

The "False Consensus Effect": An Egocentric Bias in Social Perception and Attribution Processes

LEE ROSS, DAVID GREENE, AND PAMELA HOUSE

Stanford University

Received April 21, 1976

Evidence from four studies demonstrates that social observers tend to perceive a "false consensus" with respect to the relative commonness of their own responses. A related bias was shown to exist in the observers' social inferences. Thus, raters estimated particular responses to be relatively common and relatively unrevealing concerning the actors' distinguishing personal dispositions when the responses in question were similar to the raters' own responses; responses differing from those of the rater, by contrast, were perceived to be relatively uncommon and revealing of the actor. These results were obtained both in questionnaire studies presenting subjects with hypothetical situations and choices and in authentic conflict situations. The implications of these findings for our understanding of social perception phenomena and for our analysis of the divergent perceptions of actors and observers are discussed. Finally, cognitive and perceptual mechanisms are proposed which might account for distortions in perceived consensus and for corresponding biases in social inference and attributional processes.

In a sense, every social observer is an intuitive psychologist who is forced by everyday experience to judge the causes and implications of behavior.

Many researchers and theorists have expressed a general interest in naive epistemology and implicit psychological theories. However, it has been the attribution theorists (Heider, 1958; Jones & Davis, 1965; Jones, Kanouse, Kelley, Nisbett, Valins, & Weiner, 1972; Kelley, 1967, 1973) who have pursued this topic most vigorously and most systematically. The primary focus of formal attribution theory (following Kelley, 1967, 1973) has been the logical rules or "schemata" that the layman employs in making causal inferences and extracting social meaning from particular configurations of data. In the typical attribution study it has thus been the *experimenter* who has supplied the relevant data and, in so doing, has manipulated the degree of apparent response consistency, distinctiveness, and consensus presented to the social observer. This research strategy (e.g., McArthur, 1972) has obvious and undeniable advantages if the experimenter's primary concern is the attributor's rules for data analysis.

The authors wish to acknowledge the contributions of Michael Fleming who helped to design and execute Study 3 and Study 4 and of Michael Hubbard who assisted in the analysis and interpretation of data from all four studies.

David Greene is now at Carnegie-Mellon University.

and data interpretation. But such a strategy also has serious costs, for it necessarily demands that one overlook those potentially crucial phases in the attribution process, preceding data analysis, during which the data must first be acquired, coded, and recalled from memory.

The professional psychologist relies upon well-defined sampling techniques and statistical procedures for estimating the commonness of particular responses. Where such estimates are relevant to subsequent interpretations and inferences, he can proceed with confidence in his data. Intuitive psychologists, by contrast, are rarely blessed either with adequate "baseline" data or with the means of acquiring such data. To the extent that their systems for interpreting social responses depend upon estimates of commonness or oddity they must, accordingly, rely largely upon subjective impressions and intuitions.

The source of attributional bias that we shall consider in the present paper directly involves the probability estimates made by intuitive psychologists. Specifically, we shall report research demonstrating that laymen tend to perceive a "false consensus" — to see their own behavioral choices and judgments as relatively common and appropriate to existing circumstances while viewing alternative responses as uncommon, deviant, or inappropriate. Evidence shall also be reported for an obvious corollary to the false consensus proposition: The intuitive psychologist judges those responses that differ from his own to be more revealing of the actor's stable dispositions than those responses which are similar to his own. Thus, we contend that the person who feeds squirrels, votes Republican, or drinks Drambuie for breakfast will see such behaviors or choices by an actor as relatively common and relatively devoid of information about his personal characteristics. By contrast, another person who ignores hungry squirrels, votes Democrat, or abstains at breakfast will see the former actor's responses as relatively odd and rich with implications about the actor's personality.

The term *relative* is critical in this formulation of the false consensus bias and it requires some clarification. Obviously, the man who would walk a tightrope between two skyscrapers, launch a revolution, or choose a life of clerical celibacy recognizes that his choices would be shared by few of his peers and are revealing of personal dispositions. It is contended, however, that he would see his personal choices as less deviant and revealing than would those of us who do not walk tightropes, launch revolutions, or become celibate clerics. Furthermore, the present thesis does not deny that "pluralistic ignorance" could lead to erroneous estimates by minority and majority alike. The incidence of infant abuse, for instance, might be underestimated by abusing and nonabusing parents alike. The relative terms of the false consensus thesis demand only that abusing parents estimate child abuse to be more common and less indicative of personal dispositions than do nonabusing parents.

References to "egocentric attribution" (Heider, 1958; Jones & Nisbett, 1972) to "attributive projection" (Holmes, 1968; Murstein & Pryer, 1959) and to a host of related projection phenomena (e.g., Cameron & Magaret, 1951; Cattell, 1944; Murray, 1933) have appeared sporadically in the literature. Perhaps most directly relevant to present concerns are empirical demonstrations of correlations between subjects' own behavior and their estimates about their peers. For instance, Katz and Allport (1931) demonstrated that the admitted frequency of cheating by a student was positively related to his estimate of the number of other students who have cheated. Holmes (1968) summarized several other related demonstrations dealing with political beliefs and judgments of personal attributes and, more recently, Kelley and Stahelski (1970) have stressed the role of egocentric perceptions in the prisoner's dilemma situation.

In the present paper we shall demonstrate the generality of the false consensus or egocentric attribution bias. More importantly, we shall explore its implications for our understanding of social perception phenomena and the often divergent perceptions of actors and observers. Finally, we shall discuss more basic shortcomings of the intuitive psychologist which may underlie such phenomena.

STUDY 1

Method

Study 1 presented subjects with questionnaires containing one of four brief stories composed specifically for our purposes. A total of 320 Stanford undergraduates (80 for each of the four stories) participated. Each story asked the readers to place themselves in a particular setting in which a series of events culminated in a clear behavioral choice. The subjects were not immediately required to state their own choice but were asked to estimate the percentage of their peers who would choose each of the two possible courses of action suggested. The four stories and the consensus questions are reproduced below:

SUPERMARKET STORY

As you are leaving your neighborhood supermarket a man in a business suit asks you whether you like shopping in that store. You reply quite honestly that you do like shopping there and indicate that in addition to being close to your home the supermarket seems to have very good meats and produce at reasonably low prices. The man then reveals that a videotape crew has filmed your comments and asks you to sign a release allowing them to use the unedited film for a TV commercial that the supermarket chain is preparing.

What % of your peers do you estimate would sign the release? ____%
 What % would refuse to sign it? ____% (Total % should be 100%)

TERM PAPER STORY

You arrive for the first day of class in a course in your major area of study. The professor says that the grade in your course will depend on a paper due the final day of the course. He gives the class the option of two alternatives upon which they

must vote. They can either do papers individually in the normal way or they can work in teams of three persons who will submit a single paper between them. Your are informed that he will still give out the same number of A's, B's, and C's, etc., but that in the first case every student will be graded individually while the second case all three students who work together get the same grade.

What % of your peers do you estimate would vote for group papers? ___%
 What % would vote for individual papers? ___% (Total % should be 100%)

TRAFFIC TICKET STORY

While driving through a rural area near your home you are stopped by a county police officer who informs you that you have been clocked (with radar) at 38 miles per hour in a 25-mph zone. You believe this information to be accurate. After the policeman leaves, you inspect your citation and find that the details on the summons regarding weather, visibility, time, and location of violation are highly inaccurate. The citation informs you that you may either pay a \$20 fine by mail without appearing in court or you must appear in municipal court within the next two weeks to contest the charge.

What % of your peers do you estimate would pay the \$20 fine by mail? ___%
 What % would go to court to contest the charge? ___% (Total should be 100%)

SPACE PROGRAM REFERENDUM STORY

It is proposed in Congress that the space program be revived and that large sums be allocated for the manned and unmanned exploration of the moon and planets nearest Earth. Supporters of the proposal argue that it will provide jobs, spur technology, and promote national pride and unity. Opponents argue that a space program will either necessitate higher taxes, or else drain money from important domestic priorities. Furthermore, they deny that it will accomplish the desirable effects claimed by the program's supporters. Both sides, of course, refute each other's claims and ultimately a public referendum is held.

What % of your peers do you estimate would vote for the proposed allocation of funds for space exploration? ___%
 What % would vote against it? ___% (Total should be 100%)

After completing the relevant percentage estimates, subjects were required to fill out a three-page questionnaire. On one page, they were first asked to indicate which of the two behavioral options they personally would choose and then asked to rate themselves on a series of Likert-type personality scales. This self description page of the questionnaire was either followed or preceded by two pages on which the reader was required to rate the personal traits of the "typical person" of the reader's own age and sex who would choose each of the two specific options presented in the story. For example, subjects who read the Supermarket Story were required on one page to rate the traits of "the typical person . . . who *would* sign the commercial release" and, on another page, to rate "the typical person . . . who *would not* sign the commercial release." The order of these three rating sheets was systematically varied.¹

¹ In the interests of brevity and clarity, neither self-ratings nor the "order of presentation" variable receives detailed consideration in this report. It should be noted only that self-ratings were irrelevant to our present hypotheses and, similarly, that the order variable produced no significant main effects or interaction effects of immediate theoretical relevance.

The nature of the rating scales merits some emphasis. For each story, the actors were rated with respect to a different set of four personal characteristics that might influence or be reflected by the behavioral choice described in the story. (In the Supermarket Story, for example, the traits considered were *shyness*, *cooperativeness*, *trust*, and *adventurousness*.) For each trait a 100-point rating scale was used. The midpoint and two extremes of this scale were labeled to specify both the *extremity* of the dispositional inference made and the rater's *confidence* concerning the relevant actors' dispositions. Thus, for the disposition of "cooperativeness", the scale was anchored as follows:

- +50 *Certainly more* cooperative than the average person of my age and sex, *probably very much more* cooperative.
- 0 Probably average with respect to cooperativeness. I have no reason to assume that the actor differs from the average person of my age and sex with respect to this characteristic.
- 50 *Certainly less* cooperative than the average person of my age and sex, *probably very much less* cooperative.

Summary of hypotheses. The consensus estimates and trait ratings for each story provided a test of two principal hypotheses:

1. Subjects who "choose" a particular hypothetical response will rate that response as more probable for "people in general" than will subjects who "choose" the alternative response.
2. Subjects who "choose" a specified response will use less extreme and less confident trait ratings in characterizing a "typical" person making that response than will subject who "choose" the alternative response.

TABLE 1
PERCEIVED CONSENSUS: ESTIMATED COMMONNESS OF OWN AND ALTERNATIVE
BEHAVIORAL CHOICES (STUDY 1)

Story	Rater's own choice in hypothetically described situation	n (%)	Estimates of con- sensus: estimated percentage of raters who would choose		F
			Option 1	Option 2	
Supermarket story	Sign release	53 (66%)	75.6	24.4	17.7
	Not sign release	27 (34%)	57.3	42.7	
Term paper story	Choose individual paper	64 (80%)	67.4	32.6	16.5
	Choose group paper	16 (20%)	45.9	54.1	
Traffic ticket story	Pay speeding fine	37 (46%)	71.8	28.2	12.8
	Contest charge	43 (54%)	51.7	48.3	
Space program story	Vote for cutback	32 (40%)	47.9	52.1	4.9
	Vote against cutback	48 (60%)	39.0	61.0	
Summary of four stories ^a	Choose option 1	186 (58%)	65.7	34.3	49.1
	Choose option 2	134 (42%)	48.5	51.5	

^a Unweighted average of means for four stories.

Results

Perceptions of consensus. The data presented in Table 1 offer strong support for the first of the experimental hypotheses. For each of the stories, those subjects who claimed that they personally would follow a given behavioral alternative also tended to rate that alternative as relatively probable for "people in general"; those subjects who claimed that they would reject the alternative tended to rate it as relatively improbable for "people in general."

The effect of subjects' own behavior choice upon their estimates of commonness was statistically significant for each story individually. When Story was treated as a "fixed" variable in an analysis of variance combining the data for all four stories, the main effect of Rater's Choice was highly significant, $F(1,312) = 49.1, p < .001$, while the Story \times Rater's Choice interaction was trivial, $F(1,312) = 1.37, p > .10$. It is clear that the Rater's reported behavioral choices were associated with, and presumably exerted a large and consistent effect upon, their perceptions of behavioral consensus.

Trait ratings. To test the second experimental hypothesis individual trait

TABLE 2

TRAIT RATINGS: RATER'S INFERENCES ABOUT PERSONAL DISPOSITIONS OF "TYPICAL ACTORS" BEHAVING LIKE OR UNLIKE THE RATER (STUDY 1)

Story	Traits	Rater's own choice	Trait ratings: ^a Rater's assessment of person who would choose		Differ- ence	F
			Option 1	Option 2		
Supermarket story	Shyness	Sign release (n = 53)	60.4	89.5	-29.1	17.27
	Cooperativeness	Trust	90.0	65.3	+24.7	
	Adventurousness	(n = 27)				
Term paper story	Gregariousness	Choose individual grade (n = 64)	66.4	66.6	-0.2	21.83
	Laziness	Choose group grade (n = 16)	100.9	46.8	+54.1	
	Competitiveness					
Traffic ticket story	Generosity					3.18
	Self-confidence	Pay speeding fine (n = 37)	35.8	77.4	-41.6	
	Legal knowledge	Contest charge (n = 43)	59.4	79.2	-19.2	
Space program story	Miserliness					1.81
	Rationality	Vote for cutback (n = 32)	56.8	67.9	-11.1	
	Social concern	Vote against cutback (n = 48)	68.9	68.9	0	
Summary of four stories ^b		Choose option 1	54.9	75.4	-20.5	37.40
		Choose option 2	79.8	65.1	+14.7	

^a Larger numbers reflect stronger trait inferences and greater willingness to assert that the person would prove deviant or discrepant from average with respect to the four specified traits.

^b Unweighted average of means for four stories.

ratings were measured as absolute discrepancies from the midpoint of the 100-point Likert-type scale. Ratings for the four traits for each story were then combined to provide an overall measure of the rater's inferences about the "typical" actor who might choose each of the behavioral alternatives specified. The results are summarized in Table 2.

The pattern of trait ratings for each story is in accord with the research hypothesis. That is, relatively strong inferences about the typical person who might choose a given response are made by those raters who personally would choose the *alternative* response. The difference scores in Table 2 are the critical indices; in each case this difference score is more positive (or less negative) for the rater who would choose the second alternative over the first. For two of the stories (Supermarket Story and Term Paper Story), the effect of Rater's Own Choice upon the difference in ratings for the two behavioral alternatives was clearly significant, $F(1,78) = 17.27, p < .001$ and $F = 21.83, p < .001$, respectively. For one story (Traffic Ticket Story) the effect was marginally significant, $F = 3.18, p < .10$, and for one story (Space Program Story) the effect was relatively trivial, $F = 1.81, p < .10$.

The four stories again may be considered within a single analysis of variance. When Story is treated as a fixed variable, the main effect of the subject's own behavioral choice upon the difference in trait ratings is highly significant, $F(1,312) = 37.40, p < .001$. The Story \times Subject's Choice Interaction, however, is also significant, $F(3,312) = 3.71, p < .05$.² Thus, like perceptions of behavioral consensus, trait inferences are systematically influenced by the rater's own behavioral choices, although the effect is less consistent for the latter measure than the former.

An obvious question arises concerning the relationship between the two effects that have been demonstrated. However, consideration of this question, and other questions concerning alternative interpretations and underlying mechanisms, shall be postponed until the procedures and principal results for the remaining three studies have been reported.

STUDY 2

Rationale and Method

Study 2 attempted to extend the domain of the false consensus effect. Whereas Study 1 had demonstrated that subjects tend to overestimate the degree of consensus enjoyed by their own behavioral choices in a hypothetical conflict situation, Study 2 was designed to explore a more

² When Story is treated as a random variable (so that the "Mean Square" for Story \times Rater's Choice interaction constitutes the appropriate error term) the F ratio for the main effect of Rater's Choice is reduced to 10.1; this F ratio (with only 3 degrees of freedom associated with its lesser mean square) is only marginally significant ($p = .05$). A more discriminating and appropriate test of the generality of the hypothesis, of course, would require a far larger sample of stories than that employed in Study 1.

general tendency for subjects to overestimate the extent to which others share their habits, preferences, fears, daily activities, expectations, and other personal characteristics.³

The procedure was simple. A total of 80 Stanford undergraduates completed a questionnaire dealing with 35 person description items (see Table 3). Each item presented a pair of mutually exclusive and exhaustive categories. Half of the subjects first categorized themselves with respect to the 35 variables and then proceeded to estimate the percentage of "college students in general" who fit into each category; the remainder answered these questions in reverse order. (The "order variable" produced no relevant main effects or interaction effects and, accordingly, receives no further consideration in this report.)

The hypothesis in Study 2 was simply that subjects who placed themselves in a given personal description category would estimate the percentage of "college students in general" in that category to be greater than would subjects who placed themselves in the alternative category.

Results

The personal description items (listed in the same order presented to subjects) and the relevant percentage estimates made by subjects are summarized in Table 3. One of the 35 items, a Political Expectation item concerning the impeachment of President Nixon, became unusable in the midst of the study. Each of the remaining 34 items separately tested the false consensus hypothesis (although the tests were not "independent" since the same group of subjects responded to all items). A quick inspection of the results presented in the table reveals considerable, although less than universal, support for the hypothesis. Overall, the difference in percentage estimates was in the predicted direction for 32 of the 34 items, and the magnitude of the two reversals was trivial. That is, subjects who placed themselves in a given descriptive category consistently estimated the percentage of "college students in general" in that category to be greater than did subjects who placed themselves in the alternative category. Of the items showing the predicted effect, 17 produced differences significant beyond the .10 level while 11 differences were significant beyond the .01 level.

Further examination of the data reveals that three of the seven categories provided fairly strong and consistent support for the false consensus hypothesis. Most dramatic were the items pertaining to Political Expectations: Subjects who expected women soon to be appointed to the Supreme Court, poverty to abate, nuclear weapons to be used, or extraterrestrial life to be discovered, perceived these views to be relatively widespread among their peers; subjects with the opposite expectations similarly thought that their own expectations were characteristic of "college students in general." Less dramatic but reasonably consistent support was also provided by these items dealing with Personal Traits and Views and those probing Personal Problems. For example, subjects who

³ The full text of this questionnaire is too lengthy to be reproduced in the present report, although Table 3 does list all of the relevant personal description categories. The questionnaire itself may be obtained from the first author.

TABLE 3
 RATERS' SELF-CATEGORIZATIONS AND THEIR CATEGORIZATIONS OF
 "COLLEGE STUDENTS IN GENERAL" (STUDY 2)

Questionnaire item: category 1 (category 2)	Raters' estimates of percentage of college students in category 1		Direction of difference (+ predicted; - opposite to predicted)	<i>t</i>
	Mean estimates by raters placing them- selves in category 1	Mean estimates by raters placing them- selves in category 2		
Personal traits and views				
Shy (not shy)	45.9	35.9	+	2.66‡
Optimistic (not)	61.9	50.4	+	2.58‡
Competitive (not)	75.1	69.9	+	1.35
Politically left of center (not)	59.7	58.0	+	<1
Supporter of women's lib (not)	57.3	33.4	+	3.96§
Unweighted mean of five items	60.0	49.5		
Personal preferences				
Brown (white) bread	52.5	37.4	+	3.26‡
To be alone (with others)	36.0	30.7	+	1.18
Italian (French) movies	51.6	43.4	+	2.00‡
City (country) life	51.4	49.8	+	<1
Basketball (football)	36.7	37.7	-	<1
Unweighted mean of five items	45.6	39.8		
Personal characteristics				
Male (female)	58.7	57.1	+	1.01
Brown (blue) eyes	58.3	54.5	+	1.63
Subscribe (don't) to magazines on list provided	56.9	42.7	+	2.76‡
First-born (laterborn) child	42.2	37.1	+	1.57
Hometown more (less) than 200,000	58.2	51.9	+	1.68*
Unweighted mean of five items	54.9	48.7		
Personal problems				
Think about dying? yes (no)	44.0	25.6	+	2.87‡
Hard to make friends? yes (no)	38.7	35.1	+	<1
Difficulty controlling temper? yes (no)	42.1	27.9	+	3.26‡
Frequently depressed? yes (no)	55.1	39.2	+	3.25‡
Emotional needs satisfied? yes (no)	52.9	42.2	+	2.29†
Unweighted mean of five items	46.6	34.0		
Personal activities				
Watch TV 30 hours/month? yes (no)	49.2	40.9	+	<1
Play tennis once a week? yes (no)	33.0	30.3	+	<1
Attend religious service once a month? yes (no)	26.5	27.5	-	<1
Donate blood once a year? yes (no)	22.6	21.2	+	<1
Long distance phone call once a week? yes (no)	50.7	45.0	+	1.06
Unweighted means of five items	36.4	33.0		
Personal expectations				
Marriage by age 30? yes (no)	74.5	71.9	+	<1
Better financial status than parent? yes (no)	68.3	61.8	+	1.86*
Live outside U.S. for one year in next 20? yes (no)	37.4	36.9	+	<1
Great satisfaction from job or career? yes (no)	53.5	43.3	+	<1
Death before 70th birthday? yes (no)	57.6	43.9	+	2.81‡
Unweighted mean of five items	58.3	51.6		
Political expectations				
Removal of Nixon from office? yes (no)	Deleted			
Woman in Supreme Court within decade? yes (no)	63.3	34.6	+	6.19§

Continued

TABLE 3 (Continued)

Questionnaire item: category 1 (category 2)	Raters' estimates of percentage of college students in category 1		Direction of difference (+ predicted; - opposite to predicted)	<i>t</i>
	Mean estimates by raters placing them- selves in category 1	Mean estimates by raters placing them- selves in category 2		
Poverty problem reduced in next 20 years? yes (no)	61.8	43.1	+	3.81§
Nuclear weapon used in warfare in next 20 years? yes (no)	58.8	31.2	+	3.21†
Discovery of extraterrestrial life by year 2000? yes (no)	56.6	29.3	+	5.48§
Unweighted mean of four items	60.1	34.6		

* $p < .10$.† $p < .05$.‡ $p < .01$.§ $p < .001$.

categorized themselves as shy, optimistic, or supporters of the Women's Liberation Movement and subjects who reported that they often thought about dying, had difficulty in controlling their temper, frequently experienced depression, or felt their emotional needs to be unsatisfied, were relatively inclined to think that their peers shared these traits and views or problems. Similarly, subjects who reported opposite traits and views or felt themselves to be free of the personal problems specified tended to perceive relatively high consensus for their particular characteristics.

Sporadic support for the false consensus hypothesis was provided by items dealing with three descriptive categories: Personal Preferences, Personal Characteristics, and Personal Expectations. The only items providing no significant differences supporting the hypothesis were those dealing with everyday Personal Activities (e.g., television watching, tennis playing, etc.).

In summary, it is evident that the false consensus effect applies to many types of personal behaviors, feelings, opinions, and characteristics, although there is some ambiguity about the specific domain and the limits of the phenomenon. It is premature to attempt any post hoc generalizations in this regard, although such generalizations should be facilitated by an appreciation of possible experiential, perceptual, and cognitive mechanisms that may be responsible for the false consensus effect. Speculation about some of these mechanisms will be offered in the discussion section of this paper. First, however, it is appropriate to consider a final pair of studies designed to demonstrate that the false consensus effect is more than a dubiously interesting artifact of the questionnaire and hypothetical choice methodology.

STUDY 3 AND STUDY 4

Study 1 had featured questionnaires that described hypothetical situations, sought hypothetical behavior choices from the reader, and required readers to rate the distinguishing traits of hypothetical actors. While such questionnaire studies may furnish a handy tool for the initial exploration of attributional processes, it is important also to recognize their limitations. No questionnaire account of a situation or a behavior can capture all of the subtle nuances available to the real-world observer. Also, an actor's actual responses to situations that involve real consequences may differ markedly from hypothetical choices. Finally, trait judgments about hypothetical "typical actors" may be very different from judgments made about actual specific individuals. These special limitations of questionnaire simulations raise the possibility that the phenomena they purport to demonstrate may be illusory or of limited relevance to everyday instances of attribution and social inference. Study 3 and Study 4 were parallel studies designed to demonstrate that the false consensus and trait rating effects demonstrated in Study 1 were not limited artifacts of the questionnaire methodology. They were conducted, moreover, to underscore our general conviction that the relevance of questionnaire simulations for attribution theory must be demonstrated rather than merely assumed.

Methods

Overview. Study 3, like Study 1, presented subjects with a hypothetical circumstance and then asked them to indicate which of the two behavioral alternatives they personally would follow and to rate the personal dispositions of the "typical individual" who might follow each alternative. Study 4 actually confronted subjects with the conflict situation described hypothetically to subjects in Study 3. Furthermore, subjects in this final study made trait assessments about specific individuals whom they believed to be real and about whom they had additional relevant information.

Procedure for Study 3. In Study 3 a total of 104 Stanford undergraduates read one of two slightly differing versions of a story which presented a conflict situation and asked the reader for consensus estimates. The first version of the story and the relevant consensus measure is reproduced below:

It is an official course requirement of your introductory psychology class that you participate as a subject in at least three experiments during the quarter. Sign-up sheets for experiments are posted on the bulletin board outside class which allow students to choose a time which is convenient. You decide to sign up for an experiment described as "a study concerned with attitudes," and arrive at the designated time and place where you are greeted by the experimenter and thanked for coming.

The experimenter then proceeds to describe his study. He explains that he is concerned with persuasion and attitude change and will be comparing various types of communication techniques. He further explains that today he needs subjects to

walk around campus for 30 minutes wearing a sandwich board sign which simply says: "Eat at Joe's." While they are wearing this sandwich board subjects are simply to keep a record of the number of people who say something to them. They are also required to note the person's sex and whether the person's comment is positive, negative, or neutral.

The experimenter makes it clear that you are not compelled to participate if you are unwilling, but that he would obviously prefer that you go along with his request to wear the sign and make the necessary observations. Subjects who decide not to participate, he explains, will be missing the chance to learn something interesting and to help the research project but they nevertheless will receive credit toward their course requirement.

What % of your peers do you estimate would agree to carry the sandwich board around campus? ____%

What % would refuse to carry it? ____% (Total should be 100%)

The second version of the story differed only in that the relevant sign read "Repent," rather than "Eat at Joe's." (By varying the signboard message, we hoped to vary both percentage of compliance and the specific trait inferences made about compliant subjects. Our intent simply was to increase the generality of our demonstration and to rule out possible narrow alternative interpretations relating to the specific message on the signboard.)

At the conclusion of the story the subjects were asked whether they personally would agree or would refuse to wear the sandwich board. They were also required to make trait ratings for themselves, for the typical person of their age and sex who would agree to wear the sandwich board, and for the typical person who would refuse to wear it. (The order of these items was counterbalanced. Order, however, produced no significant main effects or interaction effects and receives no further consideration in this report.) Eight Likert-type trait rating scales were used, each essentially similar to the 100-point scales used in Study 1 (i.e., the midpoint reflected no inference about distinguishing traits, increasingly extreme scores in either direction from the midpoint reflected increasingly confident and extreme trait inferences). The traits on which the hypothetical actors were rated included: *cooperativeness*, *shyness*, *aggressiveness*, *submissiveness*, *attractiveness*, *inquisitiveness*, *uptightness*, and *cynicism*.

Procedure for Study 4. A total of 80 Stanford undergraduates, participating in groups of two to five subjects, provided the data for Study 4. These subjects had volunteered to take part in an experiment concerned with "communication techniques." Upon arriving at the site of the study, the subjects were first asked to complete a single-page "Likes and Dislikes" questionnaire which asked them to describe briefly some of the things they liked to do, and some of the things they disliked doing. (The purpose of this preliminary procedure will become apparent presently.)

The experimenter then began to introduce a study which he represented to be "concerned with communication techniques." In reality, his introductory description was designed to create a conflict situation closely paralleling that presented hypothetically to subjects in Study 3. The experimenter's specific remarks were a slightly expanded version of the following:

"Let me explain what this study is all about. We're running a series of experiments about attitudes and self-perceptions. We're interested in how different types of people respond to different types of messages, depending on the medium in which they're presented. For example, we've already used telephone calls, handbills, and newspaper ads. Today we are studying another medium—a more personal one—a sandwich board sign like this one. We want to see how many people respond, who responds, and how they respond, when a message is presented on a sandwich board. We're particularly interested in what difference it makes *who* is carrying the

sandwich board sign. What we'd like you to do today is to put on one of these sandwich boards and walk around the campus for about 30 minutes. We have a map to give you with the route outlined. We also have a tally sheet for you to carry around on which to keep track of the number of people who respond verbally and to record whether their responses are positive, negative, or neutral. If you are not willing to do this we will still give you your experimental credit although you will miss the chance to have an interesting experience and to do us a big favor. Now would you please indicate if you're willing to do the task by checking the appropriate box on the Likes and Dislikes questionnaire in front of you."

Subjects were then asked to indicate, privately, their choice to wear the sign as the experimenter had requested or to withdraw from the experiment. This choice was expressed by checking the relevant alternative printed on the bottom of the questionnaire on which they had previously described their "likes and dislikes."

Once the subject had made his own decision, he was asked to make consensus estimates concerning his choice, and to rate the traits of one person who agreed and one who refused to wear the sign. In contrast to Study 3, however, subjects were not asked to rate hypothetical "typical actors"; instead they were asked to judge the traits of two supposedly real individuals who had previously participated in the study. The basis for these ratings was ostensibly to be the "likes and dislikes" questionnaire purportedly completed by the two previous participants. In fact, however, the two questionnaires, bearing both the participants' "decisions" to participate or not participate and their "likes and dislikes," had been contrived by the experimenter. One questionnaire (Version A) suggested that the person whose traits were to be rated liked "to take walks, read, sculpt, run, swing, lie on the beach, and eat" and disliked "being in crowds, being inside all day, feeling pressured by people, or having to make conversation." The other questionnaire (Version B) suggested that the target person liked "to listen, talk, laugh, bake, do arts and crafts, play with a pet dog, and tease close friends" but disliked "writing term papers, sitting in dull classes, or being with badly behaved children or objectionable adults."

Roughly half of the subjects received version A of the questionnaire paired with a target person's expressed agreement to wear the relevant sign and version B associated with a target person's expressed refusal; the remainder received the opposite pairings of questionnaires and expressed choices. (Although the version [A vs B] of the target person's self-descriptions ultimately produced a main effect upon the subjects' trait ratings, it did not produce any interaction effects relevant to the present research hypothesis; accordingly, it receives no further attention in this report.)

The experimenter justified the introduction of the consensus and trait rating measures on the grounds that they "might help us to interpret the results of our communication study . . . by giving us some idea about the responses and perceptions of participants . . . and by telling us something about the kind of people who agree or refuse to take part in our communication study." In fact, of course, these measures provided the test of the two primary research hypotheses.

The presentation of the two questionnaires supposedly describing the likes and dislikes of the two participants whose traits were to be rated served two purposes: First, it further emphasized to subjects that they were rating the traits of real persons rather than hypothetical ones; second, it placed any effects of the target person's behavioral choice in "competition" with the effects of other potentially relevant information. Thus, confirmation of the principal research hypotheses would illustrate that the impact of the false consensus effect was neither of trivial magnitude nor likely to disappear with the introduction of other possible determinants of social perception.

The final procedure in Study 4 was the thorough "debriefing" of all participants. The subjects learned the true purposes and rationale for the study and were assured that their acquiescence or refusal to carry the sandwich board sign was a perfectly reasonable response

to the experimentally-created conflict situation. After the experimenter had answered all questions to the subjects' satisfaction, the participants were urged not to tell their peers about the experimental procedures and deceptions that had been employed.

Research hypotheses for Study 3 and Study 4. The research hypotheses for Study 3 and Study 4 were identical. It was predicted first that subjects would perceive a false consensus for their own behavioral choices regardless of whether these choices were "hypothetical" (in Study 3) or "real" (in Study 4). The second prediction was that subjects' trait assessments, whether made about hypothetical typical individuals or about specific real individuals, would be distorted by their own behavioral choices in the manner previously described and previously demonstrated in Study 1.

Results

Perceptions of consensus. Overall, the false consensus effect (Table 4) was strikingly apparent both for those subjects who faced the hypothetical decision in Study 3 and for those who faced the authentic conflict situation created in Study 4. Subjects whose hypothetical or real decision was to acquiesce to the experimenter's request to wear the sign thought such acquiescence was relatively common; subjects who refused to wear the sign, by contrast, thought that acquiescence was relatively uncommon. In fact, in both studies, regardless of the message or the sandwich board sign,

TABLE 4
PERCEIVED CONSENSUS: ESTIMATED COMMONNESS OF OWN AND ALTERNATIVE
BEHAVIORAL CHOICES (STUDY 3 AND STUDY 4)

Sandwich board sign	Rater's own choice	n (%)	Estimates of consensus: estimated percentage of subjects who would		F
			Wear sign	Not wear sign	
Study 3					
Eat at Joe's	Wear sign	27 (53%)	64.6	35.4	33.3
	Not wear sign	24 (47%)	31.2	68.8	
Repent	Wear sign	27 (51%)	58.3	41.7	23.5
	Not wear sign	26 (49%)	29.7	70.3	
Combined ^a	Wear sign	54 (52%)	61.4	38.2	56.2
	Not wear sign	50 (48%)	30.4	69.6	
Study 4					
Eat at Joe's	Wear sign	28 (70%)	60.8	39.2	4.0
	Not wear sign	12 (30%)	43.3	56.7	
Repent	Wear sign	20 (50%)	63.5	36.5	34.14
	Not wear sign	20 (50%)	23.3	76.6	
Combined ^a	Wear sign	48 (60%)	62.2	37.8	26.47
	Not wear sign	32 (40%)	33.0	67.0	

^a Unweighted average of means for two signs.

the acquiescent and nonacquiescent subjects estimated that their own response was shared by a clear majority of their peers.

Comparison of the consensus estimates made in the two studies reveals that for one sign (Eat at Joe's) the false consensus effect apparently was stronger for the hypothetical conflict situation than for the real one; for the other sign (Repent), however, the real conflict situation seemed to produce the more pronounced effect. Thus, while the data for the hypothetical and real situations differed somewhat, with regard both to subjects' own decisions and their estimates concerning the decisions of their peers, the studies together provide compelling evidence that the false consensus effect is genuine. It is not an artifact of the questionnaire procedure and it is not restricted to circumstances of hypothetical, as opposed to real, behavioral choice.

Trait ratings. As in Study 1, trait ratings in the two final studies were expressed in terms of absolute discrepancies from the midpoint of 100-point Likert-type rating scales. In Table 5, the ratings for eight separate traits are combined to provide an overall index of the rater's tendency to make confident and extreme inferences about the distinguishing traits of the person being rated. An examination of the results of Study 3 and Study 4, summarized in Table 5, provide clear evidence that subject's trait inferences reflected, and presumably were influenced by, their own responses to the conflict situation. Subjects in Study 3 who indicated that they personally would refuse to wear the sandwich board sign made relatively strong inferences about the traits of the "typical" individual who would acquiesce but made relatively weak inferences about the individual who would refuse to wear the sign. By contrast, subjects who said that their own response would be acquiescence seemed unwilling to assume that an individual's acquiescence provided the basis for stronger dispositional inferences than his refusal.⁴

Subjects in Study 4 made their ratings about specific individuals whom they believed to have agreed or to have refused to wear the sign; furthermore, they made these ratings knowing something about these target individuals (i.e., the information provided by the individuals' "likes and dislikes" questionnaire). Most importantly, subjects in Study 4 made their ratings after their own real and seemingly consequential decisions to acquiesce personally or to refuse the experimenter's request. Nevertheless, the pattern of trait ratings for Study 4 is remarkably similar to the pattern reported in Study 3 where judgments, decisions, and actors were

⁴ The trait ratings in Table 5 serve to emphasize again the *relative* terms in which the false consensus hypothesis must be stated. The subjects who chose to wear the signboard actually did not see that choice as less revealing of personal dispositions than refusal to wear the sign. The hypothesis nevertheless was confirmed since the overall tendency for subjects to rate acquiescence as more revealing than refusal was relatively strong among subjects who refused to wear the signboard but relatively weak (in fact, virtually absent) among subjects who agreed to wear it.

TABLE 5

TRAIT RATINGS: RATERS' INFERENCES ABOUT PERSONAL DISPOSITIONS OF "TYPICAL ACTORS" BEHAVING LIKE OR UNLIKE THE RATER (STUDY 3 AND STUDY 4)

Sandwich board sign	Rater's own choice	Trait ratings: Rater's assessment of person who would			F
		Wear sign	Not wear sign	Difference	
		Study 3			
Eat at Joe's	Wear sign (<i>n</i> = 27)	123.4	124.7	- 1.3	8.53
	Not wear sign (<i>n</i> = 24)	183.6	117.1	+66.5	
Repent	Wear sign (<i>n</i> = 27)	143.2	140.5	+ 2.7	9.74
	Not wear sign (<i>n</i> = 26)	155.5	101.3	+54.2	
Combined ^a	Wear sign (<i>n</i> = 54)	133.3	132.6	+0.7	17.79
	Not wear sign (<i>n</i> = 50)	169.6	109.2	+60.4	
		Study 4			
Eat at Joe's	Wear sign (<i>n</i> = 28)	115.4	119.8	- 4.4	4.37
	Not wear sign (<i>n</i> = 12)	155.8	121.3	+34.5	
Repent	Wear sign (<i>n</i> = 20)	124.9	130.8	- 5.9	3.93
	Not wear sign (<i>n</i> = 20)	123.5	92.3	+ 31.2	
Combined ^a	Wear sign (<i>n</i> = 48)	120.1	125.3	- 5.2	8.93
	Not wear sign (<i>n</i> = 32)	139.7	106.8	+32.9	

^a Unweighted average of means for two signs.

merely hypothetical. Although the relevant effects are somewhat reduced in magnitude, Study 4 provides a clear demonstration that the effect of one's own behavior upon trait inferences, like the false consensus effect, is neither an artifact of the questionnaire procedure nor a phenomenon restricted to hypothetical choice and hypothetical judgment.

DISCUSSION

Considered together, Studies 1, 3, and 4 offer strong support for the hypothesis that raters' perceptions of social consensus and their social inferences about actors reflect the raters' own behavioral choices. The relevant research hypotheses were confirmed both in questionnaire studies presenting situations, choices, and judgments that were hypothetical and in an actual conflict situation demanding personally relevant behavioral choices and social judgments about specific actors. Study 2, furthermore, extended the potential domain of the false consensus phenomenon to include perceptions of commonness or oddity regarding a wide variety of personal problems, expectations, preferences, and characteristics.⁵ The

⁵ An unpublished manuscript, dealing specifically with "Public Beliefs about the Beliefs of the Public," by James Fields and Howard Schuman of the Institute for Survey Research at the University of Michigan has recently provided strong evidence for the phenomenon we have labeled the "false consensus effect." These findings extend earlier and more specific survey results reported by previous investigators including Hayes (1936), Thomsen (1941), Wallen (1941, 1943), Travers (1941), and Calvin, Hanley, Hoffman, and Clifford (1959).

implications of these four studies for our conception of the "intuitive psychologist" should be clear. His intuitive estimates of deviance and normalcy, and the host of social inferences and interpersonal responses that accompany such estimates, are systematically and egocentrically biased in accord with his own behavioral choices. More generally, it is apparent that attributional analyses may be distorted not only by biases in the intuitive psychologist's eventual analysis of social data but also by biases in the earlier processes through which relevant data are estimated, sampled, or inferred.

False Consensus and the "Divergent" Perceptions of Actors and Observers

The results of the present research are interesting to consider in the light of Jones and Nisbett's (1972) provocative thesis that observers view the causes and implications of their peers' behavior rather differently than the actors themselves view their behavior. Specifically, these theorists presented both anecdotal evidence and research to suggest that we consistently see our peers' behavior as the product and reflection of broad, consistent personal dispositions while we attribute our own responses to situational forces and constraints. Indeed, the evidence suggests that we are reluctant to agree that we ourselves possess the type of stable personality traits that we readily apply to our peers. To account for their observations and empirical findings, Jones and Nisbett called attention to a variety of important differences in the perceptual and informational "perspectives" enjoyed by actors and observers.

The presently reported research, however, leads one to speculate that attributional differences of the sort described by Jones and Nisbett may arise, at least in some measure, simply from attributers' misconceptions about the degree of consensus enjoyed by their own responses and by the alternative responses of their peers. The derivation is a simple one: To the extent that particular responses by one's peers differ from one's own responses in a given situation, such responses are likely to be seen as relatively odd or deviant—the product, therefore, not of situational forces (which guide one's own contrary responses) but of distinguishing personality dispositions or traits. Since all of one's peers respond somewhat differently from oneself in many situations, it is inevitable that such peers be seen as the possessors of more numerous and more extreme distinguishing personal characteristics than oneself. The false consensus effect thus allows us to account for many of the phenomena and experimental results that have been mustered in support of Jones and Nisbett's thesis (cf. Jones & Nisbett, 1972; Nisbett, Caputo, Legant, & Maracek, 1973) without resorting to the "differing perspective" mechanisms they suggested.

The results reported thus far, it should be emphasized, do not prove that

biased estimates of response consensus are the only factor accounting for the effects obtained in Jones and Nisbett's research and for the trait rating effects we have presented earlier. Indeed, the present studies permit one to determine whether raters' own behavioral choices exerted an influence on their trait ratings *beyond* any effect that could be accounted for by consensus estimates. To do so, one need only perform analyses of *covariance*, treating consensus estimates as a covariate.

Such analyses were performed separately for each of the four stories presented in Study 1 and for the conflict situation explored in Study 3 and Study 4. For each covariance analysis performed, the relevant F ratio was considerably lower than the corresponding statistic obtained in the original analyses of variance. Nevertheless, for the two stories in Study 1 which showed the strongest effects of the raters' own choices in the original analyses of variance (i.e., the Supermarket Story and the Term Paper Story), the effects were clearly significant for analyses of covariance, $F(1,37) = 7.90, p < .01$ and $F(1,37) = 8.91, p < .01$, respectively. For the remaining stories in Study 1, however, and for both the hypothetical and authentic conflict situations explored in the two final studies, the analyses of covariance revealed no significant effect of the raters' own behavioral choices. Accordingly, it is clear that the perceived consensus and trait-rating effects demonstrated in the present research were not independent. The present analyses, however, leave unresolved the issue of whether (and, under what circumstances) responses similar to one's own are regarded more revealing of dispositions than alternative, *but equally common*, responses.

Attributional Inferences and the Consensus Criterion

The analyses reported above provided clear evidence that consensus estimates and corresponding trait inferences by subjects were negatively correlated.⁶ Such findings, of course, are consistent with the theoretical contentions of Jones and Davis (1965) and Kelley (1967) that atypical, counternormative or unexpected responses in a given situation prompt stronger inferences about the relevant actors than do more common responses. They are also consistent with results obtained by several investigators who have directly manipulated consensus information available to observers (e.g. Jones & Harris, 1967; McArthur, 1972; Pilkonis, in press). The present findings, moreover, seem to challenge the host of recent investigators who have begun to raise doubts about

⁶ The fact that F ratios for the effect of own choice upon trait ratings were substantially reduced when consensus estimates were treated as a covariate attests to this relationship. Furthermore, the correlation coefficients indicating the relationship between perceived consensus and trait ratings *within* each group of subjects who chose a given behavioral option in Studies 1, 3, and 4 were consistently negative, ranging from $r = -.09$ to $r = -.64$ with a median of $r = -.34$.

relevance of consensus information to attributional judgments. Most notable among these are: Cooper, Jones, and Tuller (1972); Miller, Gillen, Schenker, and Radlove (1973); Nisbett and Borgida (1975); Nisbett, Borgida, Crandall, and Reed, 1976; and others who have contended and seemingly demonstrated that consensus manipulations frequently have no effect at all, or at least have far less effect than would be demanded by most normative attributional models.

It is premature, perhaps, to draw conclusions or attempt reconciliations of contending viewpoints and findings. It seems clear, however, that the relationships among perceptions of response consensus, trait inferences, and actors' own behavioral choices are extremely complex. In the concluding sections of this paper we shall try to explicate some of the factors and processes that underlie these relationships and, in so doing, we shall also try to further clarify the implications of the false consensus phenomena that have been demonstrated.

False Consensus Mechanisms

Motivational factors. Investigators who have discussed false consensus phenomena or egocentric attributional biases have typically emphasized their motivational status or function for the individual. Such biases, it is contended, both foster and justify the actor's feelings that his own behavioral choices are appropriate and rational responses to the demands of the environment, rather than reflections of his distinguishing personal dispositions. More dynamic interpretations (e.g., Bramel, 1962, 1963; Edlow & Kiesler, 1966; Lemann & Solomon, 1952; Smith, 1960) have stressed the ego-defensive or dissonance-reducing function of attributive projection, particularly as a response to failure or negative information about one's personal characteristics.

It is worth noting that the desire to forestall trait inferences about oneself could lead to three distinct types of influence or distortion. First, one might distort one's private perception and/or one's public estimate of the degree of consensus for one's own responses. Second, when the response to be reported is merely hypothetical or otherwise unverifiable, one could distort one's response report; that is, report a response that is more common, and presumably more normative, than one's probable or real response. Finally, one could distort one's actual behavior in the relevant situation; that is, actually conform to the response of one's peers to the extent that it enjoys high consensus, even if one's personal preferences, perceptions, or proclivities dictate an alternative response.

The present research cannot speak to the first of these potential sources of distortion. With regard to the other alternatives, there is some relevant evidence at hand. It is apparent at least that the false consensus phenomenon was not restricted to circumstances where response reports

were hypothetical or otherwise free from verification. Indeed, the false consensus hypotheses were as strongly confirmed for Study 4 in which the raters' own choices were real and consequential as they were for Study 3 in which the conflict situation described was merely hypothetical. It is possible, of course, that subjects' actual decisions in Study 4 about whether or not to wear the sandwich board were influenced by their assumptions about the modal response of their peers. If so, it is worth emphasizing the costs of such conformity, for example, facing an uncomfortable stroll on campus wearing the sandwich board or, alternatively, confronting a disappointed experimenter, were far from inconsequential for the subject.

Selective exposure and availability factors. Several nonmotivational factors that create the impression that one's own judgments and responses enjoy a high degree of consensus can be grouped together under the heading of "selective exposure" effects. Obviously, we tend to know and associate with people who share our background, experiences, interests, values, and outlook. Such people *do*, in disproportionate numbers, respond as we would in a wide variety of circumstances. Indeed, our close association is determined, in part, by feelings of general consensus and we may be inclined to exclude those whom we believe do not share our judgments and responses. This exposure to a biased sample of people and behavior does not demand that we err in our estimates concerning the relevant populations, but it does make such errors likely. More subtle, and more cognitive in flavor, are the factors which increase our ability to recall, visualize, or imagine paradigmatic instances of behavior. In a given situation the specific behaviors that we have chosen, or would choose, are likely to be more readily retrievable from memory and more easily imagined than opposite behaviors. In Kahneman and Tversky's (1973) terms, the behavioral choices we favor may be more "available," and we are apt to be misled by this ease or difficulty of access in estimating the likelihood of relevant behavioral options.

Ambiguity resolution factors. A second nonmotivational source of the false consensus effect arises from the intuitive psychologist's response to ambiguity in the nature and magnitude of situational forces and in the meaning and implications of various response alternatives. Attempts to resolve such ambiguity involve interpretation, estimation, and guesswork, all of which can exert a parallel effect on the attributer's own behavior choices and upon his predictions and inferences about the choices of others.

The biasing effect of ambiguity resolution perhaps is most obvious when the attributer's knowledge of a response or situation is second-hand and lacking in important specific details. Consider, for example, the subject who must decide on the precise meaning of such modifiers as *often* or *typically* or of any other potentially ambiguous descriptors encountered in the context of questionnaire items (for example, in Study 2). It is obvious

that both the response category to which that subject assigns himself and his categorizations of his peers will be similarly influenced by these decisions about the precise meaning of terms.

Similarly, the subject who read about the impromptu television commercial dilemma in Study 1 was forced to imagine the interviewer, the physical setting, and a host of other situational details which might encourage or inhibit the relevant behavioral options. If these imagined details seemingly would encourage one to sign the release then the subject was more likely to assume that he personally would sign, that a similar decision would be a common response among his peers, and that signing the release would reflect little about the distinguishing dispositions of any particular actor. By contrast, if the details imagined by the subject would inhibit signing of the release, the subject was more apt to assume that he personally would refuse, that his peers typically would do likewise, and that signing of the release would reveal much about the personal dispositions of the relevant actor.

In questionnaire studies this resolution of ambiguities in descriptions of situations and behaviors may seem a troublesome artifact. However, the same factor becomes an important source of bias in everyday social judgments and inferences where attributers may often respond to accounts of situations or actions that are vague and frequently second-hand. The intuitive psychologist constantly is confronted with statements like "Sally hardly ever dates short men" or "John refused to pay the painter's bill when he saw the paint job." In such circumstances he is forced to resolve ambiguities or uncertainties in the statement, and such resolutions will exert parallel effects upon his assumptions about his own behavior, his impressions about consensus, and his inferences about the dispositions of those whose behavior has been loosely categorized or described.

The present demonstrations of the false consensus effect, it should be reemphasized, were not restricted to circumstances where raters relied upon ambiguous second-hand descriptions. However, even when attributers actually experience or have fully adequate descriptions of a choice situation, ambiguities remain which inevitably will be resolved differently by different subjects. Thus, the subjects in Study 4 who anticipated and feared the ridicule of peers for wearing the "Eat at Joe's" sign and regarded the experimenter's wishes and expectations as trivial, were likely to refuse to wear the sign, to assume similar refusals by their peers, and to draw strong inferences about the traits of any subject who chose to wear the sign. Opposite priorities, of course, would have produced opposite personal choices and opposite social estimates and inferences.

The false consensus bias, in summary, both reflects and creates distortions in the attribution process. It results from nonrandom sampling and retrieval of evidence and from idiosyncratic interpretation of situational factors and forces. In turn, it biases judgments about deviance

and deviates, helps lead actors and observers to divergent perceptions of behavior, and, more generally, promotes variance and error in the interpretation of social phenomena.

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