

SOCIAL COMPARISON THREAT AND
INTERPERSONAL ATTRACTION

by
Robert Jay Gould

Dissertation submitted to the Faculty of the Graduate School
of the University of Maryland in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
1978

Cap. 1

APPROVAL SHEET

Title of Thesis: Social Comparison Threat and Interpersonal
Attraction

Name of Candidate: Robert J. Gould
Doctor of Philosophy, 1978

Thesis and Abstract Approved: Harold Sigall
Harold Sigall
Professor
Department of Psychology

Date Approved: December 1, 1978

ABSTRACT

Title of Dissertation: Social Comparison Threat and Interpersonal Attraction

Robert Jay Gould, Doctor of Philosophy, 1978

Dissertation directed by: Harold Sigall
Professor
Department of Psychology

The self-esteem of 80 male subjects was temporarily either raised or lowered by giving them false feedback on an alleged personality test. Subsequently, subjects were led to believe that their attractiveness to a physically attractive female student would be compared with that of a male stimulus person. The perceived ability of the male stimulus person to be attractive to females was varied and subjects were given an opportunity to indicate their liking for the male target either before learning the outcome of the female's comparative evaluation or after learning that the female had indicated a preference for the stimulus person. From an analysis of self-esteem threat based on Festinger's theory of social comparison processes (1954), a three way interaction was predicted. Under conditions where subjects had received negative comparison feedback it was predicted that low self-esteem subjects would indicate greater liking for the stimulus person than high self-esteem subjects, regardless of the stimulus person's perceived ability. In contrast, under conditions where comparative evaluation feedback was anticipated, it was predicted that low self-esteem, relative to high self-esteem, subjects, would indicate greater liking for the target perceived to have high ability, but would indicate less liking for the stimulus person perceived to have low ability. The results supported these predictions and are discussed in with respect to furthering our understanding the

the self-esteem construct and the process of self-esteem maintenance,
and the extension of the applicability of social comparison principles.

ACKNOWLEDGEMENT

I would like to express my heartfelt appreciation to Harold Sigall, who served as my dissertation advisor. Grateful acknowledgement is also due Judson Mills, Dalmas A. Taylor, Gregory White, and Albert Gardner, who served as members of my dissertation committee.

Sincere thanks are also expressed to India Fleming, Robbie White, and Kathleen Daugherty, my experimental assistants, without whose dedicated help this project could never have been completed. Finally, a special note of appreciation is extended to my wife, Kate, whose prodigious task it was to live with me from the project's inception to its completion.

TABLE OF CONTENTS

| Chapter | Page |
|----------------------------|------|
| I. INTRODUCTION..... | 1 |
| II. METHOD..... | 9 |
| Overview and Subjects..... | 9 |
| Procedure..... | 9 |
| Dependent Variable..... | 15 |
| III. RESULTS..... | 17 |
| Manipulation Check..... | 17 |
| Dependent Measures..... | 19 |
| IV. DISCUSSION..... | 26 |
| APPENDICES..... | 29 |
| BIBLIOGRAPHY..... | 41 |

LIST OF TABLES

| Table | Page |
|--|------|
| 1. ANALYSIS OF VARIANCE OF SUBJECTS' CONFIDENCE THAT THEY WOULD BE POSITIVELY EVALUATED BY THE FEMALE PARTICIPANT..... | 18 |
| 2. MEAN RESPONSE TO GENERAL IMPRESSION MEASURE AND TRAIT ADJECTIVE INDEX..... | 21 |
| 3. 2x2x2 MULTIVARIATE ANALYSIS OF VARIANCE OF SUBJECTS' RESPONSES TO CENTRAL IMPRESSION AND TRAIT ADJECTIVE INDEX MEASURES..... | 22 |
| 4. MEAN RESPONSES TO GENERAL IMPRESSION MEASURE AND 2x2x2 ANALYSIS OF VARIANCE OF SUBJECTS' RESPONSES TO GENERAL IMPRESSION MEASURE..... | 23 |
| 5. MEANS FOR TRAITS ADJECTIVE INDEX AND 2x2x2 ANALYSIS OF VARIANCE OF TRAIT ADJECTIVE INDEX..... | 24 |

CHAPTER I

INTRODUCTION

Festinger's theory of social comparison processes (1954) is based on the proposition that individuals are motivated to evaluate themselves. Three major hypotheses derived from the self-evaluation drive are that 1) in the absence of direct physical standards, people will satisfy their need for self-evaluation by comparing themselves with other people 2) social comparison yields more stable and accurate self-evaluations the more similar the target of comparison is to himself on the characteristic in question, and 3) people therefore seek to compare themselves to similar others in order to obtain accurate self-assessments.

The central assumption of their derivations, then, is that an individual desires accurate assessments of his abilities and opinions. Festinger also hypothesizes, however, that, at least in the case of abilities, there is a "unidirectional drive upward," which occurs because "...different performances have intrinsically different values. In Western culture, at any rate, there is a value set on doing better and better..." (pp. 124-125). This suggests that social comparison may serve needs for self-enhancement in addition to needs for self-knowledge. The studies of Hakmiller (1966) Wheeler (1966) and Thornton and Arrowood (1966) serve to demonstrate, in fact, that when self-enhancement needs are made salient, an individual tends to compare himself to an Other who provides the most favorable rather than the most accurate information concerning his possession of a given characteristic. Hakmiller (1966), for example, found that when subjects were led to believe that they might possess an unexpectedly high degree of a negatively valued personality trait, they tended to compare themselves to an Other who was most likely to possess the greatest amount of the unfortunate characteristic

rather than targets who were more likely to possess similar amounts of the traits as themselves. Presumably, the need for an accurate self-assessment was superceded when comparison with a dissimilar Other, worse off than himself, would provide information which served to protect an individual's favorable view of himself.

While Festinger, in his original statement of the theory, did not clearly explicate the precise meaning of the "unidirectional drive upwards" in ability comparisons, the basic notion that comparison processes have important implications for, and are influenced by, self-enhancement needs seems quite plausible. As noted by Singer (1966), implicit in the question "How much of X do I have?" is also the question, "What sort of person am I for possessing that much X?" In fact, if one accepts the extension of Festinger's concept of abilities to include personality traits (cf. Hakmiller, 1966; Thornton and Arrowood, 1966), these questions may be effectively combined in comparative assessments of global self-worth: "How much X (worthy personality characteristics) do I possess?" A study by Morse and Gergen (1970) serves to demonstrate the effects of such global social comparisons on self-esteem. Subjects completed one-half of a standardized test of self-esteem (Coopersmith, 1964) and then completed the remainder of the test in the presence of an experimental confederate whose general attractiveness was varied. Exposure to an unattractive accomplice led subjects to enhance their own self-assessment, while exposure to a highly attractive other produced the opposite effect. It seems clear, then, that targets of comparisons may have quite important implications for the maintenance of favorable self-regard.

The Morse and Gergen (1970) study serves to extend social comparison

theory in two ways. First, as mentioned earlier, the findings broaden the concept of abilities to include assessments of global self-worth, which may be seen as a summation of relatively enduring abilities and personality traits, each having an intrinsic value. Second, to this point, the comparison of self with another had generally been conceptualized as a process explicitly controlled by the individual; that the individual, be he motivated by the need for self-enhancement, self-knowledge, or both, actively seeks appropriate targets for comparison. The Morse and Gergen findings broaden this perspective by demonstrating that the manipulation of situational context (the presentation of an attractive or unattractive confederate) is sufficient to engage the comparison process. In sum, quite independent of his self-evaluation needs, comparison may be effectively forced upon an individual by his social environment, and once engaged, may have important consequences for global self-evaluation.

Whereas the Morse and Gergen study demonstrates that highly attractive comparison targets may cause self-devaluation, it seems highly unlikely that comparison with those perceived to be "better" than ourselves will invariably have this effect. Festinger's notion of comparison cessation addresses this issue. He states that,

When a discrepancy exists with respect to opinions or abilities, there will be tendencies to cease comparing oneself with those in the group who are very different from oneself. (p. 128)

According to the comparison cessation notion, when an individual perceives a comparison target to be sufficiently above or below himself on the relevant ability dimension, the target should no longer be seen as a relevant source of comparison. By implication, once comparison processes are disengaged, the effects of (comparison) target on self-esteem will be attenuated.

Taking these ideas concerning the relationship between self-esteem and the social comparison of abilities as a point of departure, the present experiment seeks to consider the effects of ability comparison on attraction toward a comparison Other. The underlying assumption of the present investigation is that individuals desire to enhance, or to at least maintain, their level of self-esteem. Following from this assumption, it is hypothesized that to the extent a comparison target mediates decreases in an individual's self-assessment, or threatens to mediate such a decrease, attraction toward that comparison target will decrease.

Whereas comparison-mediated threats to the maintenance of self-esteem may have implications for our understanding of interpersonal attraction, little research has been directed toward examining these issues. A recent study by Mettee and Riskind (1974), however, provides some compelling evidence of a relationship between social comparison processes and liking. In their experiment, subjects received feedback that an initially comparable opponent had either marginally or decisively defeated them in the performance of a task which purportedly assessed an important cognitive ability. Subjects were subsequently told that their competitors' performance conclusively demonstrated that they were superior in ability to themselves, or that they were at the same level of ability. On a measure of attraction it was found that subjects who had been decisively defeated liked their opponent more when he had been reclassified as superior than when he had not been reclassified. The reverse pattern was observed for marginally defeated subjects; here liking was greater for the non-reclassified than for the reclassified opponent. These differences in liking for comparison Others may be seen as a function

of differential threat to subjects' self-esteem created by the performance and classification feedback. Suffering a large defeat at the hands of comparison Other supposedly similar in ability poses a decided threat to an individual's self-esteem. Reclassification, in this instance, assuages the threat of self-esteem by allowing the individual to cease comparison with the decisive victor. Whereas being marginally defeated carried some negative comparison information, it is reasonable to assume that the threat to self-esteem is relatively mild. Learning that such a narrowly victorious opponent had been reclassified as "incomparably" superior may be quite difficult to reconcile with such a small difference in performance. Given the marginally defeated subjects could not cease comparison, the reclassification information would, in itself, be likely to create rather than attenuate the threat to self-esteem.

Taken together, the Morse-Gergen and Mettee-Riskind experiments indicate the variety of situations in which comparative evaluations may be salient. In the Morse and Gergen study, simply presenting a comparison target individuals were in the midst of self-evaluation was sufficient to engage the comparison process. In the Mettee and Riskind experiment, individuals found themselves the "innocent victims" of comparison feedback from an outside source. To these might be added situations in which a person anticipates comparison feedback to be forthcoming. Given that arousing an expectancy of comparative evaluation is sufficient to induce social comparison, the degree to which an individual feels a threat to his self-esteem should be a joint function of his self-assessment and his estimation of the ability of the comparison target. In general, one who sees himself as possessing a high degree of an evaluation-relevant ability should experience less threat in the face of anticipated comparative

evaluation than one whose self-estimate is low. Such a proposition is based on the assumption that self-assessments are themselves reflective of perceptions of one's comparative degree of ability; high self-evaluators believe that they compare favorably with others, while low self-evaluators hold a general belief that they compare unfavorably. Thus, given no information concerning the ability of a comparison Other is available, high self-evaluators, believing they will generally fare well, should feel little threat in the face of anticipated comparison feedback, relative to their low self-evaluator counterparts.

The differential threat to high and low self-evaluators created by anticipated comparative evaluation may be altered considerably, however, when information about the likely level of ability of a specific comparison Other is available. Specifically, when a comparison Other is perceived to possess a high degree of ability, it is reasonable to expect that a low, relative to a high self-evaluator, will be more likely to perceive the target as categorically better than himself and, by so doing, cease comparison. As he is already reconciled to a negative comparison, an individual whose self-assessment is low should, in such instances, experience relatively little threat in anticipation of evaluation.

Consider now situations in which comparison threat is created by the perception that one has actually compared unfavorably with a comparison Other. Applying similar comparison principles as were applied to the anticipation of comparison, a quite different picture emerges concerning the relative impact of such comparison feedback on those with high, versus low, self-assessments. Here we would propose that the lower an individual's self-evaluation, the more likely he would be to interpret

negative comparison feedback as indicating that the comparison Other is indeed categorically better than himself. In contrast, one who evaluates himself more positively should have relatively greater difficulty in reconciling himself to such an interpretation of unfavorable comparison information. Thus, it is reasonable to expect the threat to self-esteem embodied by negative comparison feedback should generally be greater, the higher one's self-evaluation.

In sum, the present analysis suggests that whereas individuals who hold low estimates of their abilities should be more threatened in situations where comparative evaluation is anticipated, relative to their high self-assessment counterparts, the reverse should be true when high and low self-assessors are presented with negative comparison feedback. In accordance with the findings of Mettee and Riskind (1974), it is further hypothesized that the degree to which a comparison Other produces threat to individuals self-esteem will be a determinant of attraction toward that target.

The present experiment was designed to test the preceding analysis of comparison threat, which may be defined as the perception that comparison feedback will imply or does imply a lowering of one's self-evaluation. The self-esteem of male subjects was temporarily either raised or lowered by giving them false feedback on an alleged personality test. Subsequently, subjects were led to believe that their attractiveness to a physically attractive female would be compared with that of a male stimulus person in the context of an experiment purportedly concerned with impression formation. The perceived ability of the male stimulus person to be attractive to females was varied and subjects were given an opportunity to indicate their liking for the male target either before

learning the outcome of the female's comparative evaluation or after learning that the female had indicated a preference for the stimulus person. A three way interaction was predicted. In conditions where the subject received negative comparison feedback, low self-esteem subjects would like the target more than high self-esteem subjects, regardless of target's ability. In contrast, in conditions where comparison feedback was anticipated, low, relative to high, self-esteem subjects would show greater liking for a high ability target, whereas high self-esteem subjects would show greater liking for low ability targets.

CHAPTER II

METHOD

Overview and Subjects

Subjects were given a bogus personality inventory and subsequently received either false positive or false negative feedback about their performance on the test. Subjects then moved on to what they believed to be a second, separate experiment which they were led to believe concerned the impression formation process. Subjects were led to believe that they, along with a male confederate, posing as another subject, would both be evaluated by an attractive female. Half the subjects in each of the self-esteem conditions were led to believe that the male confederate possessed high ability to be attractive to females, while the remaining subjects were led to believe the confederate possessed little such ability. Subjects were given an opportunity to indicate their liking for the male. Crosscutting both the self-esteem and confederate-attractiveness variables, liking for the stimulus person were assessed either prior to, or after the subjects learned that the female had evaluated the stimulus person more positively than themselves.

Subjects were 80 male undergraduate students enrolled in introductory psychology courses. They received credit toward their course grades for their participation. Three additional participants indicated suspicion of the experimental hypothesis during debriefing. Another participant conversed with the confederate when the experimenter left the room, and two others revealed during debriefing that they misunderstood the experimental instructions. These six individuals were therefore not included as subjects.

Procedure

Subjects were recruited for an experiment entitled "INVENTORY". Upon arrival, one of two female experimenters escorted the subject into

the experimental room and explained that the subject would be taking part in the establishment of in-state norms for a recently developed personality test called the "National Psychological Inventory". After giving a brief fictitious history of the test, the experimenter further explained that the purpose of establishing state norms for test performance was to facilitate the interpretation of test performance across the diverse geographical settings in which the test was being employed. At this point, the experimenter informed the subject that the taking and scoring of the test would not take long, and since the experimental credit to be received represented one hour of participation, she had arranged for the subject to participate in another brief experiment, which was taking place just down the hall. The experimenter added that she knew nothing of the content of the other experiment.

The subject was then given a test booklet containing 50 items, the answers to which would presumably reveal information about the respondent's personality (see Appendix A). The experimenter assured the subject that participant's test results would remain completely anonymous and instructed him not to put his name on either the test booklet or answer sheet, which was marked at the top by an "identification" number.

When the subject had completed the test, the experimenter took both the test form and answer sheet from him, explained that the scoring of the test would take only about five minutes, and pointed to some magazines on the next table that the subject might read in the interim. The experimenter then took the subject's test materials to a table on the side of the room opposite from where the subject was seated and busied herself with what was presumably the scoring of the subject's test.

Upon completion of the "scoring" of the subject's test, the

experimenter turned to the subject and handed him his "personality profile", identified by the same code number that appeared on the test forms. The profile was in the form of a graph, which listed on its horizontal axis seven positively valued personality dimensions: general self-regard, assertiveness, interpersonal perceptiveness, leadership potential, confidence in self-worth, adaptability, and self-presentational ability. Percentiles marked the vertical axis, and each subject, therefore, was given his percentile score for each dimension. Subject's responses on the inventory were not scored. Each subject received one of two standard profiles, which served to manipulate self-esteem. In the positive-feedback, or high self-esteem conditions the graph indicated that the subject rated consistently high (between the 85th and 95th percentile) on all seven personality dimensions (see Appendix B). For subjects in the negative-feedback, or low self-esteem conditions, the graph indicated consistently low ranking (between the 15th and 25th percentile) on all dimensions (see Appendix C).

After ensuring that the subject understood the meaning of the profile, the experimenter left the room on the pretext of checking on the scheduled second experiment. This was done to allow the subject some time to digest the feedback. After a few minutes the experimenter returned, collected the profile, and thanked the subject for his participation. She then escorted the subject to the second experimental room and knocked on the door. Upon hearing the second experimenter say, "Just a minute," the first experimenter again thanked the subject and departed.

After a few moments, the second experimenter opened the door, greeted the subject, and escorted him into the second experimental room. The room contained two desks and two chairs, which faced a television monitor.

The experimenter told the subject to sit at one of the desks, and then called in a male confederate who had been seated in the hallway. The experimenter thanked the male confederate for waiting, and instructed him to take a seat at the remaining desk.

The experimenter then introduced the study as one concerned with the durability of first impressions formed about members of the opposite sex. Specifically, the purported purpose of the study was to discover the kinds of information that might be given in a "first encounter" which would lead to the formation of an enduring impression of someone. The experimenter continued:

Each of you is potentially one person who will be asked to respond to certain questions concerning your academic and extracurricular interests, and your responses, in turn, will serve as the information by which our female participant, who's completing some personality measures now in another room, will form her impression of each of you. The reason I said "potentially" is that the prerequisites for our female participants are that she not be involved in a long-term romantic relationship and that she not be already acquainted with the males of whom she will be making her impressions. While we know already that she's not involved in a romantic relationship, we still have to ensure that she is not acquainted with either of you. Since we don't want her to have any information about you at this point, we've set up a T.V. monitor and camera in her room. I'll turn on her camera briefly while I go check on how she's doing on her questionnaires, and when I return you can tell me whether you know her.

The experimenter then requested that there be no conversation while he is out, turned on the T.V. monitor, and left the room. The subject then saw a videotape of an attractive female busy filling out a questionnaire. The experimenter (off camera) was heard asking how she was doing. After replying that she was almost finished, the experimenter was heard exiting and she returned to work on her questionnaire.

In a few moments the experimenter returned to the subject's experimental room, turned off the T.V. monitor, and inquired of both the subject and confederate if they were acquainted with the female participant.

In no instance was a subject so acquainted. The experimenter then continued:

Again, what I'll be asking each of you to do first is respond to some questions about your academic and extracurricular interests. When you're done, these will be given to our female participant and she'll form her impression of each of you on the basis of your responses. While she's doing this, we will have you respond to a brief biographical questionnaire for me. When she is done evaluating each of your responses we are allowing her to choose one of you to interact with in a brief face-to-face unstructured encounter, and then get some information from her concerning the durability of the first impression she had. So far, the results have shown the "personal survey" responses to yield quite durable impressions. You should be aware that she is specifically being asked to choose, on the basis of her evaluation of the personal survey responses, the person she would prefer to get to know better. We've found that this greatly facilitates interaction in the face-to-face encounter. In any case, the person not chosen by the girl will be asked to listen over an intercom system to the face-to-face encounter and make some judgments about it.

At this point, both the subject and confederate were asked to sign experimental consent forms. When they were completed, the experimenter handed both the subject and confederate personal survey questionnaire forms (see Appendix D) and requested that the confederate accompany him to another experimental room "so that both he and the other participant might have the maximum amount of privacy while responding the the questionnaire." The experimenter and confederate then exited and the subject will be left alone to complete the questionnaire. When the subject had completed the questionnaire, the experimenter returned, took the completed questionnaire, and told the subject he would now deliver his, along with the other participant's questionnaire, to the female participant for her evaluation. The experimenter then requested that the subject complete a brief "biographical information" questionnaire (see Appendix E) while the female participant was completing her evaluation. In addition, the experimenter drew the subject's attention to a question on the form which

pertained to the degree to which the subject felt confident that his responses to the personal survey would be positively evaluated by the female participant. He said:

So far, we have been surprised to find that an individual's degree of confidence that his responses will create a good impression has actually been the best predictor of the female participant's actual evaluation. So please consider the question carefully before responding.

The subject's response to this question served as a check on the effectiveness of the self-esteem manipulation. The experimenter then left and returned when the subject had completed his biographical information questionnaire and collected it from him.

In the anticipated evaluation feedback conditions, the experimenter began by telling the subject that the female participant had not yet completed her evaluation and that in the meantime he would like the subject to respond to a first impression questionnaire (see Appendix H) about the other male participant after examining his biographical information questionnaire, and that the other male participant would be asked to do the same for the subject. He continued by saying that as it might turn out that he would be asked to listen to the face-to-face encounter, and make judgments about the other fellow as he interacts, it was crucial that he give his gut-level impression of the other male participant at this point. The experimenter also noted that the confidentiality of his reactions would be assiduously maintained. In the negative evaluation feedback conditions, the instructions were identical except that phrase "as it might turn out" was replaced by the phrase "as it turns out", and subjects were told that the other male participant would be examining the subject's biographical information questionnaire responses and completing a first impression questionnaire "as a control".

The information contained in the biographical information questionnaire also served to manipulate the perceived ability of the confederate. Specifically, in the high ability conditions (see Appendix F), subjects found that, according to his questionnaire responses, the target male was an English major with a high (3.5) grade point average. In contrast, in the low ability conditions (see Appendix G), subjects found that the target was undecided about his major, and had a low (1.8) grade point average. In addition, the specific item described above as a manipulation check was included primarily to facilitate the manipulation of target's ability. Specifically, subjects in the high ability conditions found that the target felt very confident that his responses to the personal survey would elicit a positive evaluation from the female participant (he had circled number 9 on the response scale). In contrast, subjects in the low ability conditions found that the target felt little confidence that his responses would be evaluated positively (he had circled number 2 on the response scale).

When the subject had completed the impression questionnaire, the experimenter returned and collected it, at which point the subject was probed for suspicion and thoroughly debriefed.

Dependent Variable

The major dependent variable in the present experiment was liking for the male stimulus person. Liking for the male stimulus person was assessed through the subject's response to the first question appearing on the first impression form, which will be, "In general, what is your overall reaction to the other male participant?" To this question, the subject responded by circling a number on a 21-point scale anchored at the extremes by (1) Don't like him at all and (21) Like him very much. Liking

was also measured by subjects responses to an adjective checklist. Subjects were asked to provide their impressions of the stimulus person with respect to each of the following trait adjectives: sincere, honest, understanding, trustworthy, dependable, thoughtful, considerate, malicious, obnoxious, phony, and conceited. Subjects responded on 21-point scales anchored at the extremes by "Extremely Inappropriate" (1) and "Extremely Appropriate" (21), which followed each trait.

CHAPTER III

RESULTS

Since two experimenters were employed in manipulating subjects' self-esteem, a preliminary 2x2x2x2 analysis of variance were employed for both the manipulation check and dependent measures, which included experimenter as a factor. As there were no significant main effects or interactions involving the experimenter factor, all subsequent analyses were collapsed across this variable.

Manipulation Check

After subjects had completed the "personal survey", they were asked to complete a "biographical information questionnaire". Whereas the primary purpose of the final question, "How confident are you that your responses to the personal survey questionnaire will be positively evaluated by the female participant"?, was to facilitate the manipulation of target's ability, subjects also responded to this question on an 11-point scale labelled "not at all confident" (1) and "extremely confident" (11) at the extremes. Subject's responses to this question may be seen as an indirect check of the effectiveness of the self-esteem manipulation. Analysis of variance, a summary of which is presented in Table 1, revealed subjects to be more confident in the high self-esteem conditions ($M=7.65$) than in the low self-esteem conditions ($M=6.95$), but this difference only reached a marginal level of statistical significance $F(1,78)=3.51, p=.06$. The marginal nature of this effect was somewhat surprising in that the operationalization of self-esteem was virtually an exact replication of the procedure employed successfully in previous research (Sigall & Gould, 1977). Whereas differences in experimenter sex (the Sigall and Gould study employed a male, the present study employed females), or other experimenter characteristics may provide an explanation for the apparent difference in

TABLE 1
ANALYSIS OF VARIANCE OF SUBJECTS' CONFIDENCE
THAT THEY WOULD BE POSITIVELY EVALUATED
BY THE FEMALE PARTICIPANT

| Source | Sum of Squares | df | Mean Square | F |
|-------------|----------------|----|-------------|-------|
| Self-Esteem | 10.51 | 1 | 10.51 | 3.51* |
| Error | 233.88 | 78 | 2.99 | |

*p=.06

manipulations effectiveness, differences in the nature of the dependent measure and the degree of privacy of subjects' responses suggest compelling alternatives. Subjects in the Sigall-Gould experiment were asked to rate their confidence that they would succeed on an upcoming experimental task, whereas subjects in the present study rated their confidence that another person's evaluation of their academic and extracurricular interests would be positive. Perhaps more importantly, the Sigall and Gould procedure was specifically designed to ensure subjects' belief that their responses to the measure would be anonymous. No such belief in response anonymity was promoted in the present procedure, and, in fact, the inclusion of the measure on a form entitled "Biographical Information Questionnaire" may have led to a strong inference that the experimenter, at least, would be quite aware of each subject's response. It's therefore quite possible that subjects in the present study, due to self-presentational concerns, were more reluctant to express feelings of either extreme confidence or its lack.

Dependent Measures

It was predicted that in the negative evaluation conditions, low self-esteem subjects would like the target more than high self-esteem subjects regardless of target ability. In contrast, in the anticipated evaluation conditions, it was predicted that low, relative to high self-esteem subjects, would show greater liking for a high ability target, whereas high self-esteem subjects would show greater liking for a low ability target. Two measures of liking were obtained. Subject's first responded to the question: "In general, what is your overall reaction to the male participant"? Subjects were then asked to rate the appropriateness of the following adjectives in describing the stimulus person:

sincere, malicious, honest, understanding, obnoxious, phony, considerate, trustworthy, dependable, thoughtful, and conceited, respectively. Means for the general impression measure, and for the sum of the responses on the adjective list (range=11-231; negatively valued traits were reversed in the scoring) are presented in Table 2.

As the two dependent measures, the general impression measure and the sum of the responses on the adjective list, were conceptually related, an initial 2x2x2 multivariate analysis of variance was performed, employing the general impression measure and the combined scores for the 11 trait adjectives as the two dependent measures. A summary of this analysis is presented in Table 3. The analysis revealed a main effect for self-esteem ($F(2,71)=3.54$, $p<.05$) indicating that low self-esteem subjects liked the target more than did high self-esteem subjects. However, this effect was qualified by a significant three way interaction ($F(2,71)=3.26$, $p<.05$) which supports the experimental predictions. Given the significance of the multivariate analysis, univariate analyses of variance were then employed on both the general impression measure and the combined scores for the 11 trait adjectives.

Means and a summary of a 2x2x2 analysis of variance of the general impression measure are presented in Table 4. While the examination of the means reveals a pattern of differences congruent with the experimental hypothesis, the analysis yielded no significant effects for the general impression measure.

A 2x2x2 analysis of variance was performed on the combined scores for all 11 trait adjectives (range=11-231; negatively valued traits were reversed in the scoring), and the means and summary of this analysis are presented in Table 5. There was no main effect for target's ability

TABLE 2

MEAN RESPONSE TO GENERAL IMPRESSION MEASURE
AND TRAIT ADJECTIVE INDEX

| | | GENERAL IMPRESSION | | | |
|--------------------|------|----------------------------|-------|-----------------------|-------|
| | | <u>EVALUATION FEEDBACK</u> | | | |
| | | ANTICIPATED | | NEGATIVE | |
| | | <u>TARGET ABILITY</u> | | <u>TARGET ABILITY</u> | |
| | | Low | High | Low | High |
| <u>SELF-ESTEEM</u> | High | 12.7 | 11.4 | 11.7 | 10.8 |
| | Low | 12.1 | 13.3 | 11.9 | 12.8 |
| | | TRAIT ADJECTIVE INDEX | | | |
| | | <u>EVALUATION FEEDBACK</u> | | | |
| | | ANTICIPATED | | NEGATIVE | |
| | | <u>TARGET ABILITY</u> | | <u>TARGET ABILITY</u> | |
| | | Low | High | Low | High |
| <u>SELF-ESTEEM</u> | High | 14.49 | 11.76 | 12.25 | 12.94 |
| | Low | 13.89 | 14.13 | 15.21 | 14.12 |

TABLE 3

2x2x2 MULTIVARIATE ANALYSIS OF VARIANCE OF SUBJECTS' RESPONSES
TO GENERAL IMPRESSION AND TRAIT ADJECTIVE INDEX MEASURES

| Source | (Generalized Log Variance) | U-Statistic | df | F |
|----------------------|-------------------------------|-------------|----|-------|
| Self-Esteem (A) | 21.693 | .909 | 2 | 3.54* |
| Evaluation | | | | |
| Feedback (B) | 21.621 | .976 | 2 | <1 |
| Target's Ability (C) | 21.620 | .978 | 2 | <1 |
| AxB | 21.621 | .976 | 2 | <1 |
| AxC | 21.634 | .964 | 2 | 1.3 |
| BxC | 21.624 | .974 | 2 | <1 |
| AxBxC | 21.686 | .915 | 2 | 3.26* |
| Error | 21.597 | | | |

*p<.05

TABLE 4
MEAN RESPONSES TO GENERAL IMPRESSION MEASURE

| | | <u>EVALUATION FEEDBACK</u> | | | |
|--------------------|------|----------------------------|------|-----------------------|------|
| | | <u>ANTICIPATED</u> | | <u>NEGATIVE</u> | |
| | | <u>TARGET ABILITY</u> | | <u>TARGET ABILITY</u> | |
| | | Low | High | Low | High |
| <u>SELF-ESTEEM</u> | High | 12.7 | 11.4 | 11.7 | 10.8 |
| | Low | 12.1 | 13.3 | 11.9 | 12.8 |

Note: n=10 per cell; the higher the number, the more positive the evaluation.

2x2x2 ANALYSIS OF VARIANCE OF SUBJECTS' RESPONSES
TO GENERAL IMPRESSION MEASURE

| Source | Sums of Squares | df | Mean Square | F |
|-------------------------|-----------------|----|-------------|------|
| Self-Esteem (A) | 14.88 | 1 | 14.88 | 2.05 |
| Evaluation Feedback (B) | 6.33 | 1 | 6.33 | <1 |
| Target's Ability (C) | .03 | 1 | .03 | <1 |
| AxB | .90 | 1 | .90 | <1 |
| AxC | 23.65 | 1 | 23.65 | 3.26 |
| BxC | .003 | 1 | .003 | <1 |
| AxBxC | .53 | 1 | .53 | <1 |
| Error | 522.23 | 72 | 7.25 | |

TABLE 5
MEANS FOR TRAITS ADJECTIVE INDEX

| | | <u>EVALUATION FEEDBACK</u> | | | |
|--------------------|------|----------------------------|-------|-----------------------|-------|
| | | <u>ANTICIPATED</u> | | <u>NEGATIVE</u> | |
| | | <u>TARGET ABILITY</u> | | <u>TARGET ABILITY</u> | |
| | | Low | High | Low | High |
| <u>SELF-ESTEEM</u> | High | 14.49 | 11.76 | 12.25 | 12.94 |
| | Low | 13.86 | 14.13 | 15.21 | 14.12 |

2x2x2 ANALYSIS OF VARIANCE OF TRAIT ADJECTIVE INDEX

NOTE: Range=11-231; Negatively valued traits were reversed in the scoring

| Source | Sums of Squares | df | Mean Square | F |
|-------------------------|-----------------|----|-------------|--------|
| Self-Esteem (A) | 44.85 | 1 | 44.85 | 6.48** |
| Evaluation Feedback (B) | .19 | 1 | .19 | <1 |
| Target's Ability (C) | 11.03 | 1 | 11.03 | 1.59 |
| AxB | 6.56 | 1 | 6.56 | <1 |
| AxC | 2.21 | 1 | 2.21 | <1 |
| BxC | 5.89 | 1 | 5.89 | <1 |
| AxBxC | 29.89 | 1 | 29.89 | 4.32* |
| Error | 498.69 | 72 | 6.93 | |

*p<.05

**p<.02

($F(1,72)=1.59$, ns.), nor was there a main effect for evaluation feedback ($F<1$). There were also no significant two-way interactions between self-esteem target's ability ($F<1$) self-esteem and evaluation feedback ($F<1$) or target's ability and evaluation feedback ($F<1$).

There was a significant main effect for self-esteem ($F(1,72)=6.48$, $p<.02$), indicating that low self-esteem subjects liked the target more than high self-esteem subjects. However, this effect is qualified by a significant three-way interaction ($F(1,72)=4.32$, $p<.05$), which supports the experimental predictions. While low self-esteem subjects generally liked the target more than high self-esteem subjects, under conditions where evaluation was anticipated and the target's ability was perceived to be low, this tendency was reversed. The interaction was examined more closely by using simple comparisons. Collapsed across levels of target ability, after receiving negative comparison feedback, low self-esteem subjects liked the target ($M=14.67$) more than high self-esteem subjects ($M=12.60$). This difference was statistically significant ($F(1,72)=6.18$, $p<.05$). Low self-esteem subjects also liked the target ($M=14.13$) more than high self-esteem subjects ($M=11.76$) when the comparative evaluation was anticipated, and the target was perceived to have high ability, and this difference was significant ($F(1,72)=4.07$, $p<.05$). Simple comparisons also revealed that when comparative evaluation was anticipated, high self-esteem subjects liked the target more when they perceived him to have low ability ($M=14.49$) than when they perceived his ability to be high ($M=11.76$), and that this difference was significant ($F(1,72)=5.40$, $p<.05$). No other orthogonal comparisons approached significance. Taken as a whole, then, the findings offer strong support for the hypothesis.

CHAPTER IV

DISCUSSION

The results substantially support the predictions derived from the present analysis of comparison threat, and provide convincing evidence that the experience of threat to one's self-esteem as a result of anticipating, or receiving, negative comparison feedback, mediates a decrease in attraction towards a comparison target. In concordance with the findings of Morse and Gergen (1970) and Mettee and Riskind (1974), the present results extend the applicability of social comparison principles to instances where individuals are not seeking comparison for the sake of self-assessment, but are instead subjected to comparison information which has consequences for self-assessment. The findings of Mettee and Riskind, that comparison-mediated threats to an individual's self-esteem in turn decreases attraction toward his comparison target, were also corroborated and further extended. Whereas the Mettee-Riskind study demonstrated the operation of comparison processes in situations where individuals are presented with negative comparison information, the present findings extend the applicability of the comparison-threat analysis to instances where comparative evaluations are anticipated. Further, in the Mettee-Riskind experiment, the tendency of subjects to cease comparison with the comparison Other was a joint function of the discrepancy in subject-target performance and information from the experimenter that cessation of comparison should, or should not, occur. Subjects in the present study anticipated comparison with, or received negative comparison regarding targets whose perceived ability varied, and it was assumed that the subjects, on the basis of their present level of self-esteem, would themselves generate a range of comparison which in turn would determine whether or not cessation of comparison would occur.

It should be noted that the present analysis of comparison threat assumes, and the results support, a conceptualization of self-esteem that emphasizes the role of social comparison as its major determinant. The present operationalization of self-esteem closely matched this conceptualization; subjects received positive or negative feedback regarding the performance on a personality test relative to the performance of others who completed it. As is the case with all manipulations of "acute" self-esteem, such an operationalization also carries the assumption that one evaluates himself, in large measure, as he believes others evaluate him. While such an assumption is concordant with a number of theoretical ideas concerning the nature of self-esteem (e.g. Mead, 1934, Cooley 1902), the generalizability of the comparison threat analysis would be greatly enhanced if subjects, whose level of self-esteem was assessed rather than manipulated could be shown to produce a similar pattern of responses.

Extension of the present findings to incorporate "chronic" self-esteem measures may be justified on other grounds as well. The present analysis predicts, and the results strongly confirm, that individuals with high self-regard are far from immune to the experience of comparison threat. To theorists who would describe high self-esteem individuals as "well-adjusted", and the possession of high self-esteem an unequivocally valued goal, (Coopersmith, 1967) the present findings may therefore seem somewhat counterintuitive and controversial. Evidence that chronic and acute high and low self-esteem individuals respond in a similar manner would serve to quell the reasonable objection that acute and chronic self-esteem might be quite "different beasts".

One final note of caution may be added. While the findings of the present experiment support the predictions derived from the comparison

threat analysis, one potential alternative interpretation might be considered. It could be argued that of the target's perceived ability to elicit favorable evaluations from members of the opposite sex was higher in the negative comparison feedback than the anticipated comparison feedback conditions. This provides for the possibility that the target's success in gaining the female's more favorable evaluation was sufficient to counteract the ability information provided in the biographical questionnaire for subjects in the negative comparison feedback - low target ability conditions. Given such was the case, and considered in conjunction with the fact that planned comparison revealed no significant difference in attraction toward the target for low self-esteem - low ability target and low self-esteem - high ability target subjects in the anticipated comparison conditions, the results could be interpreted as reflecting simply that high self-esteem individuals dislike those who they perceive to be similar in ability to themselves. While attractive for its simplicity, such an interpretation fails to provide an alternative theoretical framework from which such a result might be predicted.

In sum, given the frequency with which individuals, perhaps particularly in Western culture, find themselves in situations where their particular abilities, or more general "social value" is compared to others' the present findings strongly suggest that the effect of such comparative evaluations on an individual's attraction toward that Other may be derived from the principles of social comparison theory.

APPENDIX A

National Psychological Inventory

Series 46074:31

DIRECTIONS:

The booklet contains a series of statements. Read each one, decide how you feel about it, and then mark your answer on the special answer sheet. MAKE NO MARKS ON THE TEST BOOKLET. If you agree with a statement, or feel that it is true about you, answer TRUE. If you disagree with a statement, or feel that it is not true about you, answer FALSE.

If you find a few questions which you cannot or prefer not to answer, they may be omitted. However, in marking your answers on the answer sheet, make sure that the number of the statement is the same as the number on the answer sheet.

Appendix A - cont'd

1. I looked up to my father as an ideal man.
2. Some people exaggerate their troubles in order to sympathy.
3. I am very slow in making up my mind.
4. I always follow the rule: business before pleasure.
5. A person who doesn't vote is not a good citizen.
6. I have had very peculiar and strange experiences.
7. I always like to keep my things neat and tidy and in good order.
8. Clever, sarcastic people make me feel very uncomfortable.
9. It makes me feel like a failure when I hear of the success of someone I know well.
10. I gossip a little at times.
11. I tend to be on my guard with people who are somewhat more friendly than I had expected.
12. Usually I would prefer to work with women.
13. There are a few people who just cannot be trusted.
14. I become quite irritated when I see someone spit on the sidewalk.
15. I have very few fears compared to my friends.
16. It is hard for me to start a conversation with strangers.
17. I sometimes get nervous if I think that someone is watching me.
18. For most questions there is just one right answer, once a person is able to get all the facts.
19. I sometimes pretend to know more than I really do.
20. Sometimes I feel like smashing things.
21. I think I would like the work of a school teacher.
22. Most people would tell a lie if they could gain by it.
23. When someone does me a wrong I feel I should pay him back if I can, just for the principle of the thing.
24. I usually take an active part in the entertainment at parties.

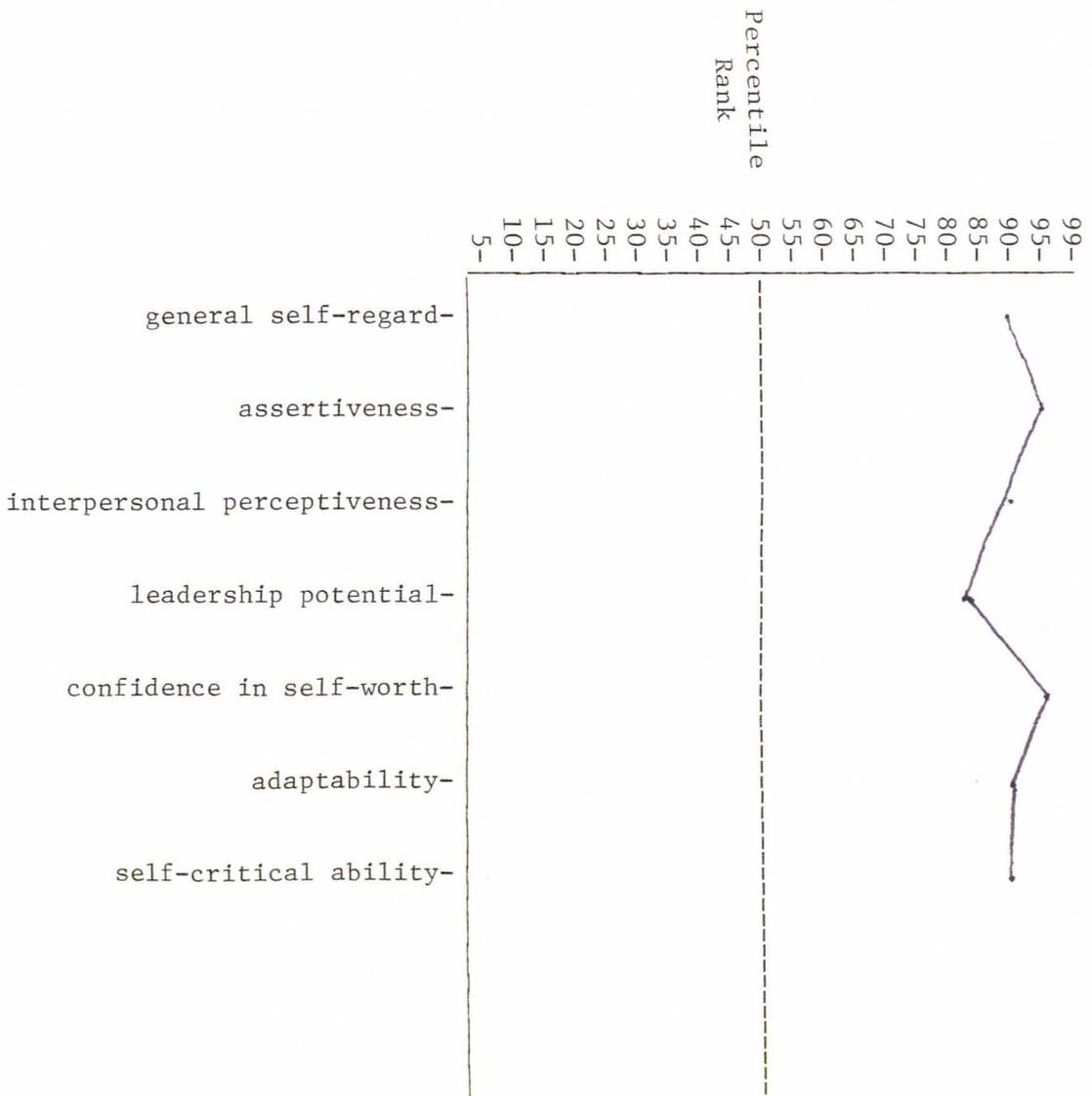
Appendix A - cont'd

25. I think I would enjoy having authority over other people.
26. Some of my family have quick tempers.
27. I get very tense and anxious when I think other people are disapproving of me.
28. I think Lincoln was greater than Washington.
29. It is always a good thing to be frank.
30. Sometimes I feel like swearing.
31. I used to keep a diary.
32. I like to boast about my achievements every now and then.
33. There have been times when I have been very angry.
34. I don't like to undertake any project unless I have a pretty good idea as to how it will turn out.
35. I prefer to shower to a bathtub.
36. I like to be the center of attention.
37. I would like to see a bullfight in Spain.
38. The average person is not able to appreciate art and music very well.
39. I get pretty discouraged sometimes.
40. The thought of being in an automobile accident is very frightening to me.
41. Sometimes I have the same dream over and over.
42. I believe we are made better by the trials and hardships of life.
43. Planning one's activities in advance is very likely to take most of the fun out of life.
44. I do not always tell the truth.
45. I am likely not to speak to people until they speak to me.
46. There is something wrong with a person who can't take orders without getting angry or resentful.
47. One of my aims in life is to accomplish something that would make my mother proud of me.

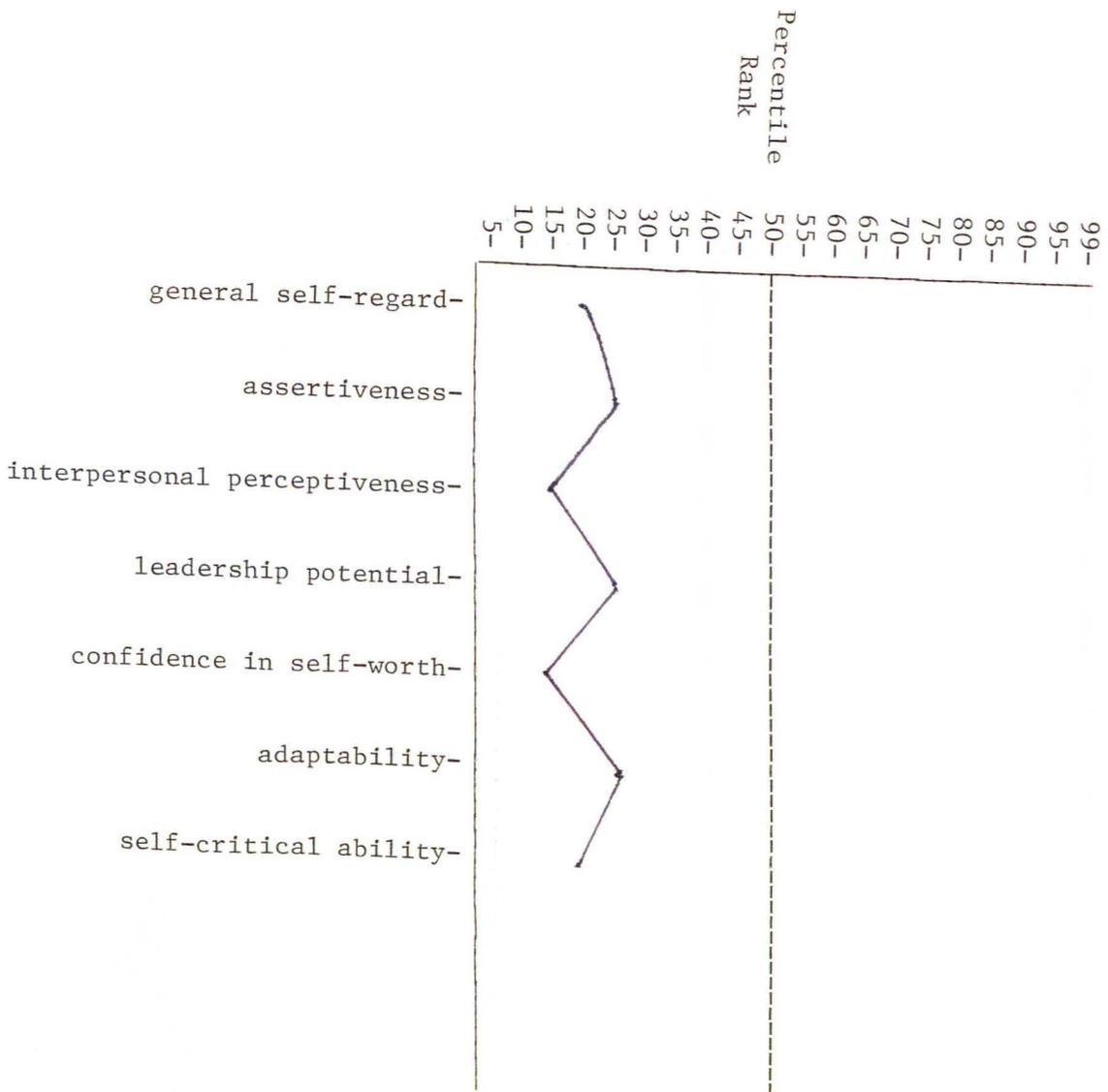
Appendix A - cont'd

48. It is all right to get around the law if you don't actually break it.
49. Most people will use somewhat unfair means to gain profit or an advantage rather to lose it.
50. I consider a matter from every standpoint before I make a decision.

APPENDIX B
HIGH SELF-ESTEEM FEEDBACK



APPENDIX C
LOW SELF-ESTEEM FEEDBACK



APPENDIX E
SUBJECT'S FORM
BIOGRAPHICAL INFORMATION QUESTIONNAIRE

1. Age_____
2. Class (circle one): Freshman - Sophomore
Junior - Senior
3. Major_____
4. G.P.A. _____
5. How confident are you that your responses to the personal survey questionnaire will be positively evaluated by the female participant?

1 2 3 4 5 6 7 8 9 10 11
Not at all
Confident
Extremely
Confident

APPENDIX F
HIGH TARGET ABILITY
BIOGRAPHICAL INFORMATION QUESTIONNAIRE

1. Age 19
2. Class (circle one): Freshman - Sophomore
Junior - Senior
3. Major ENGLISH
4. G.P.A. 3.5
5. How confident are you that your responses to the personal survey questionnaire will be positively evaluated by the female participant?
1 2 3 4 5 6 7 8 9 10 11
Not at all Extremely
Confident Confident

BIBLIOGRAPHY

- Cooley, C. H. Human Nature and the Social Order; Scribner's, 1902.
- Coopersmith, S. A method for determining self-esteem. Journal of Abnormal and Social Psychology, 1959, 59, 87-94.
- Coopersmith, S. The Antecedents of Self-Esteem; W. H. Freeman and Company, 1967.
- Festinger, L. A theory of social comparison processes. Human Relations, 1954, 7, 175-190.
- Hakmiller, K. L. Threat as a determinant of downward comparison. Journal of Experimental Social Psychology, 1966, Supplement 1, 32-39.
- Mead, G. H. Mind, Self, and Society; University of Chicago Press, 1934.
- Mettee, D. R. & Riskind, J. Size of defeat and liking for superior and similar ability competitors. Journal of Experimental Social Psychology, 1974, 10, 333-351.
- Morse, S. & Gergen, K. J. Social comparison, self-consistency, and the concept of self. Journal of Personality and Social Psychology, 1970, 16, 148-156.
- Sigall, H. & Gould, R. The effects of self-esteem and evaluator demandingness on effort expenditure. Journal of Personality and Social Psychology, 1977, 35, 12-20.
- Singer, J. Social comparison-progress and issues. Journal of Experimental Social Psychology, 1966, Supplement 1, 103-110.
- Thornton, D. A. & Arrowood, A. J. Self-evaluation, self-enhancement, and the locus of social comparison. Journal of Experimental Social Psychology, 1966, Supplement 1, 40-48.
- Wheeler, L. Motivation as a determinant of upward comparison. Journal of Experimental Social Psychology, 1966, Supplement 1, 27-31.