felt the confederate's performance was the decisive factor in the group's success, while 28 percent indicated that the group won the lottery tickets because everyone in the group performed well. It appears then that the responsibility manipulation was adequate for most subjects in the success condition.

Subjects had been told that success on the experimental tasks would be a function of how much effort they exerted. In order to determine if subjects did see the tasks as a measure of motivation, they were asked to indicate the extent to which they believed the tasks measured how hard one is willing to work. This analysis yielded no significant main effects or interaction. Mean ratings of the adequacy of the tasks as a measure of motivation revealed that the tasks were seen as a moderately good measure.

A third manipulation check item assessed whether the experimental tasks were seen as simple or complex. Difficulty ratings of the tasks resulted in a significant main effect for game outcome. Subjects in the success condition felt the tasks were easier (M=30.42) than subjects in

the failure condition (M=27.75), F(1,113)=4.00, p<.05. The ratings in general, however, indicated that the tasks were perceived to have been moderately easy.

A fourth manipulation check item concerned satisfaction with personal performance. Subjects had been told that their performance on the tasks fell within the average range of scores. Satisfaction ratings resulted in a main effect for game outcome. Subjects in the success condition were somewhat satisfied (M=24.19) while subjects in the failure condition reported more satisfaction with their performance (M=28.58), F(1,113)=10.41, p<.01.

Five adjective pairs were included to check whether subjects perceived the apparently disabled confederate as disabled. The first item asked subjects to rate the extent to which the confederate was similar to or different from most people. A main effect for physical condition was found. The nondisabled confederate was seen as more similar to other people (M=24.94) than the disabled confederate (M=19.92), F(1,113)=8.45, p<.01. Significant effects were also found for athletic ratings. The nondisabled confederate was rated as more athletic (M=16.24) than the disabled confederate (M=10.39), F(1,113)=12.86, p<.001. A significant interaction was present however, F(1,113)=5.36, p<.05 (see Table1). Tests of simple effects indicated that the confederate in the nondisabled success condition was seen as more athletic than the confederate in the disabled success condition, F=(1,113)=17.11, p<.001. An examination of the means for this interaction reveals that although the difference in athletic ratings within each disability condition was not significant (i.e., the nondisabled confederate in the success condition was not rated significantly different from the nondisabled confederate in the failure condition and the disabled confederate in the success condition was not rated significantly different than the disabled confederate in the failure condition), it appears that the success-failure manipulation had more of an effect on athletic ratings in the nondisabled condition than in the disabled condition. When the the nondisabled confederate helped the group to succeed, she was perceived to be more athletic than

when she was responsible for the group's failure. Ratings of the disabled confederate on the other hand, do not appear to have been affected by the game outcome.

TABLE 1. Mean Athletic Ratings

	Physical condition of confederate	
Game Outcome	Nondisabled	Disabled
Success	18.88 (16)	8.95 (37)
Failure	13.89 (18)	11.54 (46)

Note. Numbers in parentheses are cell Ns. Higher scores indicate higher ratings of athleticness

Analysis of the adjective pair weak-strong revealed that the disabled confederate was perceived to be weaker (M=18.74) than the nondisabled confederate (M=23.25), $F(1,113)=8.51$, $p < .01$. No significant effects were found for the adjective pairs active-passive and graceful-awkward, $Fs < 1$. Overall however, it appears that the simulation of the physical disablity was successful. A final item was included as a check on the attractiveness of the confederates. A main effect was found for physical condition such that the disabled confederate was seen as more attractive (M=26.39) than the nondisabled confederate (M= 23.24), $F(1,113)=5.31$, $p<.05$. The individual means for each of the four conditions indicated that attractiveness ratings fell between "somewhat attractive" and "moderately attractive". The confederates then were not perceived to have been exceptionally attractive.

Reliability of Nine-Item Evaluation Scale

Consistency among the nine trait items on which subjects evaluated the confederate was .63 as measured by Cronbach's coefficient alpha. Since the items were internally consistent they could be combined for use as a single scale; that is, subjects' ratings on the nine items were summed to yield a composite evaluation score which was the dependent variable for testing hypotheses[1]. Coefficient alphas for each experimental condition can be found in Table 2.

TABLE 2. Coefficient Alphas for The Confederate Evaluation Scale for each Experimental Condition

	Physical condition of the confederate	
Game Outcome	Nondisabled	Disabled
Success	.86 (16)	.66 (37)
Failure	.76 (18)	.78 (46)

Note. Numbers in parentheses are cell Ns.

[1] The nine trait items were originally chosen to reflect evaluation along the a priori dimensions of perceived motivation, perceived intelligence and perceived likeability. The dimensions were used in order to guide the selection of items so that a representative sample of items from the evaluation domain would be obtained. The intention was not to use the dimensions as individual factors or subscales and since they did not emerge as three internally consistent factors, the individual items were combined for use as a single scale.

Confederates

Two confederates were used. Because the numbers of subjects who participated with each confederate in each condition were not equal, these numbers are presented in Table 3.

TABLE 3. Number of Subjects Participating with each Confederate in each Experimental Condition

	Physical condition of the confederate	
Game Outcome	Nondisabled	Disabled
Success	A=5	A=11
	B=11	B=26
Failure	A=5	A=10
	B=13	B=36

Note. Letters refer to the two confederates.

Test of Hypothesis 1

The first hypothesis predicts that there will be an interaction effect of game outcome and physical condition on subjects' impression ratings of the confederate such that the apparently disabled confederate will receive more extreme ratings than the apparently nondisabled confederate. This hypothesis was tested using a 2 X 2 X 2 (physical condition of the confederate X

game outcome X confederate analysis of variance.

There were three significant main effects but no interactions. The main effect for game outcome indicated that evaluation of the confederate was higher in the success condition (M=253.91) than in the failure condition (M=223.92), $F(1,111)=20.48$, $p<.001$. The physical condition main effect revealed that the apparently disabled confederate received higher ratings (M=241.99) than the nondisabled confederate (M=226.74), $F(1,111)=5.73$, $p<.05$. The means and standard deviations for each experimental condition are shown in Table 4. The confederate main effect indicated that Confederate A was evaluated more positively (M=251.74) than Confederate B (M=232.37), $F(1,111)=5.87$, $p<.05$. The main effect for the confederate variable can be regarded as irrelevant since there was no interaction of the confederate variable with the other variables. (In addition to this analysis, a multivariate analysis of variance was done on the nine component items of the evaluation scale. The results are summarized in Appendix I on page 89.)

TABLE 4. Mean Evaluation Ratings of the Confederate

	Physical condition of the confederate	
Game Outcome	Nondisabled	Disabled
Success	249.50(16) SD=43.40	255.81(26) SD=27.76
Failure	206.17(18) SD=36.87	230.87(46) SD=37.49

Note. Numbers in parentheses are cell Ns. Higher scores indicate more favorable evaluations.

Thus the results do not support the extremity hypothesis. Instead they show a positivity effect: across both outcome conditions the disabled confederate is evaluated more favorably than the nondisabled one (suggesting that sympathy was the main determinant of subjects' evaluations of the confederate regardless of the latter's performance at the task). The main effect for outcome may be interpreted as a further check on the success-failure manipulation.

As mentioned earlier, 28 percent of the subjects in the success condition did not attribute primary responsibility for the task outcome to the confederate (although all of the failure condition subjects did.) To see whether the results would be the same if one eliminated from the analysis these subjects whose perception of responsibility was ambiguous, a 2 X 2 (physical condition of the confederate X game outcome) analysis of variance was carried out on the smaller sample. The findings replicated those of the original analysis, with significant main effects for

disability and outcome but no significant interaction effect.

Test of Hypothesis 2

The second hypothesis states that (a) individual differences in attitudinal ambivalence toward the disabled will be correlated with ratings of the disabled confederate, and (b) neither pro nor anti scores alone will be related to the evaluation of the confederate.

Ambivalence was defined as the product of the subject's standardized pro and anti scores (with a constant added to the standardized scores to make them all positive). It was predicted that ambivalence scores would be associated with favorable ratings of the confederate in the success condition and with unfavorable ratings of the confederate in the failure condition and that pro and anti scores alone would be unrelated to confederate ratings in either condition. Pearson correlations were computed between attitude scores and evaluations of the disabled confederate in the success condition and in the failure condition. As shown in Table 5, in the success condition only the anti scores were significantly associated with evaluations of the confederate ($r=-.39$, $p<.05$); the higher the anti score, the more negatively the confederate was evaluated [2]. There were no significant correlations in the failure condition. Thus the ambivalence prediction was not upheld in either outcome condition.

[2] The number of subjects reported in the disabled success and disabled failure conditions for this correlational analysis, differs from the number of subjects reported earlier in these conditions. This occurred because every subject who participated in the experiment had not completed the Attitudes Toward Disabled Persons Questionnaire. The numbers reported here reflect the number of subjects for whom data were available for both the experiment and questionnaire.

TABLE 5. Pearson Correlations Between Attitude Scores and Evaluations of the Disabled Confederate

	Experimental Condition	
Score	Success (n=29)	Failure (n=32)
Ambivalence	-.26	.21
Pro	.01	.26
Anti	-.39*	.00

*p<.05 (For a two-tailed test)

Other findings

Two filler questions in line with the social facilitation cover story were included in the postexperimental questionnaire. The first question asked subjects to indicate the extent to which they were aware that they were working with other people. A 2 x 2 (physical condition of the confederate X game outcome) analysis of variance resulted in an interaction, $F(1,113)=4.44$, $p<.05$. Simple effects tests indicated that subjects in the disabled success condition reported more awareness than subjects in the nondisabled success condition, $F(1, 113)=5.38$, $p<.05$, whereas in the failure condition the disability variable produced no difference in awareness. The means for this interaction are shown in Table 6. A possible explanation of this finding is that the perception

of the confederate in the disabled success condition as a competent person in a wheelchair caused the confederate in this condition to emerge as a highly distinctive and therefore highly salient stimulus. The distinctiveness of the confederate may then have influenced subjects' retrospective awareness reports.

TABLE 6. Mean Ratings of Awareness

	Physical condition of the confederate	
Game Outcome	Nondisabled	Disabled
Success	21.88 (16)	28.49 (37)
Failure	26.50 (18)	24.91 (46)

Note. Numbers in parentheses are cell Ns. Higher scores indicate more awareness.

The second question asked subjects to indicate how competitive they felt during the game. No significant effects were obtained. The individual means for each of the four conditions indicate that subjects felt "somewhat competitive."

4. DISCUSSION

The results of the present study do not support the experimental hypotheses. The first hypothesis predicted that the disabled confederate would be evaluated more extremely than the nondisabled confederate. It was anticipated that the disabled confederate would receive more positive evaluations than the nondisabled confederate in the success condition and more negative evaluations in the failure condition. Instead it was found that the disabled confederate was evaluated more positively than the similarly portrayed nondisabled confederate regardless of experimental condition.

This finding would seem to provide evidence for the so-called sympathy effect obtained by Scheir et. al., Carver et. al., and Gibbons et. al.(studies one and two). The present study however, extends the findings of these investigations since a more involving procedure was used. Carver et. al. and Scheir et al. employed a procedure in which subjects evaluated a disabled or nondisabled stimulus person after reading a favorable or unfavorable interview transcript, while in the first two studies conducted by Gibbons et. al., subjects watched a live or videotaped interview with a disabled or nondisabled confederate. The present study employed a procedure in which subjects interacted face-to-face with a real stimulus person whose behavior directly affected them. As such, the present study most clearly resembles the fourth investigation conducted by Gibbons et. al., in which positive and negative amplification effects were obtained when a disabled or nondisabled confederate was responsible for the dyad's success or failure on an experimental task. The present study, then, represents the first investigation in which sympathy effects were found using a procedure in which the confederate's behavior had direct consequences for the subject.

At first glance this study appears to be procedurally similar to the Gibbons et. al. investigation. A second look, however, indicates that the two studies differ in several respects. First, in the Gibbons et. al. study subjects interacted individually with the confederate, the two forming a dyad, while in the present investigation two or three subjects interacted with the

confederate. Second, the tasks used in the two studies differed. Gibbons et. al. had subjects work on solvable and unsolvable anagrams while the present study employed the three tasks described in the Method section. It is conceivable that subjects would find anagram problems more closely related to other measures of intelligence than the tasks employed here which subjects described as "moderately easy."

In addition to these methodological differences between the present investigation and the Gibbons et. al. study, there were further differences which perhaps can best account for the discrepancy in results. One concerns the amount of personal contact afforded subject and confederate. In the Gibbons et. al. investigation, the subject and confederate did not directly interact with each other. In the high relevance condition the subject and confederate's scores were combined to produce a joint total, but subject and confederate did not actually converse with each other. In the present study, the subjects and confederate exchanged personal information about school and leisure activities. The result was that the confederate became known to the subjects in a humanized and personalized way that did not occur in the Gibbons et. al. investigation.

Scheier et. al. have noted that this type of personalization may lead to sympathy effects. Individuation they believe, evokes sympathy for the stigmatized target, which then leads the subject to overcompensate for his or her negative feelings by rating the stigmatized target more positively. In addition, sympathy effects may also occur because personalization may make the subject more aware of the limitations and inhibiting factors which confront the disabled person. In the present investigation, in addition to presenting herself in a personal way, the confederate made reference to the limitations imposed on her by her disability. When the disabled confederate introduced herself to the group, she mentioned that there were many things she would like to do but could not because she was confined to a wheelchair. The individuation of the disabled confederate coupled with the reference to the restraints that having a disability entails may have produced the sympathy effect.

Another difference between the two studies concerns the manner in which responsibility for the game outcome was revealed to the subjects. In the Gibbons et. al. investigation, each time the subject had completed an anagram he or she brought it to the experimenter. As the subject waited to receive an additional problem, the experimenter scored the confederate's previous anagram. In this way the subject learned how well the confederate had done. In the present experiment, information about the confederate's performance was revealed in a more direct manner. In the success condition, the group was informed by the experimenter that the team's success was due in large part to the performance of the confederate. In the failure condition, the experimenter told the group that the team's failure was due to the poor performance of one of the participants but did not reveal which one. The confederate then revealed in a somewhat uncaring manner that she had received the low score. She also intimated that the loss of the lottery ticket was not important to her. The subjects therefore knew not only that the confederate was responsible for the group's failure, they also knew that the confederate did not feel much remorse about her low score. Knowledge of the confederate's poor performance coupled with her flippant remarks may have accentuated the group's frustration. In the Gibbons et. al. investigation, subjects were aware that the confederate had performed poorly but the confederate did not reveal how he felt about his performance.

The manner in which the game outcome was revealed to the subjects, along with a final difference to be noted between the studies, the possibility of winning the lottery tickets, probably made the group's experience of success and failure more salient to the present subjects than to those in the Gibbons et. al. investigation. In the present success condition the disabled confederate was rated more positively than the nondisabled confederate, as in the Gibbons et. al. study. In the present failure condition, however, the confederate's remarks probably created a situation very different from the one created by Gibbons et. al. Not only had the confederate prevented the group from winning the lottery tickets, she had compounded her culpability with her inappropriate

self-disclosure and comments. Why then did the disabled confederate receive a more favorable evaluation than the nondisabled confederate?

The answer to this question may lie in an experiment conducted by Katz, Farber, Glass, Lucido, and Emswiller (1978). In this investigation an apparently disabled or nondisabled female confederate administered cognitive tasks to adult subjects. In the positive-self presentation condition the tester was friendly, and obviously well-adjusted, while in the negative self-presentation condition she was caustic, apathetic, and obviously not well-adjusted. After the tasks had been completed and the tester had left the room, subjects were afforded an opportunity to volunteer to help her at a future time. Contrary to amplification predictions, the results revealed less willingness to help the disabled tester than the nondisabled one in the positive self-presentation condition, but more willingness to help the disabled than the nondisabled person in the negative condition. In discussing these results, Katz et. al. hypothesized that a sympathy effect occurred because subjects saw the disabled confederate's rudeness and apathy as an expression of her physical misfortune. They consequently felt sorry for her and offered more help. Drawing on a suggesting by Goffman (1963), Katz et al. noted that the stigma role the majority imposes on the disabled is one of required suffering and inadequacy. When a disabled person conforms to these requirements he or she is responded to positively, but when these requirements are violated, the disabled individual is disliked and accorded negative treatment. In support of this view, Katz et. al. replicated the experiment, but with a disguised measure of covert hostility as the dependent variable instead of willingness to help. As predicted from the Goffman formulation, there was an interaction effect in which covert hostility (apparently against the tester) was relatively high in the disabled-positive and nondisabled-negative conditions, and relatively low in the disabled-negative and nondisabled-positive conditions. Moreover, both the disabled and nondisabled confederates were rated as more unhappy and anxious in the negative condition than in the positive condition. To Katz et. al. it seemed reasonable to assume that in the

disabled-negative condition the tester's apparent unhappiness would be attributed to her physical condition, so that the subjects would feel sorry for her and want to help her.

The failure condition results for the present study seem similar to the results obtained by Katz et. al. The disabled confederate's inappropriate comments were probably interpreted as a manifestation of bitterness and apathy created by the disability, while the nondisabled confederate's behavior was taken at face value and she was consequently seen as one who did not care about helping the group.

The personalization of the confederate and her mention of the limitations imposed by her disability, along with her self-deprecating behavior in the failure condition, probably helped to produce a mood of sympathy in which subjects could deny any negative feeelings they may have had toward the disabled confederate. The structure of the situation then might have obscured potentially negative reactions.

This is not to say, however, that subjects did not have aversive reactions to the disabled confederate. As Katz (1980) has noted, these reactions may be unconsciously denied and not available for scrutiny. It is also possible that a different dependent measure might have been able to detect negative feelings. A solicitation for help by the confederate after the experiment had been completed (a procedure used in the Katz et. al. experiment) could have been used in conjunction with the evaluation measure. In a study conducted by Mills, Belgrave and Boyer (1984), two different dependent measures were used and different results were obtained for each measure. The study employed three conditions in which an apparently disabled confederate did or did not mention the disability in different contexts. There was also a control condition in which the confederate was not disabled. The results indicated that ratings of the confederate's personality did not differ across conditions, while a behavioroid measure (preference for interaction with the confederate versus participation in another activity) did lead to differences between the conditions. Multiple measures, then, may point out discrepancies in subjects' reactions. Some other measures that

might reveal aversive reactions are sociometric techniques, physiological indices of affective arousal, and nonverbal indicators of tension and avoidance. Although the use of such measures can be time consuming and difficult, they offer an opportunity for obtaining information that might otherwise be unavailable and that is relatively free of social desirability bias. The use of multiple measures may be especially helpful in achieving these objectives.

Test of Hypothesis 2

Hypothesis 2 predicted that individual differences in attitudinal ambivalence would be associated with favorable ratings of the disabled confederate in the success condition and with unfavorable ratings of the disabled confederate in the failure condition. Contrary to prediction, it was found that ambivalence scores were unrelated to the evaluation of the confederate in either outcome condition. An additional interpretation of this hypothesis is that there will be a positive correlation between ambivalence scores and evaluation of the disabled confederate in the success condition and a negative correlation between ambivalence scores and evaluation of the disabled confederate in the failure condition. The present results can be considered a significant disconfirmation of this alternate interpretation as well, since the signs of the two correlations are in directions opposite to prediction (i.e., -.26 in the success condition and .21 in the failure condition. These ambivalence correlations differ significantly from each other at the .05 level for a two-tailed test). This finding suggests that the success and failure conditions may not have been experienced as such by all subjects; the success condition may have triggered negative feelings in ambivalent subjects while the failure condition may have triggered positive feelings in ambivalent subjects. It is not clear why this may have occurred, but it raises the possibility that there were features in both conditions that made the opposite attitudinal component more salient to subjects.

It had also been predicted that neither pro nor anti scores alone would be related to the evaluation of the confederate. In the success condition, however, it was found that the higher the anti (i.e., prejudice) score, the more negatively the disabled confederate was evaluated. This

unanticipated relationship may possibly be a reflection of a hostile reaction on the part of highly prejudiced subjects to the disabled target for violating an expectation that her performance would be inferior. In the failure condition, on the other hand, the target's inept performance likely confirmed the prejudiced subjects' expectations, so that the latter's overall dissatisfaction was perhaps no greater than that of less prejudiced subjects. This might explain why in the failure condition evaluations made by subjects with high or low anti scores tended to be similar. It should also be noted that although the correlations for the pro scale are not signficantly different from zero, the pattern of results matches that obtained for the anti scale. That is, pro scores were related to the evaluation of the disabled confederate in the failure condition but not in the success condition. The higher the pro (i.e., sympathy) score, the more positively the disabled confederate was evaluated. Subjects with highly favorable attitudes may have expected the disabled confederate to do well on the experimental tasks. When she performed ineptly however, they felt sympathetic towards her and rated her more positively than subjects with less favorable attitudes. In the success condition on the other hand, the disabled confederate's exceptional performance confirmed these subjects' expectations and they rated her no more positively than subjects with less favorable attitudes.

The low association beween pro scores and evaluations however, accords with the ambivalence-amplification premise that only pro and anti scores <u>in combination</u> are predictive of responses to individual members of a given outgroup such as the disabled. But another possible explanation is that sympathy-arousing cues in the experimental situation were strong enough to override the effects of individual differences in pro attitude, eliciting markedly favorable responses to the target on the part of most subjects. The presence of potent sympathy cues might also account for the lack of association between ambivalence scores and evaluations. Multiple dependent measures however, might have proved useful, as already discussed.

The failure of the ambivalence scores to predict evaluation of the confederate may also

have been due to the fact that the pro and anti scales measure global attitudes toward the disabled, while the experimental situation assessed reactions to a specific disabled person in a wheelchair. In discussing the problem of predicting behavior from attitudes, Fishbein and Ajzen (1975) note that when attitude toward a class of objects is measured and the attitude is used to predict an individual's behavior toward a specific member of the class, the correspondence between attitude and behavior will be low, since it is unlikely that beliefs about a particular target are similar to general beliefs about the group. It may have been unrealistic then to expect that pro and anti attitudes toward disabled people in general, would predict evaluation of a specific individual in a wheelchair, who attended college, had interesting leisure activities and discussed the fact that she was disabled. A correspondence between attitudes and evaluation might have been found if the pro and anti scales had referred to persons in wheelchairs instead of disability in general.

Another possible explanation of the general absence of correlations between attitude scores and evaluations is that the attitude scales have low validity. Although the pro and anti attitude scales were found to be internally consistent and uncorrelated, little is known about their validity. Further work must be done to establish whether the scales are valid predictors of behavior toward disabled individuals.

Conclusion

The present study failed to replicate the findings of Gibbons et. al. in which positive and negative amplification effects were found when a disabled or nondisabled confederate was responsible for the dyad's success or failure on an experimental task. In the present study, the confederate was also responsible for the group's success or failure, but an overall positivity effect was obtained rather than amplification. Several differences were noted between the Gibbons et. al. investigation and the present study. The main difference concerned the personalization, or individuation, of the confederate. The confederate was introduced to the subjects in a way that did not occur in the Gibbons et. al. experiment. Other investigations have also found that

personalization leads to sympathetic ratings of a disabled target.

Although Gibbons et al. found evidence for response amplification, their study is not a particulary realistic one. In the real world it would be rare for an individual to interact with another person, disabled or otherwise, without an exchange of some personal information. It is difficult to imagine a real life situation in which two people work jointly on a task and have no information about each other. The present study, although not entirely realistic, nevertheless presents a more realistic situation since the confederate and subjects were not total strangers.

The present investigation, then, raises important questions about the influence of personalization on ambivalent feelings. It was found that portrayal of the disabled confederate as a person who attended college and had interesting leisure activities, yet acknowledged the limits imposed on her by her disability, led to favorable evaluations. In addition, the self-presentation of the disabled confederate in the failure condition as a somewhat socially maladjusted person may have also produced sympathetic ratings. The question arises as to whether this sort of personalization can be used to suppress the negative component of the ambivalent attitude and accentuate the positive component. More research is needed in order to answer this question, but the results obtained here suggest that individuation of the disabled person and self-avowal of the disability may facilitate favorable reactions on the part of nondisabled others.

The "nasty-nice" study by Katz et. al. (1978) indicates that the self-presentation of the disabled individual is an important issue. If the disabled confederate here had been portrayed as one who did not appear to be suffering as a result of the disability and was consequently well-adjusted, different results might have been obtained. In this case, as in the Katz et. al. study, negative amplification effects might have occurred. These authors have suggested that more work is needed to clarify the kinds of behavior and personality traits that are considered to be desirable and undesirable for disabled persons. Work in this area would be helpful in teaching disabled individuals strategies for dealing with the biases and misperceptions of nondisabled persons.

Further work needs to be done to determine the validity of the attitude scales. The pro and anti attitude scales should be used in conjunction with an experiment which more closely resembles the Gibbons et. al. investigation. In a study of this type it is possible that the mere presence of the disabled confederate in the absence of individuating information would be sufficient to arouse ambivalent feelings about disabled persons. This would therefore provide a better test of the predictive utility of the pro and anti scales.

It would also be useful to examine attitudes and behavior toward the disabled in a less restricted sample. The present study employed college student but different results might have been obtained in an older and/or less educated sample. The findings of this study then must be considered in light of the fact that a college sample was used.

Summarizing, the findings of this study have suggested that a certain kind of personalization of a disabled target may arouse sympathy for and suppress negative attitudes about disabled persons. Future research should focus on determining the kind of personalization (individuation) that leads to favorable and unfavorable reactions. In addition, multiple dependent measures should be employed so that more of an opportunity is available for the discovery of the effects of ambivalent feelings.

Appendix A -- Item Analysis for Fall Sample.

Table 7

Item-Total Scale Correlations for Pro and Anti Items - Fall Sample[a]

Item	Item-Pro Scale Correlation[b]	Item-Anti Scale Correlation
P1. Disabled people are often good people to hire because they try hard to succeed.	.25**	-.07
P2. There is no reason why people confined to wheelchairs should not be encouraged to become lawyers, doctors, or teachers if they have the necessary intelligence.	.48*	.00
P3. College students who are disabled are entitled to special facilities such as ramps, automatic doors, reserved elevators, etc.	.34**	.05
P4. Expect for their particular physical problem, some disabled people are the same as anyone else.	.23**	-.04
P5. Disabled people in positions of authority are often more kind and understanding toward their subordinates than are nondisabled people.	.56***	.28**
P6. Big companies should make special efforts to hire qualified disabled people.	.44***	-.23**
P7. Disabled people are probably closer to the really important things in life.	.44***	-.13

Item	Item-Pro Scale Correlation	Item-Anti Scale Correlation
P8. Disabled people often make good friends because they are sympathetic and caring.	.53***	.07
P9. People with disabilities are oten friendlier than nondisabled persons.	.42***	.03
P10. Persons with disabilities such as blindness, deafness or paralysis can sometimes understand people better than nondisabled people.	.42***	.09
A1. In trying to compensate for their disability, some disabled people tend to become too aggressive.	-.03	.22**
A2. Sometimes it is difficult to know how to get along with disabled people.	.06	.35***
A3. Disabled people are sometimes harder to get along with than nondisabled people.	-.18	.32***
A4. Disabled people sometimes expect special treatment from others.	-.10	.50***
A5. Disabled people tend to give up too easily.	-.06	.58***
A6. Too many disabled people are really dissatisfied with themselves.	.08	.36***
A7. People with severe disabilities sometimes insist on entering situations where they make others feel uncomfortable.	.12	.42***

Item	Item-Pro Scale Correlation	Item-Anti Scale Correlation
A8. Persons with severe disabilities such as blindness, deafness or paralysis sometimes have personalities that are unusual.	-.10	.28**
A9. Many disabled people are moody.	-.05	.52***
A10. People with severe disabilities are often a burden to those around them.	.07	.55***
A11. Even without meaning to, people with extreme deformities often make me uncomfortable.	-.02	.31***
A12. Many disabled people do not cope well with problems that are unrelated to their disability.	.08	.35***

Note. " P" refers to Pro items and "A" refers to Anti items.

[a] n=69

[b] Item-scale correlation excludes the item with which it is correlated.

*p < .10; **p < .05; ***p ≤ .01 (all tests are two-tailed).

APPENDIX B-- Disablity questionnaire.

Pro items- 2, 3, 4, 7, 11, 12, 14, 15, 17, 19, 20, 22, 24

Anti items- 1, 5, 6, 8, 9, 10, 13, 16, 18, 21, 23

ATTITUDES TOWARD DISABLED PEOPLE

Age ____ Sex ____

Year in college _____ Major subject _____

Your ethnic background (check one)

____White of European descent

____ Black

____ Hispanic

____ Asian

____ Other

This questionnaire is concerned with people's attitudes toward disabled people. The term "disabled" refers to people with a variety of physical disorders such as blindness, deafness, paralysis, etc. Please read each statement and decide the extent to which you agree or disagree with it. Indicate the extent of your agreement or disagreement with a statement by selecting one of the following:

Agree strongly	+3
Agree	+2
Agree slightly	+1
Disagree slightly	-1
Disagree	-2
Disagree strongly	-3

Agree strongly	+3
Agree	+2
Agree slightly	+1
Disagree slightly	-1
Disagree	-2
Disagree strongly	-3

_____ 1. In trying to compensate for their disability, some disabled people tend to become to aggressive.

_____ 2. Disabled people are often good people to hire because they try hard to succeed.

_____ 3. There is no reason why people confined to wheelchairs should not be encouraged to become lawyers, doctors, or teachers if they have the necessary intelligence.

_____ 4. College students who are disabled are entitled to special facilities such as ramps automatic doors, reserved elevators, etc.

_____ 5. Sometimes it is difficult to know how to get along with disabled people.

_____ 6. Disabled people are sometimes harder to get along with than nondisabled people.

_____ 7. Except for their particular physical problem, some disabled people are the same as anyone else.

_____ 8. Disabled people sometimes expect special treatment from others.

_____ 9. Disabled people tend to give up too easily.

_____ 10. Too many disabled people are really dissatisfied with themselves.

_____ 11. Disabled people in positions of authority are often more kind and understanding toward their subordinates than are nondisabled people.

_____ 12. People with severe disabilites sometimes insist on entering situations where they make others feel uncomfortable.

_____ 13. Big companies should make special efforts to hire qualified disabled people.

_____ 14. Disabled people are probably closer to the really important things in life.

_____ 15. Persons with severe disabilities such as blindness, deafness and paralysis sometimes have personalities that are unusual.

_____ 16. Disabled people often make good friends because they are sympathetic and caring.

Agree strongly	+3
Agree	+2
Agree slightly	+1
Disagree slightly	-1
Disagree	-2
Disagree strongly	-3

_____ 17. Many disabled people are often moody.

_____ 18. People with severe disabilities are often a burden to those around them.

_____ 19. People with disabilities are often friendlier than nondisabled persons.

_____ 20. Even without meaning to, people with extreme deformities often make me uncomfortable.

_____ 21. Many disabled people do not cope well even with problems that are unrelated to their disability.

_____ 22. Persons with disablitlies such as blindness, deafness or paralysis can sometimes understand people better than nondisabled people.

Appendix C-- Experimental Tasks.

CROSSING OUT LETTERS

Your task on the following pages is to cross out the letter "o" whenever it occurs in a word.

Work as quickly as you can.

The "Whiskey Rebellion" broke out in the mountains of western Pennsylvania in 1794. The farmers were mad as hell over the tax. Fifteen thousand Federal troops marched out to the mountains and supressed them. Almost at once, however, the trouble over the whiskey tax became a symbol of something bigger. This was a general enmity between the western and eastern sections of practically every seaboard state. Part of it was political. The eastern sections tended to control the legislatures, the economy and the law courts, and the western sections was rougher. Religions, codes and styles of life were sterner. Life in the eastern captials seemed to give off the odor of Europe and decadence. Shay's Rebellion broke out in the Berkshire hills of western Massachusetts in 1786 in an attempt to shake off the yoke of Boston, which seemed as bad as George III's. To this day people in western Massachusetts make propsals earnestly or with the down-in-the-mouth humor, that they all ought to split off from "Boston." Whiskey-the mountain people went right on making it. Whole sections of the Applachians were a whiskey belt, just as sections of Georgia, Alabama and Mississippi were a cotton belt. Nobody on either side ever had any moral delusions about why the Federal Government was against it. It was always the tax, pure and simple. Today the price of liquor is 60 percent tax. Today, of course with everbody gone wild over the subject of science and health, it has been much easier for the Federals to persuade people that they crack down on moonshine whiskey because it is dangerous, it poisons, kills and blinds people. The statistics are usually specious.

Moonshining was illegal, however, that was also the unvarnished truth. And that had a side effect in the whiskey belt. The people there were already isolated, geographically, by the mountains and had strong clan ties because they were all from the same stock. Scotch-Irish Moonshining isolated them even more. They always had to be careful who came up there. There are plenty of hollows to this day where if you drive in and ask some good old boy where so and so is, he'll tell you he never heard of the fellow. Then the next minute, if you identify yourself and give some idea of why you want to see him, and he believes you, he'll suddenly say, "Aw, you're talking about so-and-so I

thought you said-." With all this isolation, the mountain people began to take on certain characteristics normally associated by the diffident civilizations of today, with tribes. There was a strong sense of family, clan and honor. People would cut and shoot each other up over honor. And physical courage! They were almost like Turks that way.

In the Korean War, there were seventy-eight Medal of Honor winners. Thirty-two of them were from the south, and practically all of the thirty-two were from small towns in or near the Appalachians. The New York metropolitan area, which has more people than all these towns put together, had three Medal of Honor winners, and one of them had just moved to New York from the Appalachian region of West Virginia. Three of the Medal of Honor winners came from within fifty miles of Junior Johnson's side porch.

CONNECT THE NUMBERS

This booklet contains two puzzles. For each puzzle your task is to draw a line connecting the numbers in order from 1 to the last number. The last number in each of the puzzles is 80. Work as quickly as you can.

23	20	24	26	31	28	77	74	69		
18	25	22	29	36	33	70	67	78	75	80
21	13	19	32	27	30	35	76	73	68	
14	17	11	37	34	71	66	63	60	79	
12	10		16	41	38	61	72	65		
6	15	8	39	46	43	64	59	62		
9	2	5	42	49	40	45	56	53		
4	7		47	44	51	54		58		
1	3	50		48	57	52	55			

START

58	63		61						
54		56	59	64	67		69		78
57	46	53	62		60	65		77	70
52	55	50	45	66	33	68	71	79	73
47	44	39	42	49	36	31	74		76
	51	48	37	32	41	34	29	72	80
	38	43	40	35	30		26	75	28
	3	8	5	14	11	20	23	16	25
	6	13	2	9	22	15	18	27	
	1	4	7	12	19	10	21	24	17

START

1	2	3	4	5	6	7	8	9
A	B	C	D	E	F	G	H	I

1	7	8	3	2	9	4	6	3	7	1	5

9	1	5	3	7	4	6	3	9	7	6	1

6	5	8	3	4	2	8	6	3	9	4	5

8	9	1	7	6	5	8	3	7	5	1	5

1	8	7	2	4	3	6	5	4	9	3	5

5	4	7	2	9	7	2	3	8	7	1	4

8	2	2	6	4	1	7	8	3	2	7	9

1	2	3	4	5	6	7	8	9
A	B	C	D	E	F	G	H	I

7	8	5	8	4	9	1	2	5	4	6	2

4	9	4	6	8	3	5	1	7	2	9	3

6	3	8	5	1	6	8	2	4	7	9	3

5	4	7	2	4	6	7	5	9	8	3	5

7	2	6	4	9	2	3	8	1	7	5	4

7	4	9	8	1	3	2	8	5	8	7	3

2	3	1	8	9	4	7	2	7	8	3	9

APPENDIX D- Subject and confederate scores

Success - subject's score is always 92 points; confederate's score is always 126 points.

Number of subjects including confederate	Subjects' Scores
3	87
4	87, 90

Failure - subject's score is always 92 points; confederate's score is always 58 points.

Number of subjects including confederate	Subjects' Scores
3	87
4	87, 90

APPENDIX E -- Impression Rating Scale, Manipulation Check Items, and Filler Items.

Please rate person _____

PERSONALITY RATING

Below, you will find some personality traits. The letter corresponding to the person you are to rate is on the top of the page. Please CIRCLE THE ONE DOT that best indicates your opinion on each of the following statements. Please do not leave any questions blank.

This person appears to be:

1.

extremely competent	moderately competent	somewhat competent	somewhat incompetent	moderately incompetent	extremely incompetent

2.

extremely unfriendly	moderately unfriendly	somewhat unfriendly	somewhat friendly	moderately friendly	extremely friendly

3.

extremely un-intelligent	moderately un-intelligent	somewhat un-intelligent	somewhat intelligent	moderately intelligent	extremely intelligent

4.

extremely dependable	moderately dependable	somewhat dependable	somewhat un-dependable	moderately un-dependable	extremely un-dependable

5.

extremely unlikeable	moderately unlikeable	somewhat unlikeable	somewhat likeable	moderately likeable	extremely likeable

6.

extremely lazy	moderately lazy	somewhat lazy	somewhat hardworking	moderately hardworking	extremely hardworking

7.

extremely inconsiderate	moderately inconsiderate	somewhat inconsiderate	somewhat considerate of others	moderately considerate of others	extremely considerate of others

8.

extremely motivated	moderately motivated	somewhat motivated	somewhat unmotivated	moderately unmotivated	extremely unmotivated

9.

extremely helpful	moderately helpful	somewhat helpful	somewhat unhelpful	moderately unhelpful	extremely unhelpful

10.

very similar to most people	moderately similar to most people	somewhat similar to most people	somewhat different from most people	moderately different from most people	very different from most people

11.

extremely athletic	moderately athletic	somewhat athletic	somewhat unathletic	moderately unathletic	extremely unathletic

12.

extremely weak	moderately weak	somewhat weak	somewhat strong	moderately strong	extremely strong

13.

extremely active	moderately active	somewhat active	somewhat passive	moderately passive	extremely passive

14.

extremely graceful	moderately graceful	somewhat graceful	somewhat awkward	moderately awkward	extremely awkward

15.

extremely unattractive	moderately unattractive	somewhat unattractive	somewhat attractive	moderately attractive	extremely attractive

Below are some questions about your experience in this experiment. These questions are concerned with your feelings during the experiment, your perceptions of your own and the group's performance and your feelings about the tasks.

1. The theory of social facilitation maintains that people work harder in the presence of others than when they work alone. To what extent were you aware that you were working with others?

. . . . . .

very aware | somewhat aware | somewhat unaware | very unaware

2. To what extent did the presence of the group members arouse feelings of competition?

. . . . . .

felt extremely competitive | felt somewhat competitive | felt somewhat uncompetitive | felt extremely uncompetitive

3. To what extent do you believe the tasks measure how hard a person is willing to work?

. . . . . .

extremely good measure | moderately good measure | moderately poor measure | extremely poor measure

4. How satisfied were you with your <u>own individual</u> performance?

. . . . . .

extremely satisfied | somewhat satisfied | somewhat unsatisfied | extremely unsatisfied

5. If your group won the lottery ticket please answer question 5a. If your group did not win the lottery ticket please answer question 5b.

5a. Groups win the lottery ticket for different reasons. Why do you feel your group won the lottery ticket (check one)

_____ The group won the lottery ticket because everyone in the group performed well

OR

_____ The group won the lottery ticket because of a particularly outstanding performance by one or two people.

5b. Groups lose the lottery ticket for different reasons. Why do you feel your group lost the lottery ticket (check one)

_____ The group lost the lottery ticket because everyone in the group performed poorly

OR

_____ The group lost the lottery ticket because of a particularly poor performance by one or two people.

6. The tasks were

. . . . . .

extremely difficult	somewhat difficult	somewhat easy	extremely easy

Appendix F -- Item analysis for total sample

Table 8

Item-Total Scale Correlations for Pro and Anti Items - Total Sample[a]

Item	Item-Pro Scale Correlation[b]	Item-Anti Scale Correlation
P1. Disabled people are often good people to hire because they try hard to succeed.	.31***	-.16**
P2. There is no reason why people confined to wheelchairs should not be encouraged to become lawyers, doctors, or teachers if they have the necessary intelligence.	.01	-.14**
P3. College students who are disabled are entitled to special facilities such as ramps, automatic doors, reserved elevators, etc.	.15**	-.08
P4. Expect for their particular physical problem, some disabled people are the same as anyone else.	.16**	-.23***
P5. Disabled people in positions of authority are often more kind and understanding toward their subordinates than are nondisabled people.	.42**	.12*
P6. Big companies should make special efforts to hire qualified disabled people.	.34***	-.23***
P7. Disabled people are probably closer to the really important things in life.	.49***	-.02

Item	Item-Pro Scale Correlation	Item-Anti Scale Correlation
P8. Disabled people often make *good friends because they are* sympathetic and caring.	.53***	-.01
P9. People with disabilities are often friendlier than nondisabled persons.	.46***	.05
P10. Persons with disabilities such as blindness, deafness or paralysis can sometimes understand people better than nondisabled people.	.47***	-.01
A1. In trying to compensate for their disability, some disabled people tend to become too aggressive.	-.05	.45***
A2. Sometimes it is difficult to know how to get along with disabled people.	-.03	.43***
A3. Disabled people are sometimes harder to get along with than nondisabled people.	-.15**	.53***
A4. Disabled people sometimes expect special treatment from others.	-.05	.48***
A5. Disabled people tend to give up too easily.	-.14**	.41***
A6. Too many disabled people are really dissatisfied with themselves.	-.02	.32***
A7. People with severe disabilities sometimes insist on entering situations where they make others feel uncomfortable.	.00	.34***

Item	Item-Pro Scale Correlation	Item-Anti Scale Correlation
A8. Persons with severe disabilities such as blindness, deafness or paralysis sometimes have personalities that are unusual.	.05	.43***
A9. Many disabled people are moody.	.02	.56***
A10. People with severe disabilities are often a burden to those around them.	-.10	.52***
A11. Even without meaning to, people with extreme deformities often make me uncomfortable.	-.21***	.40
A12. Many disabled people do not cope well with problems that are unrelated to their disability.	-.03	.45***

Note. " P" refers to Pro items and "A" refers to Anti items.

[a] n=338

[b] Item-scale correlation excludes the item with which it is correlated.

*$p < .10$; **$p < .05$; ***$p \leq .01$ (all tests are two-tailed).

Appendix G -- Item analysis for spring sample

Table 9

Item-Total Scale Correlations for Pro and Anti Items - Spring Sample[a]

Item	Item-Pro Scale Correlation[b]	Item-Anti Scale Correlation
P1. Disabled people are often good people to hire because they try hard to succeed.	.32***	-.18**
P2. There is no reason why people confined to wheelchairs should not be encouraged to become lawyers, doctors, or teachers if they have the necessary intelligence.	.04	-.12*
P3. College students who are disabled are entitled to special facilities such as ramps, automatic doors, reserved elevators, etc.	.12*	-.08
P4. Expect for their particular physical problem, some disabled people are the same as anyone else.	.14*	-.25***
P5. Disabled people in positions of authority are often more kind and understanding toward their subordinates than are nondisabled people.	.46***	.09
P6. Big companies should make special efforts to hire qualified disabled people	.33***	-.23***
P7. Disabled people are probably closer to the really important things in life.	.48***	-.03

Item	Item-Pro Scale Correlation	Item-Anti Scale Correlation
P8. Disabled people often make good friends because they are sympathetic and caring.	.53***	-.03
P9. People with disabilities are often friendlier than nondisabled persons.	.47***	.02
P10. Persons with disabilities such as blindness, deafness or paralysis can sometimes understand people better than nondisabled people.	.45***	-.04
A1. In trying to compensate for their disability, some disabled people tend to become too aggressive.	-.05	.47***
A2. Sometimes it is difficult to know how to get along with disabled people.	-.04	.43***
A3. Disabled people are sometimes harder to get along with than nondisabled people.	-.20***	.54***
A4. Disabled people sometimes expect special treatment from others.	-.05	.49***
A5. Disabled people tend to give up too easily.	-.15**	.43***
A6. Too many disabled people are really dissatisfied with themselves.	-.02	.33***
A7. People with severe disabilities sometimes insist on entering situations where they make others feel uncomfortable.	-.02	.35***

Item	Item-Pro Scale Correlation	Item-Anti Scale Correlation
A8. Persons with severe disabilities such as blindness, deafness or paralysis sometimes have personalities that are unusual.	.05	.42***
A9. Many disabled people are moody.	.007	.56**
A10. People with severe disabilities are often a burden to those around them.	-.10	.53***
A11. Even without meaning to, people with extreme deformities often make me uncomfortable.	-.25***	.40
A12. Many disabled people do not cope well with problems that are unrelated to their disability.	-.05	.45***

Note. " P" refers to Pro items and "A" refers to Anti items.

[a] n=296

[b] Item-scale correlation excludes the item with which it is correlated.

*$p < .10$; **$p < .05$; ***$p \leq .01$ (all tests are two-tailed)

Appendix H-- Item analysis for summer sample

Table 10

Item-Total Scale Correlations for Pro and Anti Items - Summer Sample[a]

Item	Item-Pro Scale Correlation[b]	Item-Anti Scale Correlation
P1. Disabled people are often good people to hire because they try hard to succeed.	.26	.00
P2. There is no reason why people confined to wheelchairs should not be encouraged to become lawyers, doctors, or teachers if they have the necessary intelligence.	-.24	-.34*
P3. College students who are disabled are entitled to special facilities such as ramps, automatic doors, reserved elevators, etc.	.26	-.15
P4. Expect for their particular physical problem, some disabled people are the same as anyone else.	.22	-.22
P5. Disabled people in positions of authority are often more kind and understanding toward their subordinates than are nondisabled people.	.48**	.32*
P6. Big companies should make special efforts to hire qualified disabled people.	.40**	-.27
P7. Disabled people are probably closer to the really important things in life.	.57***	.05

Item	Item-Pro Scale Correlation	Item-Anti Scale Correlation
P8. Disabled people often make good friends because they are sympathetic and caring.	.52***	.11
P9. People with disabilities are often friendlier than nondisabled persons.	.33*	.29
P10. Persons with disabilities such as blindness, deafness or paralysis can sometimes understand people better than nondisabled people.	.59***	.16
A1. In trying to compensate for their disability, some disabled people tend to become too aggressive.	-.12	.19
A2. Sometimes it is difficult to know how to get along with disabled people.	.09	.43**
A3. Disabled people are sometimes harder to get along with than nondisabled people.	.26	.51***
A4. Disabled people sometimes expect special treatment from others.	-.08	.39**
A5. Disabled people tend to give up too easily.	-.14	.21
A6. Too many disabled people are really dissatisfied with themselves	-.05	.20
A7. People with severe disabilities sometimes insist on entering situations where they make others feel uncomfortable.	.20	.24

Item	Item-Pro Scale Correlation	Item-Anti Scale Correlation
A8. Persons with severe disabilities such as blindness, deafness or paralysis sometimes have personalities that are unusual.	.04	.46**
A9. Many disabled people are moody.	.12	.52***
A10. People with severe disabilities are often a burden to those around them.	-.16	.43**
A11. Even without meaning to, people with extreme deformities often make me uncomfortable.	.12	.41**
A12. Many disabled people do not cope well with problems that are unrelated to their disability.	.05	.28*

Note. " P" refers to Pro items and "A" refers to Anti items.

[a] n=42

[b] Item-scale correlation excludes the item with which it is correlated.

*p < .10; **p < .05; ***p ≤ .01 (all tests are two-tailed).

Appendix I--Mean Ratings of Trait Items

Table 11

Mean Ratings of Trait Items as a Function of Disability of the Confederate and Game Outcome

	Success		Failure				
Trait	Non-Disabl.	Disabl.	Non-Disabl.	Disabl.	Main Effect-Outcome	Main Effect-Disability	Disability X Outcome F(1,113)
Competent	31.94	31.16	24.44	27.59	20.36**	1.11	2.90
Friendly	25.56	25.03	23.40	24.26	.82	.01	.63
Intelligent	30.69	30.35	23.56	25.65	26.01**	.51	1.09
Dependable	28.63	27.92	24.67	25.22	5.32*	.01	.18
Likeable	25.44	26.73	21.78	25.87	1.39	3.11	1.44
Hard-working	30.44	31.46	22.00	25.80	37.61**	4.14	1.43
Considerate	26.94	26.51	23.61	27.39	.09	1.93	2.55
Motivated	25.81	30.59	19.17	24.02	17.72**	7.36**	.00
Helpful	24.06	26.05	23.50	25.07	.44	1.50	.02

Note. High scores indicate a more favorable evaluation.

*p < .05 **p < .01

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