A Negativity Bias in Interpersonal Evaluation

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Two studies were conducted to demonstrate a bias toward negativity in evaluations of persons or their work in particular social circumstances. In Study 1, subjects evaluated materials written by peers. Those working under conditions that placed them in low status relative to the audience for their evaluations, or conditions that made their intellectual position within a group insecure, showed a clear bias toward negativity in those evaluations. Only individuals who believed their audience to be of relatively low status and at the same time believed their intellectual position to be secure did not show this bias. In Study 2, subjects viewed a videotape of a stimulus person and rated him on several intellectual and social dimensions. Again, subjects believed their audience to be of either relatively high or relatively low status. As a cross dimension, they were given instructions to focus on either the intellectual or the social abilities of the stimulus person while viewing the videotape. A strong main effect of audience status was demonstrated, but only in ratings of intellectual traits; subjects who believed their audience to be of relatively high status rated the stimulus person's intellectual qualities significantly more negatively. Moreover, this effect was independent of the instructional focus subjects had been given. The negativity bias is discussed in the context of previous demonstrations of biases toward weighting negative information more heavily than positive information, as well as previous demonstrations of seemingly pervasive positivity biases in memory and judgment.

One rite of passage from graduate student to professional psychologist is the first invitation to review a manuscript for a psychology journal, an experience that many of us remember as fraught with insecurity and self-doubt. Would we fail to detect a fatal flaw in design or methodology

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and accept the manuscript, only to have this flaw discovered by colleagues when the paper appeared? Would the editor feel that our comments were insightful and incisive enough to warrant further invitations to review? Could we somehow manage to be both witty and wise? It is probable that many of us resolved this dilemma by becoming brutally critical—combing over the manuscript, composing a litany of faults in conceptualization, design, methodology, and writing style. In short, we fell prey to a negativity bias—a vigilance for faults, a blindness for strengths.

A brief consideration of the many situations in which interpersonal evaluation is called for suggests that this negativity bias may operate in a wide variety of circumstances. At academic colloquia, it often seems to be the graduate students who are the most searing critics of the speaker. If a film buff asks us what we thought of a French movie we just saw, the less sure we feel discussing foreign films, the more inclined we may be to resort to complaints about the director's self-indulgence or the film editor's lack of eloquence. In each of these instances, an individual's intellectual or critical abilities are being scrutinized by an intellectual superior; in each, that individual responds by offering negative criticism. These anecdotes suggest a causal relationship between insecurity and negativity: individuals who, because of low relative status or unstable position, are unsure about another's perceptions of their intellectual abilities, may be biased toward negativity in their interpersonal evaluations.

Previous researchers have identified what seems to be a general negativity bias in evaluations of stimuli, including social stimuli (Kanouse & Hanson, 1971). This bias is defined as a tendency for perceivers to be "cost-oriented" in forming overall evaluations of objects, to weight negative aspects of an object more heavily than positive aspects. For example, it has been demonstrated that when subjects are given a set of adjectives supposedly describing an individual and are asked to give overall evaluations of that person, negative adjectives will be disproportionately important in determining the final evaluation. Anderson (1965) found that when subjects were asked to evaluate a hypothetical person described by a set of four adjectives differing in negative or positive polarity, highy polarized negative adjectives lowered the overall evaluation more than would be predicted by either an adding model or an averaging model of information integration. A parallel effect for highly polarized positive adjectives was not demonstrated. Although there is some evidence of individual subject differences in the weighting of traits (Ostrom & Davis, 1979), a number of other studies (e.g., Feldman, 1966; Hodges, 1974; Rokeach, 1968) have confirmed the general finding that negative adjectives have a greater "modifying capacity" than positive adjectives, a greater ability to pull overall evaluations toward themselves. And, in studies of impression formation, it has been found that not only is negative information weighted more heavily (Hamilton & Zanna, 1972), but it leads to impressions that are more resistant to change than those based on positive information (Richey, McClelland, & Shimkunas, 1967).

Parallel negativity effects have been demonstrated in other domains. For example, when two immoral deeds are paired, the worse of the two is more important in determining the overall evaluation of the pair (Birnbaum, 1972). In job interview situations, interviewers appear to rely more heavily on negative than on positive information (Bolster & Sprinbett, 1961). Also, in risk-taking studies, subjects seem to concentrate on the negative consequences of losing rather than the positive consequences of winning. Thus, potential costs are more important in determining an overall evaluation of a risk-taking situation than are potential gains (Katz, 1964; Rettig & Pasamanick, 1964; Slovic & Lichtenstein, 1968).

It is important to note two fundamental differences between these negativity biases and the negativity bias proposed at the start of this paper. First, these biases seem to represent general tendencies in evaluations of stimuli that have decidedly negative attributes. The new bias proposed here does not represent a general response tendency, but a response bias induced by particular social situations. In addition, it is proposed to operate in evaluations of stimuli that are not a priori chosen to have negative attributes. Second, the previously identified effects can be viewed as a bias toward favoring negative information, a tendency to weight the negative more heavily in perceptions of evaluative information. By contrast, the presently identified bias can be viewed as a bias toward producing negative evaluations, a tendency to make evaluatively negative statements about others under certain conditions. The former focuses on stimuli; it is a bias in the perception of evaluative information. The latter focuses on responses; it is a bias in the production of evaluative information.

A compelling explanation offered by Kanouse and Hanson (1971) for the greater weighting of negative information is that it represents a "figure-ground" phenomenon. According to this argument, most evaluations and expectations are positive; negative information would thus be weighted more heavily as a result of a contrast effect. Indeed, there is a great deal of evidence for such a general positivity bias—so much evidence, in fact, that a "Pollyanna Principle" has been proposed (Matlin & Stang, 1978): pleasantness predominates, in that pleasant items are processed more accurately and efficiently than unpleasant or neutral items. This phenomenon appears to be strong and pervasive: pleasant events are judged more likely than unpleasant events, even when the true probabilities are actually equivalent (Marks, 1951; Irwin, 1953); pleasant interpersonal relationships are expected more often than neg-

ative relationships (DeSoto & Kuethe, 1959); in a free association task, subjects respond with pleasant words more frequently than with unpleasant words (Boucher & Osgood, 1969); people tend to rehearse and think about pleasant events and items more often than negative ones (Bradburn, 1969; Matlin & Underhill, Note 1; Stang, Note 2); people tend to expect and report high levels of personal happiness (Cantril, 1965; Bradburn & Caplovitz, 1965). And perhaps most relevant to the present study is evidence that people tend to make positive evaluations of other people, including strangers (Frauenfelder, 1974; Kleinke, Bustos, Meeker, & Staneski, 1973; Mettee, 1971a, 1971b; Sears & Whitney, 1972).

Taken as a whole, previous research on negativity and positivity would seem to contradict intuitions about a negativity bias such as that described in the anecdotes presented earlier. It appears that, unless subjects are actually given evaluative information that is explicitly negative, they tend to make positive evaluations of most stimuli. Thus, we would expect, for example, that most manuscript reviewers for journals would give rather positive reports to their editors, and nearly everyone in colloquia audiences should express approval of the speakers and their ideas. Perhaps the proposed negativity bias does occur, though, even given the pervasive tendency toward positivity. There may be specific social factors that, when operative in a particular situation, can eliminate the usual positivity bias and, in fact, induce a clear negativity bias in interpersonal evaluation.

There is virtually no previous research that directly addresses this issue. One recent study, however, does provide some evidence of situationally induced negativity (Cialdini & Richardson, 1980). Students who experienced a visible failure (poor performance on a creativity test) showed a tendency to derogate a rival university, a result that was dubbed the "blasting phenomenon." This phenomenon, "a tendency to derogate others, especially others with whom one has a negative unit relationship, in the interests of self-enhancement" (p. 413), was interpreted according to Heider's (1958) balance theory: If P and O are negatively connected, then the more negative O can be made to seem to observers, the more positive will be the observers' opinion of P. The results of this study do reveal a negativity bias; they suggest that individuals who are made to feel intellectually insecure will, as a tactic of impression management, display negativity toward objects having a negative relation to themselves.

The negativity bias proposed here, however, is considerably more general. It is described as a tendency to derogate others in the interests of self-enhancement, even when the evaluator does not have a negative unit relationship with those others. The present experiments were designed to explore this proposed phenomenon. For Study 1, two inde-

pendent variables were chosen in an attempt to capture the important features of the everyday situations described earlier; subjects made evaluations for an audience (the experimenter) who was of approximately the same status as themselves or of much higher status, and they were made to feel that their intellectual position within a group was either secure or insecure. It was expected that both low relative status and intellectual insecurity would lead to negativity in evaluations.

STUDY 1

Method

Subjects. Participants in this study were 44 male undergraduates at Dartmouth College who had signed up for an experiment on "group decision making." They were paid for their participation.

Procedure. The experimental design employed was a 2×2 factorial in which the two between-subjects independent variables were status of the experimenter, who would be the audience for subjects' evaluations (high or low status), and security of the subjects' superior position within a group of peers (secure or insecure). Thus, the four experimental conditions were: (1) Secure Subject Position/High-Status Experimenter, (2) Secure Subject Position/Low-Status Experimenter, (4) Insecure Subject Position/Low-Status Experimenter.

Subjects participated in the experiment in groups of 4. The four members of each group were not previously acquainted with one another. Within each group, one subject was randomly assigned to each of the four experimental conditions; thus, all four conditions of the experiment were represented in each group. This was done before subjects were ushered into the laboratory, by having them choose from four cards which supposedly represented "seating booth" assignments. All groups were run by the same female experimenter.

As soon as they were brought into the laboratory, the subjects were seated in booths that kept them visually isolated from one another and from the experimenter. They were then given instruction sheets that contained an explanation of the purported purpose of the experiment. For half the subjects (High-Status Experimenter conditions), this introduction stated that the experimenter was "Dr. Amabile, Assistant Professor of Psychology at Brandeis University in Boston, who is visiting Dartmouth this semester." To the others (Low-Status Experimenter conditions) she was introduced as "Terri Amabile, a first-year graduate student in psychology here at Dartmouth." Neither status—professor or graduate student—seemed implausible to any subject, and no subjects asked about this during a question period at the conclusion of each experimental session.

The instruction sheet went on to state that the experiment was designed to examine the differences between written and oral communication in groups attempting to solve social problems. Each subject was told that his was a "written communication" group, and that no oral communication between participants or with the experimenter would be allowed until the conclusion of the session. This cover story, justifying the exclusive use of written communication throughout the experiment, made it possible to provide different information to different subjects in the group without their knowledge of the disparity. It also ensured that the experimenter could not communicate any expectations concerning the subjects' behavior. Thus, from the start of the session, all instructions were given to subjects in written form.

The initial instructions went on to state that the group would be given two social problems to consider, one after the other. One member of the group would serve as the "expert" during consideration of each problem; the other three subjects would supposedly write suggestions for solving that social problem, and the expert would evaluate those suggestions.

After subjects had finished reading the instructions, the experimenter gave each a back-

ground questionnaire to complete, supposedly to give her a basis for choosing the expert for the first topic. This questionnaire contained items on social attitudes, political interests, hobbies, and academics (e.g., "Please estimate your G.P.A."; "Please rate your level of interest in current events."). After pretending to score these questionnaires, the experimenter gave each subject a card stating that he had been chosen as the expert:

Your answers on the initial questionnaire indicate that because of your interests, intellectual capacities, and evaluative skills, you should be chosen to act as the "expert" on the first topic. This means that, as expert, you will be asked to evaluate the suggestions written by the other three subjects. I will also ask you to evaluate one suggestion that was written by a previous subject.

The memo that the others are reading right now tells them that you are the "expert" on this topic and that you will be evaluating their suggestions. While you are evaluating their suggestions, they will be reading each other's suggestions and trying to elaborate on them.

In addition, subjects in the Secure Subject Position conditions were told, "You will continue to be the 'expert' for the second topic." In contrast, the card for subjects in the Insecure Subject Position conditions stated, "After you complete your evaluations of the suggestions made by the others, I will examine them to decide whether you should continue as the 'expert' for the second topic."

Following this, each of the four subjects, believing himself to be the expert, was asked to write out the criteria he would use in judging suggestions made for solving this first social problem (summer unemployment among high school youth). During this time, each subject believed that the other three were writing their suggestions, which he would later evaluate. After allowing subjects to write for a few minutes, the experimenter collected the papers and left the room, stating that she was going to photocopy them so that the "nonexperts" could try to elaborate on the suggestions made by the others while the expert was evaluating the suggestions. Before leaving, the experimenter gave each subject an information sheet on the second social problem that was, supposedly, going to be considered in the second half of the experiment. This was done to ensure that the subjects would not have idle time during which they might discuss the experiment in her absence.

The experimenter returned with copies of four previously prepared handwritten suggestions on the problem of summer unemployment. These suggestions had been given moderately positive evaluations by pretest subjects. Each subject was told that the first three suggestions were written by the members of his own group, and that the fourth had been written by a previous subject. Thus, it would be possible to distinguish between negativity biases directed specifically toward those who are or are not members of one's own group and more general negativity biases in interpersonal evaluation. The order in which the four suggestions were presented to subjects was counterbalanced. Subjects evaluated each of the four suggestions on five dimensions: (1) degree of intelligence reflected by the suggestion (very little-very much), (2) feasibility of the suggestion (very impractical-very practical), (3) clarity of presentation of the idea (very unclear-very clear), (4) probable results if the suggestion was followed (very unsatisfactory-very satisfactory), and (5) overall quality of the suggestion (poor-very good). These ratings were made on 40point scales, and subjects wrote a brief comment about each suggestion. When these evaluations were completed, the experimenter announced that there was not enough time to permit a consideration of the second social problem. She then asked subjects for their reactions to and comments on the experiment and fully explained its purpose.

Results and Discussion

Although some of the suggestions were consistently rated more positively than others by subjects in all conditions, there was no evidence of any interactions between particular suggestions and either of the two independent variables. In three-way analyses of variance (Security \times Status \times Suggestion) on each rating dimension, with Suggestion a within-subjects factor, the three-way interactions on all dependent variables were nonsignificant, as were the security \times suggestion and the status \times suggestion interactions. Thus, ratings on each dependent measure for each subject were combined across the four suggestions.

There were significant correlations among all five subject-rated dependent variables: intelligence, feasibility, clarity, probable results, and overall quality. The lowest correlation in this matrix was between probable results and clarity, r = .33, p < .013, and the highest correlation was between intelligence and overall quality, r = .79, p < .001; the mean correlation for the matrix was .54. On this basis, these five variables were summed to form an overall index of each subject's evaluation of the suggestions.¹

This index provides strong evidence that both low relative status and insecure position can indeed induce a negativity bias in evaluations. Inspection of the means in Table 1 reveals that the only group not demonstrating a negativity bias in evaluations was that which was secure and believed the experimenter to be of low status. By analysis of variance, the Security \times Status interaction is statistically significant, F(1, 40) = 8.29, p < .01, and the two main effects are marginally significant: security, F(1, 40) = 3.35, p < .07, and status, F(1, 40) = 3.56, p < .07.

Analyses of the five individual dependent measures included in this index reveal no effects opposite to those obtained on the combined measure, and several effects that confirm the composite analysis. There was a significant Security × Status interaction for three of the variables: overall quality, F(1, 40) = 5.16, p < .03, feasibility, F(1, 40) = 4.89. p < .03, and probable results, F(1, 40) = 8.06, p < .01. This interaction approached statistical significance for the two remaining variables: clarity, F(1, 40) = 3.68, p < .06, and intelligence, F(1, 40) = 3.12, p < .06.08. In addition, there was a significant main effect of security on intelligence, F(1, 40) = 5.69, p < .02, and feasibility, F(1, 40) = 6.00, p < .02, and a significant main effect of status on overall quality, $F(1, \frac{1}{2})$ 40) = 5.89, p < .02, and intelligence, F(1, 40) = 4.28, p < .04. In all cases, the main effects and interactions reflect the same pattern of differences in the means: subjects who are insecure or who believe the experimenter to be of high status are more negative than those who are secure and who believe her to be of low status. For all dependent measures, subjects in the Secure Position/Low Status Experimenter condition were the most positive in their evaluations.

¹ The distributions for all five variables were quite similar, and analyses on an index combining normalized scores produced results that were virtually identical.

	Security of subject's position as expert	
Status of experimenter	Secure	Insecure
High	433.09	453.73
High Low	526.91	434.18

TABLE 1
MEANS ON COMBINED INDEX OF FIVE SUBJECT-RATED VARIABLES: STUDY 1

Note. These are means of summed scores on each of the five measures, over the four suggestions, for subjects in each group. Higher numbers indicate more positive evaluations. Each of the five individual measures was rated on 40-point scales.

Two independent judges, blind to subjects' experimental condition, used 40-point scales to rate the brief comments that subjects wrote on each suggestion. Their ratings of the tone of the comment (from very negative to very positive) showed a high level of interjudge reliability (mean r = .90). These ratings, combined over the four suggestions, generally conform to the pattern of results obtained in the subject-rated dependent measures, although the differences here are not statistically significant. Subjects in the Secure Position/Low-Status Experimenter group were considerably more positive (M = 143.18) than subjects in any of the other three groups: Secure Position/High-Status Experimenter, M = 106.18; Insecure Position/High-Status Experimenter, M = 116.82.

It might be argued that subjects who felt insecure in some way in this experiment appeared to be negative in their evaluations simply because they took the task more seriously and put more effort into it, scrutinizing the suggestions more carefully. However, there is some evidence to suggest that this was not the case. First, the two independent judges also rated the quality of writing in the brief comments subjects made on each of the suggestions, a measure that can be considered a rough assessment of the level of effort subjects applied to the evaluation task. There were no significant differences between conditions on this measure and, moreover, the correlations between this measure and the other dependent variables were all nonsignificant and close to zero. Second, inspection of these open-ended comments revealed that subjects in the Secure Position/Low-Status Experimenter group wrote comments that were just as long as those of the other subjects. Indeed, although there was a wide range in the number of words written on the four suggestions (26–189) and in the number of sentences (4-9), there were no significant differences between conditions on either of these measures. Thus, it appears unlikely that the negativity differences between conditions resulted from a nonuniformity of effort.

It is possible that the negativity effect demonstrated here is due solely or primarily to subjects' derogation of the one suggestion that was supposedly written by someone outside their own group. This possibility would be predicted by Cialdini and Richardson's (1980) "blasting phenomenon," which was described earlier. Subjects, being implicitly or explicitly aware of cognitive balance effects in interpersonal relations, might attempt to downgrade an observer's impression of someone outside of their own group when they are feeling personally insecure.² Alternatively, it might be supposed that, in an attempt to make themselves particularly distinctive within their current situation, subjects would be motivated to specifically derogate those within their own group.

To investigate these two possibilities, a suggestion supposedly written by an outside person, and clearly labeled as such, was included for evaluation. Comparisons between evaluations of this outside suggestion and evaluations of the three "group" suggestions reveal no significant differences and no obvious tendency to rate the "outside" suggestion or the "inside" suggestions higher. Subjects in the negative groups were consistently negative in evaluations of the four suggestions, and subjects in the one positive group were consistently positive. Thus, this study demonstrates a negativity bias that is more general than that demonstrated by Cialdini and Richardson (1980), in that the current bias does not depend upon a negative relation between the evaluator and the object evaluated.

It is interesting to consider whether the negativity bias displayed here was an absolute or a relative one. Subjects' ratings of the quality, feasibility, and other attributes of the suggestions were made on 40-point scales that had five reference points marked, with the midpoint (20) always being labeled "Average." A clear demonstration of an absolute negativity bias would require that, in the three groups displaying negativity, the mean ratings be lower than that "average" point. However, this was not the case. The highest scale ratings given by the three "negative" groups were made for evaluations of the clarity of the suggestions. There, the mean ratings for these three groups—Secure Position/High-Status Experimenter, Insecure Position/High-Status Experimenter, and Insecure Position/Low-Status Experimenter-were 25.41, 28.25, and 26.00, respectively. The lowest scale ratings given by these groups were. respectively, 17.59, 19.41, and 17.66, for ratings of probable results. Ratings of the other variables, overall quality, feasibility, and intelligence. were intermediate between these high and low values. Thus, with fairly high consistency, the three "negative" groups made ratings that were quite close to "average" on the scale; the negativity bias demonstrated here is, then, most safely considered a relative one.

² Cialdini and Richardson (1980) suggest that, according to balance theory, the "blasting phenomenon" could be manifested toward any outgroup member, even one where there was no explicitly negative unit relation.

To allow a theoretical analysis of these results, it is important to determine whether it was subjects in the three groups giving lower evaluations who were displaying a negativity bias, or subjects in the one group giving higher evaluations who were displaying a positivity bias. Obviously, an answer to this question must come from evaluations of the suggestions made by raters outside of the experimental situation. As a pretest, the same experimenter had randomly assigned 17 of the volunteer subjects to make anonymous evaluations of the four suggestions on four of the five variables used in the experiment; quality, clarity. feasibility, and probable results. The rating sheets were identical to those used in the experiment, and the subjects were simply instructed to evaluate each suggestion on each dimension. These ratings were summed into an overall index and compared with overall indices of these four variables for each of the four experimental groups. As expected, these comparisons revealed that all groups except the Secure Position/Low-Status Experimenter group were displaying a bias toward negativity in their evaluations: Secure Position/Low-Status Experimenter, t(26) =0.40, n.s.; Secure Position/High-Status Experimenter, t(26) = -2.89, $p < .008^3$ Insecure Position/Low-Status Experimenter, t(26) = -2.70, p < .012; and Insecure Position/High-Status Experimenter, t(26) =-1.64, p < .109. Although the overall index did not reveal a significant negativity effect for this last group, Insecure Position/High-Status Experimenter, the negativity effect was significant on two of the four individual dependent variables: quality, t(26) = -2.77, p < .02, and probable results, t(26) = -3.21, p < .01.

Analyses of the subjects' evaluations in Study 1, then, provide strong evidence of a negativity bias in interpersonal evaluation under conditions of low relative status or insecure position. This pattern was obtained in subjects' evaluations of the author of the suggestions (scale ratings on the "intelligence" question), in their scale ratings of the author's product (feasibility, clarity, probable results, overall quality of the suggestion), and in their written comments. For each of the variables, the only subjects who did not demonstrate the negativity bias were those whose positions as "expert" were secure and who believed the experimenter to be of relatively low status. Moreover, the low ratings made by subjects in the other three groups do seem to represent a true negativity bias. Relative to the pretest ratings of the suggestions, these groups were significantly lower in their ratings, while the Secure Position/Low-Status Experimenter group produced ratings that were essentially the same as the pretest baseline.

STUDY 2

Although Study 1 provided a clear demonstration of the proposed negativity bias, a second study was needed to demonstrate the reliability

³ All t tests are two-tailed.

of the phenomenon and to extend its generality. Thus, Study 2 was conducted as a conceptual replication of the status effect of Study 1 with several changes in procedure. First, the stimulus used was quite different from the suggestions that subjects evaluated in Study 1. In Study 2, subjects viewed a videotaped interview with a male student and made ratings of his intellectual and social traits. Second, both male and female subjects were used. Third, a manipulation check on the perceived status of the experimenter was obtained. And, finally, Study 2 was conducted by a different experimenter who was unaware of the subjects' experimental condition.

In addition, subjects in Study 2 were presented with an explicit instructional focus before they viewed the videotapes. They were told either that they were to judge the stimulus person's social traits or that they were to judge his intellectual traits. (All subjects in fact subsequently rated both.) This variable was designed to provide information on the process by which negativity occurs. If low-relative-status subjects are biased in their coding of information about the stimulus person, or if they are being more critical as they are watching him, we would expect instructional focus to interact with experimenter status. Within the low-relative-status groups, those given a prior social focus should display negativity in their ratings of the stimulus person's social traits but not his intellectual traits; those given a prior intellectual focus should display negativity in their ratings of his intellectual but not his social traits. If, on the other hand, subjects' biasing occurs as they are making their ratings, we would find no such interactions.

Method

Subjects. Subjects were 52 male and 52 female undergraduates at Brandeis University who had been recruited from the Introductory Psychology course. They signed up for a study in "Person Perception" and participated in partial fulfillment of a course requirement. The subjects were randomly assigned to experimental condition with the restriction that there were 13 males and 13 females in each of the four basic experimental conditions.

Procedure. The experimental design employed was a $2 \times 2 \times 2$ factorial in which the three between-subjects independent variables were: subject sex, status of the experimenter (high or low status), and instructional focus (subjects were told that their task was to judge the stimulus person's intellectual traits or his social traits). The stimulus was a 7-min videotape in which a male actor plays the part of a student from another college who is being interviewed by a female peer. The interviewer is not visible on the tape, and she says very little. The stimulus person answers her questions about his family background, college life, and future plans. Pretest ratings of the tape indicated that the stimulus person was judged moderately positively on both intellectual and social traits.

Subjects participated in groups of five or fewer, and all sessions were run by a female experimenter who was different from the experimenter who had run Study 1. As soon as subjects arrived, they were told that considerations of experimental control precluded their interaction with one another or with the experimenter. They were told to submit any questions to the experimenter in written form, and all the instructions they received were written. Thus, it was possible to keep the experimenter blind to subjects' conditions by having her simply hand them instruction sheets and rating booklets in prearranged folders.

In most of the groups, different subjects received instructions for different experimental conditions.

The two manipulated independent variables were introduced in an instruction sheet that subjects read as soon as the session started:

My name is Harmony Glazebrook and I am currently (a candidate for a Ph.D. in psychology/an undergraduate research assistant). The purpose of this study is to find out how people make judgments about the (intellectual/social) abilities of others. In this experiment you will watch a segment of videotape in which the camera focuses on one person in an interview situation. Please watch the tape carefully. After it is over, I will give you a questionnaire on which to make your judgments of the (intellectual/social) abilities of the person on the tape.

This experiment is designed to determine how well you can judge the (intelligence/social skills) of the individual you will see. Your judgments of this person's (intellectual/social) abilities will be compared with the judgments of someone who knows this person very well.

After subjects had read their instructions and viewed the videotape, they made ratings of the stimulus person on 12 intellectual dimensions (ability to articulate thoughts, critical ability, open-mindedness, creativity, verbal skills, acquired knowledge, studiousness, wit, logical ability, potential for academic success, ability to handle himself intellectually, and overall intelligence) and 13 social dimensions (conversational ability, friendliness, spontaneity, warmth, honesty, humor, sensitivity, politeness, attractiveness, optimism, potential for success socially, ability to handle himself socially, and overall social competence). These ratings were made on 40-point scales, and subjects also wrote brief open-ended comments about the stimulus person. Subjects who had been told to judge the person's intellectual abilities rated the intellectual traits first, and those who had been told to judge his social abilities rated the social traits first.

Results and Discussion

In an attempt to confirm that the "graduate student" experimenter was indeed perceived to be of higher status than was the "research assistant" experimenter, 20 additional subjects (10 male and 10 female) were chosen from the same subject pool to read one version of the opening instructions and rate the status of the experimenter. These ratings clearly demonstrated that the high-status experimenter was indeed seen as being of higher status. On a 40-point scale for rating the status of the experimenter relative to the "average Brandeis undergraduate," the graduate student experimenter was given a mean rating of 29.41, while the research assistant experimenter was given a mean rating of 21.91, t(18) = 3.81, p < .001.

Several of the intellectual trait ratings were highly intercorrelated: ability to articulate thoughts, critical ability, verbal ability, studiousness, potential for academic success, acquired knowledge, ability to handle himself intellectually, and overall intelligence. Over the 104 subjects, all of the intertrait correlations in this matrix of eight traits were significant at p < .001; the correlations ranged from .32 to .76, with a mean of .53. Similarly, several of the social trait ratings were highly intercorrelated:

friendliness, warmth, humor, sensitivity, ability to handle himself socially, and overall social competence. Over the 104 subjects, all of the intertrait correlations in this matrix of six traits were significant at p < .001; these correlations ranged from .32 to .76, with a mean of .45. Thus, two indices were formed for each subject: an intellectual index composed of the sum of the subject's ratings for the eight intellectual traits, and a social index composed of the sum of the subject's six social trait ratings. These two groups of ratings can be considered as separable from one another; the correlation between the two indices was only .30.

Means of the intellectual and social indices are presented in Table 2. These means clearly indicate that the major finding of Study 1 was indeed replicated. A negativity effect was produced by a high-status experimenter, such that the groups having a graduate student experimenter were more negative in their evaluations of the stimulus person; this main effect of experimenter status is statistically significant for the intellectual index, F(1, 96) = 7.92, p < .01. Interestingly, the main effect of experimenter status on the social index is virtually nonexistent (F < 1). Results on the individual variables are consistent with the findings for the indices. The main effect of experimenter status is significant for several of the intellectual variables: ability to articulate thoughts, F(1,96) = 7.17, p < .01; critical ability, F(1, 96) = 6.61, p < .02; verbal skills, F(1, 96) = 6.14, p < .02; studiousness, F(1, 96) = 5.88, p < .02.02; potential for academic success, F(1, 96) = 9.20, p < .003; and ability to handle himself intellectually, F(1, 96) = 4.04, p < .05. None of the 13 social dimensions showed a significant main effect of experimenter status.

Before concluding that the consistent difference between intellectual and social traits in showing the negativity bias represents a meaningful phenomenon, it is important to determine whether this difference might be an artifact of the particular stimulus used. Unless the intellectual and social traits were rated equally in the absence of the independent variables, the interpretation of the difference found in this study would be unclear. For example, if baseline ratings showed the intellectual variables to be rated consistently lower than the social variables, this might suggest that the negativity bias will be demonstrated toward whichever domain of the stimulus person's behavior or personality is weakest or most easily attacked, and not toward the intellectual domain per se.

In order to examine this possibility, a group of 10 subjects from the same subject pool (5 male and 5 female) were randomly assigned to view the videotape and rate the stimulus person in the absence of specific instructions regarding the experimenter's status or the particular domain

⁴ As in Study 1, the distributions for the variables in each index were quite similar, and analyses on indices of normalized scores produced virtually identical results.

Status of experimenter	Instructional focus				
	Male subjects		Female subjects		
	Social	Intellectual	Social	Intellectual	
High	176.92 I	197.38 I	178.62 I	212.46 I	
	149.23 S	161.46 S	155.46 S	170.46 S	
Low	205.23 I	223.23 I	204.77 I	236.38 I	
	159.62 S	167.23 S	146.46 S	161.46 S	

TABLE 2
MEANS ON INTELLECTUAL AND SOCIAL INDICES: STUDY 2

Note. "I" indicates the mean on the intellectual index for that group, and "S" indicates the mean on the social index. The intellectual index was formed by summing ratings on eight individual measures and the social index was formed by summing ratings on six individual measures. Each of the individual measures was rated on a 40-point scale.

of traits to be judged. These baseline control subjects rated the eight major intellectual dimensions and the six major social dimensions (in counterbalanced orders). Their ratings revealed absolutely no tendency to rate intellectual traits more negatively than social traits, t(9) = 0.63, n.s. The mean rating of the intellectual traits was 28.31, and that of the social traits was 27.16.

It appears, then, that the negativity bias demonstrated in these studies will be shown primarily or exclusively in evaluations of the intellectual traits of others, but not their social traits. This difference might be accounted for by social norms. In academic settings particularly, it is probably much more acceptable (and perhaps it is even encouraged) to criticize others' intellectual skills rather than their social skills. Alternatively, it may be that the negativity in evaluations represents not a general norm but a specific response to this experimental situation. If it is true that low-relative-status subjects were particularly concerned with demonstrating their intelligence to the experimenter, the most effective way to do so might be the criticism of others' intellectual skills. A criticism of intellectual products or responses implies that the evaluator is more intelligent than the individual evaluated; otherwise, it would be impossible for the evaluator to see any shortcomings. On the other hand, criticism of social skills does not so directly imply greater intelligence on the part of the evaluator.

There was no evidence of an interaction between the two main independent variables—experimenter status and instructions focus—on any of the dependent measures. This suggests that subjects are biasing their evaluations when they come to make the response and not when they are initially viewing the stimulus. If the more negative subjects were negative in their judgments because they were watching the stimulus person more critically—i.e., using more stringent criteria in coding his behavior, we would expect that the high-experimenter-status/social-focus group would demonstrate negativity in social ratings but not intellectual ratings, and that the high-experimenter-status/intellectual-focus group would demonstrate negativity in intellectual ratings but not social ratings. However, there was no evidence of any such effect. Regardless of the instructional focus they were given, subjects having a high-status experimenter displayed negativity in their ratings of the stimulus person's intellectual traits but not in their ratings of his social traits. In analyses of variance on the individual dependent variables, no interaction terms between experimenter status and instructional focus even approached statistical significance. The same held true for the interaction terms in an analysis of combined indices when type of traits rated (social or intellectual) was included as a within-subjects independent variable.

Thus, it appears that subjects' biasing of their evaluations under conditions of low relative status occurs at the level of response. Even subjects who were concentrating on the stimulus person's social behavior and who expected to only rate his social traits demonstrated negativity in their subsequent ratings of his intellectual traits.

Moreover, it does not appear that instructional set failed to interact with experimenter status in producing negativity simply because the instructional set manipulation had no effect. There was in fact a significant main effect of this variable; an instructional focus to evaluate social traits produced ratings of intellectual traits that were more negative than those produced under an instructional focus to evaluate intellectual traits. This main effect of instructional focus was statistically significant on the combined intellectual index, F(1, 96) = 7.87, p < .01, and on a number of individual intellectual variables: ability to articulate thoughts, F(1, 96) = 5.99, p < .02; critical ability, F(1, 96) = 6.32, p < .02; acquired knowledge, F(1, 96) = 5.64, p < .02; and overall intelligence, F(1, 96) = 8.10, p < .005. There was no such main effect of instructional focus on the social index.

This main effect of perceptual set on intellectual ratings may be accounted for by the nature of the tape. The script for the stimulus person had him describe an interest in a wide range of social pursuits, from ski

 5 There was, however, a main effect of instructional focus on two of the 13 social variables: friendliness, F(1, 96) = 5.35, p < .05, and warmth, F(1, 96) = 4.64, p < .05. In both cases, subjects given the social instructions were more negative than those given the intellectual instructions. A clue to the explanation for these results comes from the open-ended comments that subjects made after their scale ratings. Three independent raters who agreed on 89% of the cases were asked to read each comment and decide whether the subject was describing the stimulus person as "socially skilled but insincere." Of the 52 subjects in the social instructions group, 62% made comments that the judges placed in this category. Of the 52 subjects in the intellectual instructions groups, however, only 35% made comments to this effect.

weekends to late-night parties. Thus, although he also gave evidence of intellectual potential (he received rather good grades and wished to go on to law school), he may have come across as something of a playboy. While subjects concentrating on his intellectual abilities may have formed a superficially positive impression of his social abilities, those focusing on his social traits may have formed the somewhat more complex image of someone whose sociability might interfere with his intellectual performance.

Some support for this notion comes from a content analysis of the subject's open-ended comments on the stimulus person. Three independent raters who were blind to subjects' condition were asked whether they would describe each comment as fitting one or both or neither of two categories: "SP is socially popular," and "SP is sociable to an extent that interferes with his intellectual achievement." The judges agreed perfectly on their assignment of comments to the first category in 92.3% of the cases, and in 88.5% of their assignments of comments to the second category. In the remaining cases, comments were assigned to the category that two of the judges agreed upon.

These open-ended comments do indeed suggest that social-instructional-focus subjects saw the stimulus person as sociable to an intellectually detrimental extent. Of the subjects in these groups, 82.7% made comments suggesting that he was socially popular, and 61.5% made comments suggesting that his sociability interfered with his intellectual achievement. Of subjects in the intellectual-instructional groups, only 60.0 and 38.5% made comments that fit in these two categories, respectively. The possibility that a socially popular person might be rated negatively on intelligence is further supported by previous research on implicit personality theory, where the trait "popular" loaded quite positively on a social dimension, but moderately negatively on an intellectual dimension (Rosenberg, Nelson, & Vivekananthan, 1968).

The phenomenon demonstrated in Study 1 appears to hold equally for male and female subjects; there were no main effects of subject sex on any of the 25 individual variables or either of the two combined indices, and there was only one significant interaction with the sex factor. On ratings of the stimulus person's warmth, there was a significant sex \times experimenter status interaction, such that males rated the stimulus person higher when the experimenter was of equal status, and females rated him higher when the experimenter was of high status, F(1, 96) = 6.15, p < .02.

As in Study 1, it appears that the bias demonstrated here is relative rather than absolute. Absolute scale ratings indicate that few of the group means on any of the variables were below the "average" midpoint of 20 on the 40-point scales. And also as in Study 1, there is evidence that it is the "negative" groups who are displaying negativity rather than the

"positive" groups who are displaying positivity. When the same eight intellectual variables that were used to compose the combined index reported in Table 2 are summed for the baseline control group, the mean rating on these intellectual traits is 226.50. Paired comparisons with the four experimental groups (combining across sex) reveal that only one of those groups is significantly different from this baseline control: high-status experimenter-social instructional focus, t(34) = 2.58, p < .02. However, a comparison of the baseline control mean with the intellectual means in Table 2 clearly indicates that the "negative" groups are indeed consistently lower, and that the one group not showing a negativity bias (low-status experimenter-intellectual instructional focus) is no more positive than the baseline control.

GENERAL DISCUSSION

Taken together, the results of these two studies represent a strong demonstration of a negativity bias in interpersonal evaluation. Several points can be made in a summary of the main findings: (a) The bias can be induced by having the audience for the evaluation be of higher status than the evaluator, or by placing the evaluator in a relatively insecure position of intellectual status. (b) The negativity bias demonstrated here appears to occur as subjects make their responses and not as they view the stimulus, since differences in instructional focus did nothing to influence it. (c) The negativity bias is more likely to be exhibited in evaluations of intellectual traits or products than in evaluations of social traits. (d) The bias can be found in both direct evaluations of a person and in evaluations of a person's work. (e) It is truly a bias in the negative direction, since ratings in the negativity groups were consistently lower than baseline ratings. (f) The effect has considerable generality, since it holds across subject populations at two different universities, male and female subjects, different experimenters and somewhat different manipulations of the status variable, and different types of stimuli to be evaluated.

As noted earlier, the negativity bias demonstrated here is best considered a bias toward *relative* negativity, a consistent tendency for insecure or low-relative-status subjects to rate the suggestions lower than did secure or equal-status subjects. For the most part, the evaluations made by the "negative" subjects were not substantially lower than the midpoint on the scales provided; thus, in an absolute sense, these subjects were not rating the suggestions negatively. However, it is possible that, psychologically, these "average" ratings can be considered to be negative. In light of the pervasive tendency toward positivity noted by Kanouse and Hanson (1971), a person who evaluates something as merely "average" may be seen as damning it with faint praise. Certainly, contemporary college students have come to view the "average" grade, a "C," as a decidedly negative evaluation.

The negativity bias in interpersonal evaluation displayed by insecure individuals has been noted by previous observers of human behavior—if not in psychology, at least in literature:

[Charles Tansley] rushed in . . . and denounced the Waverley novels when he knew nothing about it, nothing about it whatsoever, Mrs. Ramsay thought, observing him rather than listening to what he said. She could see how it was from his manner—he wanted to assert himself, and so it would always be with him till he got his Professorship or married his wife, and so need not be always saying "I—I—I." For that was what his criticism of poor Sir Walter, or perhaps it was Jane Austen, amounted to. "I—I—I." He was thinking of himself and the impression he was making, as she could tell by the sound of his voice, and his emphasis and his uneasiness. Success would be good for him. (Virginia Woolf, To the Lighthouse, pp. 159–160).

In the view of this eminent "naive psychologist," and on the basis of the anecdotes presented at the start of this paper, a motivational interpretation of the negativity bias would seem plausible. In addition, results from Study 2, showing no effect of instructional focus and thereby suggesting that the bias operates at the level of response, are consistent with a motivational interpretation. Such an interpretation proposes that individuals having low status relative to the audience for their evaluations or occupying insecure positions within a group are concerned about the way in which their intellectual abilities will be perceived. Thus, they are motivated to preserve their self-esteem and their esteem in the eyes of others. One mechanism, perhaps, by which this might be accomplished is the use of negatively critical evaluations of the intelligence or the intellectual work of others. In other words, a self-presentational strategy is adopted whereby these individuals attempt to demonstrate that they are capable of incisive, insightful criticism. In the context of the present experiments, this motivational interpretation would suggest that subjects suffering low relative status or insecure position were primarily motivated by self-presentational concerns—which produced the observed bias in evaluations—while subjects having a secure position or a low-status experimenter were motivated by nothing more than a desire to make accurate evaluations.

If indeed subjects are biasing their evaluations in the interests of self-presentation, it is interesting to consider whether they might actually come to accept these biased evaluations as a "true" assessment of the stimuli. There is nothing in the present conceptual analysis to preclude such a possibility and, indeed, cognitive dissonance theory (Festinger, 1957) would predict that this could very well happen. It is possible that dissonance was aroused when subjects made evaluations that were more negative than their initial "true" impressions under the "high-choice" conditions present in the current experiments. Research suggests that under such conditions, subjects will reduce their dissonance by privately

accepting the evaluations they have made (Davis & Jones, 1960; Linder, Cooper, & Jones, 1967). In real-world situations, there might also be other factors leading individuals to accept their own negatively biased evaluations. For example, a group of peers (such as graduate students) who are all suffering relative low status or intellectual insecurity might serve to confirm one another's negatively critical evaluations.

Although a motivational interpretation of the negativity bias seems intuitively reasonable, it is possible that the bias is more cognitively based. It does not appear to be the case that insecure and low-relative-status subjects simply took the evaluation task more seriously and put more effort into it, since in Study 1 there were no differences between groups on the length or the subjectively rated quality of their written comments. It may be, however, that in that study the experimenter's status and the experimenter's statements about scrutinizing subjects' suggestions served as cues for the type of criteria the subjects were to apply. It is conceivable, for example, that subjects who believed the experimenter to be a professor assumed that she expected them to apply more stringent criteria in judging the suggestions than did subjects who believed the experimenter to be a graduate student.

The experimental situation employed in Study 2, however, makes this criteria change explanation seem less likely. In that study, subjects were not judging the quality of a product but were instead rating their impressions of a stimulus person. Impression formation is not a task in which we ordinarily think of more or less stringent criteria being applied; at least, the meaning of "criteria" in this context is quite different from that in product evaluation. Rather, one would assume that the criterion in personality assessment is simple accuracy; indeed, subjects in Study 2 were told that their ratings would be compared with those of someone who knows the stimulus person well. It does not seem likely that subjects would assume that harsher evaluations of the stimulus person would be more accurate. Thus, this cognitive mechanism of more stringent criteria leading to negativity seems less plausible.

Since the negativity bias has been described in terms of impression management, it will be interesting for future research to investigate the *effect* of negatively critical evaluations on perceivers. One previous study (Folkes & Sears, 1977) has demonstrated that positive evaluators are more well liked than negative evaluators, but positive evaluators are *not* consistently rated higher on knowledgeability. These researchers found that in ratings of politicians, evaluators giving mixed negative and positive evaluations were thought to be most knowledgeable, while in ratings of cafeteria workers, movies, cities, and college courses, evaluators giving very positive evaluations were seen as most knowledgeable. There are, however, some substantial differences between the evaluations seen by subjects in the Folkes and Sears study and the evaluations made by

subjects in the present study. These evaluations consisted only of simple like-or-dislike judgments, and the negative evaluators were persons who made "dislike" judgments for several stimulus objects, while the positive evaluators were persons who made "like" judgments for several stimulus objects. By contrast, subjects in the present studies rated only four suggestions or one stimulus person, and those ratings consisted of scale judgments on several dimensions. Folkes and Sears (1977) suggest that persons who are uniformly positive about movies, cities, and so on, might be seen as more knowledgeable because they appear to have a wide range of experience. It is implausible, however, that persons rating a suggestion or a stimulus person very highly would be seen as displaying broad knowledge and experience. Thus, further research is needed to determine if perhaps, when judgments of the kind made in the present studies are involved, negativity is seen as an indicator of intelligence. It may indeed be that we, as observers, perceive negative criticism of such stimuli as more intelligent than positive evaluation and that we, as actors, know of this impact on our audiences and make use of it.

There are several reasons to believe that this is so. Asch (1946) found that subjects rated an "intelligent" and "polite" person as "wise" only 30% of the time; however, they rated an "intelligent" and "blunt" person as "wise" 50% of the time. Moreover, negative evaluations may be more impressive because, as suggested by Abelson and Kanouse (1966), they are perceived as more clear indications of the evaluator's position, or because they make the evaluator seem more distinctive against a presumed background of positivity (Jones & Davis, 1965; Kanouse & Hanson, 1971). If it can indeed be demonstrated that certain types of negative evaluations are perceived as more intelligent than positive ones, this might suggest that the mechanism underlying the bias is in fact a motivational one, that insecure individuals are using negativity as a tactic to impress others with their intelligence. Thus, instead of viewing the negativity bias as an "error" in interpersonal evaluation, it might, on the basis of such evidence, be reasonable to view it as an entirely sensible approach to impression management. The implications of this possibility are intriguing; it would lead us to expect that the bias toward negativity might be demonstrated not only by insecure and low-relative-status individuals, but by people who score high in Machiavellianism (Christie & Geis, 1970) or in self-monitoring (Snyder, 1974), as well. In short, it might be wise to accept "with a grain of salt" the negative interpersonal evaluations made by individuals who, because of status, security of intellectual position, or personality characteristics, are highly motivated to control the impression that others form of them, or are highly skilled at doing so.

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