

THE FUNCTION OF ETHICAL JUDGMENTS
IN IMPRESSION FORMATION

by

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ABSTRACT

The primary focus of this study is to test the central function of ethically related information on impression formation. The experiment was designed to contrast the effects of information about the ethical behavior of a stimulus person, Linda, with the effects of information about her capabilities in a work setting when presented with conflicting information about her social behavior. Information in the two categories to be compared, i.e. ethics or achievement, was either positive or negative in evaluative tone. Impressions were measured from a memory recall task and from responses to a checklist of inferred traits.

Three distinct dimensions of judgment were demonstrated by the results of the study: social, ethical and achievement-related dimensions. The social dimension includes judgments about a person's interpersonal skills and social interactions with others; the achievement dimension rates a person's attitudes, capabilities and behavior relevant to the performance of a task. Judgments on an ethical dimension attend to whether a person's behavior and attitudes conform to principles of right and wrong.

Ethical information was expected to affect judgments along not only the ethical dimension but also the social and achievement dimensions; ethical information had a significant impact on ethical judgments only. A strong relationship was found, as predicted, between ethical information and how well a person was liked. The stimulus person, Linda, was most liked by subjects who were told she acted ethically, least by those told she acted unethically; there was no significant difference in her likeability whether she

failed or succeeded in achieving her goal. Also, evaluation of Linda on an ethical dimension was the strongest predictor of how much a subject liked her.

The hypotheses concerning accurate recall of information, the impact of schemata on what facts and inferences are remembered as true, and the relationship between inferences drawn, information recalled, and the impression formed, were not substantiated.

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INTRODUCTION

We recognize in ourselves characteristics, inclinations and attitudes which contribute to various behaviors, some of which may be judged negatively, some positively. Otherwise the world would be divided into heroes and villains. Yet the difficulty many of us have in reconciling the presence of traits of opposite valence in the same other person has long been the subject of extensive study in the field of impression formation (Asch, 1946). Various principles or models have been posited to explain the processes people use to form an impression out of contradictory information. Anderson (1968b) argued for a model which asserts a person's attractiveness to others is an average of the degree to which the separate traits add to or subtract from his likeability. Heider (1958) suggests we attend to information about another in such a way that the final impression is a balanced one; the "halo effect" is one manifestation of this tendency towards balance.

Recent research has attempted to establish the ability of persons to differentiate dispositional traits along distinct dimensions of judgment when forming impressions of others (Delia, Crockett, Press, & O'Keefe, 1975; Stroebe, Thompson, Insko, & Reisman, 1970). These authors proposed that, if traits of opposite valence belong to different dimensions of judgment, then inconsistency in the description of the other would be minimized, provided the distinction is perceived and provided that evaluations of the person are independently made

for situations that involve the separate dimensions.

In the experiment by Stroebe, et. al. subjects evaluated a concept on the basis of information about a source, Dr. M., and his attitude toward the concept. Dr. M. was described as either an expert or inexpert scientist, and as either a nice or an awful person. Subjects were told that Dr. M. either supported or attacked a particular scientific theory, and that he either was married or divorced; they were asked to evaluate either the scientific theory or Dr. M.'s wife. Evaluations of the scientific theory were not influenced by whether Dr. M. was described as a nice or awful person but only by his reputation as a scientist; similarly, evaluations of the wife were unaffected by whether Dr. M. was presented as an expert or inexpert scientist but only by whether he was a nice or an awful person. That is, in evaluating the two concepts, i.e. the scientific theory or Dr. M.'s wife, subjects apparently attended to information on the relevant dimension and minimized or ignored information on the irrelevant dimension.

In the experiment by Delia, et. al., when a stimulus person was described with clearly positive traits on the work dimension and consistently negative traits on the social dimension, or vice versa, subjects were able to differentiate traits relative to the two dimensions when making corresponding evaluations. Judgments about a person's capabilities in a work setting did not influence significantly subjects' judgments of the person's social attractiveness. Again, subjects successfully discriminated attributes according to the two dimensions, thereby minimizing the inconsistency between attributions of opposite evaluative tone.

That our evaluation of a person in a single context, e.g. work

setting, will not predict, nor be predicted by, our evaluation of the same person in a social setting or on an overall evaluative continuum seems intuitively obvious, despite the comparative neglect of this consideration by research in impression formation. Nevertheless, what has not been established is the degree to which judgments along one dimension may confound judgments made along other dimensions for which information is either contradictory, ambiguous or absent. It is a simple enough task to separate our opinions about a person described as an expert scientist but an awful person as was demonstrated in the experiment by Stroebe, et. al. We may be less able to acknowledge positive as well as negative attributes along one dimension if our impression is overwhelmed by severely negative information on another dimension. It is a commonplace observation that people often discount the capabilities of persons whom they dislike. In many cases positive attributes along one dimension, e.g. capabilities, may be either forgotten or minimized when negative information on another dimension becomes salient.

All of this is not to deny that specific dimensions of judgment are commonly differentiated by people forming impressions of others. Rather the present study affirms the existence of various dimensions of judgment in impression formation and attempts to identify three of them. Two of these dimensions are analogous to those used in previous research: judgments of a person's social attractiveness and judgments of a person's capabilities in a work setting or in the performance of a task.

A third dimension allows people to make judgments about whether another person's attitudes and behavior are ethical. It is proposed

in the present study that in the initial interactions between two persons, most people want to come to some tentative conclusion about whether the other person is ethical toward others. Furthermore, it is held that information relevant to ethical behavior and attitudes is attended to more closely and given greater weight than other types of information when forming impressions of others. Information outside of this framework is more often ignored, forgotten or distorted in such a way that the overall impression is consistent with the judgment made along the ethical dimension. This phenomenon will be especially evident when observations relevant to the social dimension include both positively and negatively evaluated behavior.

The present study reflects a particular orientation to the understanding of the processes of impression formation, that of Werner's developmental psychology (1957). This viewpoint asserts that the development of cognition is reflected in increased differentiation and articulation of elements, along with an increased interdependence of elements due to their integration into a hierarchically organized system. Whereas a child's conceptions are global, diffuse and unorganized, with development a person's cognitions become more specific and more differentiated. These more discrete concepts tend to be organized in a hierarchical pattern within which some concepts override others. Increased knowledge as an adult is therefore conceptualized as movement from global, diffuse concepts to a system of cognitions characterized by increased differentiation and hierarchic integration.

This Wernerian conceptualization of cognitive development is useful for understanding the interrelationships between various

dimensions of interpersonal judgments. It has been demonstrated that persons with more highly developed systems of interpersonal constructs are less likely to sort people into two groups on the basis of a good-bad dichotomy (Campbell, 1960; Scott, 1963). Since concepts become more specific and discrete with development, a person with a highly developed system of interpersonal constructs should have more dimensions by which to judge others. Dispositional traits within an ethical construct should be more carefully defined and distinct from other constructs. As concepts become less global, judgments made from perceptions about another's ethical behavior should have less influence on attitudes about that person on other dimensions.

Closely related to the idea of hierarchically organized systems of cognitions are the schemata described by a number of theorists of social perception. Neisser (1976) has persuasively argued for the importance of conceptual schemata for perceptual theory; the stimuli attended to by the perceiver and the meaning given to the stimuli are strongly influenced by the schemata invoked by the perceiver. Arguing that perception is inherently selective, Neisser describes schemata as plans for understanding objects and events, plans which direct our perceptions and which largely determine how we understand our perceptions. These schemata are formulated out of our past perceptions and are constantly modified by new information. Perception can be viewed as the interaction of schemata available within the perceiver and the information available in the environment.

Neisser's conceptualization of schemata is consonant with Werner's developmental psychology. Neisser cites experimental

evidence in support of the view that infants are born with a limited number of primitive schemata by which they find out about their environment, organize their perceptions and develop a plan for obtaining more information. These initial schemata enable the infant to make only the most elementary observations of his environment. Schemata become increasingly specific and differentiated with experience. "The development of the schema is therefore from the general to the particular, from undifferentiated to precise" (page 65). And, just as Werner argues that cognitions are composed of elements organized in hierarchical systems, Neisser believes that people have many schemata which are interrelated in complex ways. Some schemata are broader and often subsume and override less extensive ones.

Both of these theories affirm the need for people to make sense of their world, to achieve a stability and predictability in their perceptions. In the realm of social perceptions this need for stability and predictability translates into the perceiver's attempts to understand others within the frameworks available to him, i.e. within the repertoire of schemata available. Both theories acknowledge the powerful, but often unrecognized, consequences of our beliefs about other people on the impressions we form of others. We organize our perceptions of others in the way which least threatens our view of the world, i.e. in close conformity with our more or less stable concepts about others.

Research has supported the idea that stimuli are understood according to the schemata used. Identification of which schema is invoked from a particular set of information, why one is invoked

rather than another, and the pattern of inferences inherent in a specific schema are critical to understanding the processes by which people form impressions of others.

Although Solomon Asch does not use the term schemata, his well-known experiments address some of the questions about the role of schemata (1946). In the first experiment reported subjects heard one of two seven-trait lists describing a fictitious person. Only the fourth trait presented varied; one group of subjects was told the person was warm, the other that the person was cold. Not surprisingly, impressions measured by checklists of inferred traits revealed that subjects formed widely divergent impressions from the two lists. More important, written impressions suggested that subjects in the two conditions inferred quite different types of behavior from the other six traits. Cautiousness in a warm person was interpreted positively whereas in a cold person it was seen as stealth.

In a second experiment Asch solicited impressions based on the six traits of the first experiment, minus the label warm or cold. Subjects were again asked to infer traits on a checklist identical to the first experiment with the terms warm-cold added. Although the impressions as a whole were more neutral, Asch identified a tendency for the impressions to vary along the same warm/cold dimension. Subjects in the second experiment who imagined the stimulus person to be warm tended to have similar impressions as those subjects in the first experiment who had been overtly told the person was warm. Asch concluded:

While not entirely conclusive, the results suggest that a full impression of a person cannot remain indifferent to a category as fundamental as the one in question, and that a trend is set up to include it in the impression on the basis of the given data. (1946, page 271).

While the results of Asch's experiments can be interpreted in various ways, they are consistent with the idea that the schema by which a person is classified as either warm or cold are common to most perceivers and are consistently invoked even in the absence of direct information. The central trait, e.g. warm-cold in the first two experiments, can be conceptualized as one factor which determines the schemata used to process information. By contrast, Asch demonstrated that the conceptual pair, polite-blunt, although it could function as a central trait when presented with some types of information, encompassed a much narrower pattern of beliefs. Asch's experiments support the idea that our impressions of others are significantly molded by the salient patterns of expectations we use to understand others, and the research provided an initial exploration of the question of why and when a specific schema is invoked.

One promising method of determining what schemata are salient for a particular set of information has been the use of memory recall tasks. In a number of studies subjects are asked to make certain judgments by recalling past information about a stimulus person (Picek, Sherman, & Shiffrin, 1975; Cantor & Mischel, 1977). Research

measuring subjects' impressions of a stimulus person on the basis of memory depends on a number of principles which have been identified by Ostrom (in press). The first states that stimulus material is encoded according to the "thematic framework" salient when the stimuli are initially processed. This principle is parallel to the idea that the schemata salient in a particular situation determine how we understand the situation. A second principle extends the first by asserting that the way in which the stimulus information can later be remembered depends on the thematic framework salient when the information was first processed. An obvious example of this principle is the ease with which most of us can recall the months of the year within a temporal framework; it is much more difficult to list the months in alphabetical order. These first two principles deal with the role of schemata in the process of understanding and remembering information presented.

The third and fourth principle consider the way in which people make inferences from the information given, and how they store and recall those inferences. The third principle asserts that inferences are stored in memory separately from the items of information from which they are generated. An experiment by Posner and Snyder (1975) substantiates this assertion. Subjects were shown a set of traits which were either all positive or all negative in evaluative tone. Shortly afterwards they were asked to indicate whether a single probe word was one of the traits in the set given. Subjects took more time to decide if the probe word belonged to the stimulus set as the set size increased; they also took less time to decide, and committed fewer errors when the probe trait was opposite in evaluative

tone to the list of words than when it was similar in tone to the traits in the stimulus set. The subjects apparently had spontaneously generated an abstraction, i.e. positive or negative evaluative tone, from the stimulus set and were able to refer to this abstraction separately from the individual items of information.

Ostrom's fourth principle asserts that the inferences remembered as factual are dependent on the thematic framework, or schema, that is salient when items in the stimulus information are processed and stored. Whether the inferences are made at the time the information is stored or when it is recalled, inferences generated from a particular thematic framework often become indistinguishable from the facts which stimulated that framework. In the experiment by Picek, Sherman and Shiffrin (1975) subjects were presented one of two humorous stories depicting a four-person social structure with reciprocated sentiment relations (like/dislike); two of the six relationships were left unstated. The four specified relationships were such that, according to Heider's principle of balance, in one story the social structure was balanceable, in the other the structure was imbalanceable. Picek, et. al. asked subjects to recall the sentiment relations among the four persons. For the unstated relationships subjects could mistakenly believe they were actually presented, either as like or disliked sentiments. The number of times these errors balanced the structure was compared with the number of times errors contributed to imbalance. For balanceable stories, subjects made responses to non-stated links in the direction of balance, for nonbalanceable stories errors were in the direction of imbalance. Apparently subjects encoded social structures as either "socially balanced and logical" or

"socially imbalanced and illogical," and used the code to understand, store and recall the information. Inferences remembered as true were consistent with the social code used.

An experiment by Cantor and Mischel (1977) gave further credence to the theory that people use specific schemata to encode, store and recall information about others. Subjects were presented a series of traits describing either an introvert or an extrovert. Some subjects were told explicitly that the fictitious person was an extrovert or introvert, for others the theme was only implicit. All subjects received some information judged relevant to the theme plus additional unrelated material. In a recognition memory test subjects had more confidence they had seen nonpresented but conceptually-related material and less confidence they had seen nonpresented, unrelated material, whether or not the themes extrovert or introvert were explicit. Presumably inferences made from the salient schema, i.e. extrovert or introvert, were more likely to be remembered as true than those unrelated to the schema.

A memory recall task is, therefore, one potential method of identifying the schemata subjects use to process and understand information about a stimulus person. The traits remembered as true about a stimulus person afford us some clue as to the schema invoked when actual dispositional traits were presented. Especially when errors are great, the nonpresented traits remembered as true should reflect the salient schema. If the schema used is identified from a memory recall task, and if it did exert a determining influence on the impression formed, then there should be a correlation between the recalled traits and the impression measured from an inferred-trait

checklist.

A number of studies suggest that ethical judgments tend to influence and even override judgments made on other dimensions. Ratings of traits according to the degree a trait contributes to a person's likeability provides some credence to this phenomenon (Anderson, 1968a). Nearly 50 percent of the traits classified as ethically related in the present study were included in the ten most likeable or ten least likeable traits on Anderson's list.

Ratings of individual traits, however, do not take into account our attempts to understand traits in relation to one another. As Asch states, "we try to get at the root of the personality" (1946, page 259) when forming impressions of others. One of Asch's experiments suggests the central function of ethically related traits proposed by this study. Asch presented subjects with one of two lists of traits describing a fictitious person:

A. kind wise honest calm strong

B. cruel shrewd unscrupulous calm strong*

When asked to provide synonyms for the traits given, subjects reading series A, with two ethical terms, substituted words implying gentleness for "calm;" those reading series B replaced calm with words such as "calculating" and "scheming." Similarly, "strong" in series A was seen as "fearless," "courageous," or "reliable," whereas in series B it was more often interpreted as "ruthless." The ethically

* This author's italics.

related terms seemingly functioned as central traits and influenced the impressions formed relative to the last two terms.

The possibility of ethical judgments counteracting processes which would otherwise determine how subjects form an impression of another was raised by results from a study by Rosencrantz and Crockett (1965). Impressions formed of the stimulus person by female subjects did not conform to the expectations of the experimenters. Subjects were students enrolled in a college with a particular religious heritage. It was surmised by the authors that the female subjects may have felt a moralistic rejection of the stimulus person, a phenomenon which neutralized and even reversed the anticipated effects of the experiment.

The primary focus of this experiment is to demonstrate the central function of ethically related information on impression formation. A precise definition of ethics inevitably necessitates a subjective value judgment about what behaviors and attitudes are appropriately included in ethical considerations; the definition itself is the first and most critical ethical judgment. Kohlberg (1976) conceptualized six stages of moral judgment; this study defined ethics according to the sixth stage. At the sixth stage ethical judgments stem from the belief as a rational person in the validity of universal moral principles and a sense of personal commitment to them.

This experiment was designed to contrast the effects of information about the ethical behavior of a stimulus person, Linda, with the effects of information about her capabilities in a work setting when presented with conflicting information about her social behavior. Information in the two categories to be compared,

i.e. ethics or achievement, was either positive or negative in evaluative tone. Impressions were measured from a memory recall task and from responses to a checklist of inferred traits.

Several hypotheses were formulated:

1. Attraction to the other person.

a. Subjects will like Linda most when they are presented positive ethical information, least when they read about unethical behavior.

b. The effect of the ethically related information will be greater for persons for whom ethical judgments are relatively central than for those for whom they are less central.

c. Evaluations of Linda on an ethical dimension will be the strongest predictor of how much subjects like her.

d. **There** will be no significant difference in Linda's likeability whether she succeeded or failed in achieving an academic goal.

2. Ratings on dimensions of personality.

a. Variations in ethical-unethical behavior will affect ratings on three different dimensions of judgment: ethical, social and achievement. These effects will be greatest for persons for whom ethical judgments are relatively central.

b. Variations in achieving-nonachieving behavior will affect ratings on the achievement dimension but not on the ethical or social dimensions.

3. Impressions from memory recall task.

a. When attempting to recall dispositional traits presented

in the information describing Linda, the proportion of intrusions which are nonpresented positive traits will be greatest for subjects who read information about ethical behavior and least for those who read about unethical behavior.

b. The proportion of intrusions which are nonpresented positive traits will not differ significantly for those reading positive or negative achievement information.

c. Intrusions made by subjects reading ethically related information will predominantly be traits related to ethical behavior, with valences corresponding to the ethical material read.

d. The proportion of traits recalled which are positive in evaluative tone, regardless of accuracy, will be greatest when subjects read about ethical behavior, least when they read about unethical behavior.

e. The proportion of traits recalled which are positive in evaluative tone, regardless of accuracy, will be a significant predictor of how much subjects will like Linda.

f. The proportion of positive ethical traits recalled will correlate with a subject's evaluation of Linda on the ethical dimension.

METHOD

The study included two phases. First, traits were classified according to whether they provided information primarily about social behavior, ethical behavior or behavior relevant to achievement in a work setting. The second phase was the experimental study of variations in subjects impressions of a person when the types of traits presented were manipulated.

Classification of traits

Three male and four female judges were asked to classify 192 of the 555 traits identified in experiments by Anderson as meaningful to college students when forming impressions of others (Anderson, 1968a). All but 45 of the traits were among Anderson's sublist of 200 traits rated most meaningful; 53 of the high meaningful traits were excluded from the ratings for one of four reasons. One, the trait was similar in meaning to another rated; for example, argumentative was rated, quarrelsome was not. Two, the trait opposite in meaning was selected; thus, tidy was rated, untidy was not. Three, the trait had multiple meanings, one of which might describe behavior in one category, another which seemingly referred to behavior in another category; for example, aggressive implies "a disposition to dominate often in disregard of others' rights"* (ethical), or "energetic pursuit of one's ends"* (achievement). Four the trait did not seem to relate to any of the

* Webster's Seventh New Collegiate Dictionary, G.& C. Merriam Company, publ., Springfield, Mass., 1967.

three categorized of social, ethical or achievement behavior, e.g. unhealthy.

Definitions of the three classifications were presented to the judges in the following manner:

On each of the cards in this stack is a word commonly used to describe people. These traits can be grouped into three categories according to the following concepts:

1) SOCIAL -- Some of the words pertain to attitudes and behaviors which contribute predominantly to our opinion of a person in a social setting. Social words are those which tell us something about a person's interpersonal skills and his social interactions with others. Attitudes, capabilities and behavior relevant to social interactions.

2) ACHIEVEMENT -- These words primarily describe qualities which contribute or detract from a person's ability to achieve success. Attitudes, capabilities and behavior relevant to the performance of a task.

3) ETHICAL -- Some words give us information about whether a person's behavior is ethical or unethical. Attitudes and behavior relevant to principles of right and wrong.

The 192 traits were printed on index cards, one trait to a card. Each judge was asked to sort the 192 traits into three separate stacks corresponding to the three classifications and to re-examine the cards in each stack until the traits were sorted to his or her satisfaction. Classification frequencies for individual traits are presented in the appendix.

The largest proportion of traits was classified as social; half

of those were classified unanimously. Classification of traits related to achievement in a work setting was also made frequently but less consistently: 77 were selected for the achievement category, 30 of these (39 percent) by all seven judges. Only 26 traits were classified by at least four judges as related to ethics. Ethically related traits were also less consistently categorized than social traits (42 percent), primarily because most of them were also classified as social traits by one or more of the judges; only 11 traits were unanimously categorized as related to ethics. Only one trait, broad-minded, was not classified in any one category by a majority of the judges (Table I).

TABLE I
FREQUENCY OF CLASSIFICATION OF TRAITS

Classification	Number of judges agreeing on classification				Total
	7	6	5	4	
Social	44 (50%)	18 (20%)	17 (20%)	9 (10%)	88
Achievement	30 (39%)	17 (22%)	11 (14%)	19 (25%)	77
Ethics	11 (42%)	6 (23%)	3 (11%)	6 (23%)	26
Unclassified					1
Total	85	41	31	34	192

Participants

Forty one female undergraduates and nineteen male undergraduates enrolled in introductory speech courses at the University of Kansas participated in the experiment for course credit.

Procedure

After first signing a statement agreeing to participate in the experiment, subjects were asked to imagine they were going on a weekend camping trip with several people they knew fairly well. Also going was Linda, a woman whom they had never met. In order to form an impression of the woman, subjects were presented five short anecdotes about Linda supposedly solicited from her friends. An additional ten dispositional traits attributed to Linda by people who knew her were presented following the anecdotes. Participants were encouraged to try to form an impression of Linda from the material presented.

The ten traits presented and four of the five anecdotes were identical for all participants. Two of the anecdotes depicted positive social behavior, i.e. friendliness and cheerfulness. Two described negative social behavior, i.e. stubbornness and lack of tact. Of the ten personality traits five characterized positive social behavior, the other five characterized negative social behavior.

Variation in the information presented to the subjects occurred only in the second anecdote of the five anecdotes given. The second anecdote referred either to success or failure in the achievement of a work-related goal or to positive or negative ethical behavior. One group read that Linda was awarded a scholarship based on exceptional academic performance which allowed her to go to the college of her choice (A+); another group was told that she failed to win a

scholarship available to upperclassmen with a grade point average of 3.0 since she had only been able to maintain a 2.5 grade point average (A-). A third group read that Linda volunteered crucial information to her only competitor for a scholarship which would allow her to go to the college of her choice (E+) and a fourth group was told that she decided not to volunteer the information in order to gain the advantage over her competitor (E-).

Participants were allowed 7 minutes to examine the material describing Linda. They were then instructed to solve arithmetic problems for 10 minutes; this task was designed to prevent subjects from rehearsing the information. Following the arithmetic problems the experimenter asked subjects to imagine they were describing Linda to someone who knew nothing about her. Subjects were encouraged to write as elaborate an impression as possible within a 10 minute time period.

After writing their impressions of Linda, subjects performed a number of tasks designed to obtain a quantitative measurement of their impression of Linda. Participants first indicated on a seven-point scale how much they thought they would like or dislike Linda. Then subjects were presented a list of 60 traits and asked to circle the 10 traits which had been presented as attributed to Linda by people who knew her. In addition to the five positive social and five negative social traits presented in the stimulus material, the list included 10 other social traits, 20 ethically related traits, and 20 achievement-related traits. Both positive and negative traits were equally represented in each category and the ordering of the traits on the list was random. Following the memory recall test, subjects were instructed to examine the same 60 traits and mark on seven-point scales how likely

they thought it was that each trait applied to Linda.

The final task was designed to measure variations among participants in the degree to which they commonly judge others on an ethical dimension. Subjects were presented a list of 100 traits including the 60 words from the memory recall task, 25 other words categorized as related to ethics by one or more of the judges, eight traits categorized by a majority of the judges as achievement-related and seven traits primarily judged as social traits. The experimenter read a brief description of ethical and unethical traits and instructed participants to categorize traits accordingly. If the participant felt that the trait provided no information about a person's ethical behavior or attitude, the trait was to be categorized as "neither." Subjects were asked to classify traits on the basis of the meaning of the word alone. As an example, subjects were told not to categorize capabilities as ethical or unethical unless they believed the trait itself described a disposition relevant to ethical behavior; inferences about the likely ethical behavior from a word describing a particular capability were not to be considered in the classification process. Exact instructions to participants are presented in the appendix.

Independent variables

Three independent variables were manipulated in the experiment. First, information in the second anecdote was varied in order to compare the impact of ethically related or achievement-related information on subjects' impressions of Linda. The resultant nominal variable, Stimulus Information, had four values: 1) Positive Ethical (E+), 2) Negative Ethical (E-), 3) Positive Achievement (A+), 4) Negative achievement (A-).

The second independent variable was the proportion of traits considered relevant to ethics by each subject. The Ethical Perceptions Index measured the proportion of traits rated as either ethical or unethical to the total number of traits rated.

The Ethical Perceptions Index was used as an indicator of a participant's propensity to evaluate others along an ethical dimension. In relation to the concept of schemata, a higher proportion suggests that a person often invokes a schema related to ethical judgments of others; the greater the index, (a) the more central the schema should be to a participant's impressions of others and (b) the more extensive it should be, encompassing more types of behaviors. Conversely, a person with a low score on the Ethical Perceptions Index should be less likely to invoke an ethical schema and the schema should be narrower and less influential on the final impression formed.

Third, the sex of the subject was included as a variable in all initial analyses.

Dependent variables

Two set of dependent variables were evaluated. The first set indicated subjects' evaluations of Linda. One of these was their rating of whether they would like or dislike Linda.

Three other evaluational variables were derived from ratings on the seven-point scales following each of the 60 traits. Subjects indicated how likely it was a particular trait applied to Linda. For the 30 positive traits the highest value of seven was assigned when the trait most likely applied; for the 30 negative traits the highest value of seven was assigned when the trait least likely applied to Linda. Thus, a high score indicated that subjects believed Linda

would possess the desirable traits and would not possess the undesirable ones.

Three dependent variables were constructed from these 60 applicability ratings. The mean value for the 20 traits related to ethics indicated subjects' evaluation of Linda along an ethical dimension (Ethical Score). Similarly, the mean values of the 20 social traits and of the 20 achievement-related traits provided subjects' evaluations along the social dimension (Social Score) and along the achievement dimension (Achievement Score). Higher mean values for the three scores reflected higher evaluations of Linda by the participant along the corresponding dimension.

A second set of variables reflected how accurately participants recalled the ten social traits presented in the stimulus material and what types of errors they made in the memory task. Proportions based on the total number of intrusions of nonpresented traits were derived for six categories corresponding to the three dimensions of judgment -- ethical, social and achievement-related traits -- and to the positive or negative valence of the trait.

RESULTS

Experimental conditions and dimensions of judgment

Scores for the three dimensions of judgment were subjected to standard analysis of variance and analysis of covariance. The analyses included the two nonmetric independent variables as factors, i.e. the four types of information, and the subject's sex. The Ethical Perceptions Index was used as a covariate. The main effects, the interaction effect of the two factors and the effect of the covariate were measured. Since the main effect of sex and the interaction term did not attain statistical significance for any of the dependent variables, secondary analyses considered only the effects of varying the stimulus information and of the covariate.

Judgments on ethical dimension

Results from the analysis of covariance for judgments on the ethical dimension are presented in Table II. As can be seen, variations in stimulus information had a significant effect on these judgments.

TABLE II
SUMMARY OF ANALYSIS OF VARIANCE OF
ETHICAL SCORES

Source	df	MS	F
Stimulus Information	3	4.02	*9.37
Ethical Perceptions Index	1	1.83	*4.28
Error		0.43	

* Significant at the $p < .05$ level.

The means of the four groups' ratings are shown in Table III. It is evident that when ethical behavior was presented, the most positive ratings were elicited, while the unethical behavior elicited the most negative ratings. T-tests measuring the significance of the differences between group means confirmed that variations in achievement had no significant effect upon judgments on the ethical dimension.

TABLE III 1

MEAN ETHICAL SCORES BY TYPE OF STIMULUS INFORMATION

Won scholarship (A+)	Lost scholarship (A-)	Honest with competitor (E+)	Underhanded with competitor (E-)
4.92 _{ab}	4.79 _b	5.30 _a	3.80

The Ethical Perceptions Index was a strong predictor of judgments on the ethical dimension (Table II). Persons who considered a high proportion of traits to be related to ethical judgments tended to rate Linda higher on the ethical dimension. Given the strength of the effect of the covariate, the next step was to test for differences in the effect of the covariate among the four types of stimulus information. Since standard analysis of variance cannot test for interaction effects between factors and covariates, an analysis of variance technique through multiple regression analysis was used. With the group reading the positive achievement information as a control group, the effect of

1. In this and subsequent tables, means with common subscripts did not differ from each other at $p < .05$ by t-tests; all other mean differences exceeded the .05 level of significance.

variations in the information given the other three groups, of the Ethical Perceptions Index, and of the interaction between the covariate and the three types of information was tested for the ethical dimension. The equation did not achieve statistical significance, indicating that the effect of the Ethical Perceptions Index on evaluations along the ethical dimension did not vary among the four types of information presented.*

Judgments on the achievement dimension

Table IV summarizes the analysis of covariance of judgments on the achievement dimension. Manipulation of the stimulus information had a significant main effect on this dimension. Examination of the mean Achievement Scores in Table V suggests that judgments on the achievement dimension were largely sensitive to stimulus information about behavior related to achievement. T-tests were performed to measure the significance of the differences between mean Achievement Scores for the four groups. Whereas the mean Achievement Score was significantly higher when positive achievement information was read than when negative achievement information was given, no significance was found for the difference in means for the two ethically related stories. The Ethical Perceptions Index had no significant effect on the evaluations on the achievement dimension.

* Since the standard error of the B term associated with the Ethical Perceptions Index was quite large in comparison to the value of the B term, some caution should be used in accepting the F-test as a valid reflection of the significance of the relationship between the Ethical Perceptions Index and the three dimensional scores. Because the sample size was small (60) and the distribution of values on the Ethical Perceptions Index varied considerably from a normal curve, the margin of error was proportionally large. Conclusions about the effects of the covariate must therefore be tentative.

TABLE IV
 SUMMARY OF ANALYSIS OF VARIANCE OF
 ACHIEVEMENT SCORES

Source	df	MS	F
Stimulus Information	3	1.42	*5.62
Ethical Perceptions Index	1	0.57	2.27
Error	54	0.25	

TABLE V
 MEAN ACHIEVEMENT SCORES BY TYPE OF STIMULUS INFORMATION

Won scholarship (A+)	Lost scholarship (A-)	Honest with competitor (E+)	Underhanded with competitor (E-)
5.46	4.60 _a	5.10 _b	4.91 _{ab}

Judgments on the social dimension

Analysis of covariance of judgments on the social dimension reveals that variations in the stimulus information did not have a significant main effect (Table VI). Mean Social Scores are presented in Table VII.

The Ethical Perceptions Index was a strong predictor of evaluations on the social dimension (Table VI). Subjects who categorized a high proportion of traits as either ethical or unethical, and who therefore appear to make ethical considerations relatively more central to their impressions of others, were more likely to evaluate Linda

higher on the social dimension regardless of the variations in the stimulus information.*

TABLE VI
SUMMARY OF ANALYSIS OF VARIANCE OF SOCIAL SCORES

Source	df	MS	F
Stimulus Information	3	0.20	0.78
Ethical Perceptions Index	1	2.30	*8.84
Error	54	0.26	

TABLE VII
MEAN SOCIAL SCORES BY TYPE OF STIMULUS INFORMATION

Won scholarship (A+)	Lost scholarship (A-)	Honest with competitor (E+)	Underhanded with competitor (E-)
4.85	4.59	4.75	4.32

Likeability scores

A parallel analytical procedure was used to test the hypothesis that the degree to which people liked Linda would be primarily dependent on their perceptions of her ethical behavior. Variation in

* Multiple regression analysis was used to test for variations in the effects of the Ethical Perceptions Index on Social Scores among the four types of information. Since the standard error of the B term associated with the Ethical Perceptions Index was quite large in comparison to the value of the B term, the effects of the covariate must remain tentative. See footnote, page 26.

the stimulus information was expected to be a strong predictor of the Likeability Score, with the mean score highest when ethical behavior was presented, lowest when unethical behavior was described, and with no significant difference between Likeability Scores of the two groups reading about positive or negative achievement information. Likeability Scores of participants who considered a high proportion of traits relevant to ethical considerations were expected to be more sensitive to the ethical information presented.

Results from analysis of variance confirmed that the variations in the information had a strong effect on Likeability Scores (Table VIII). Examination of the mean Likeability Scores in Table IX clearly demonstrates the anticipated effect. Linda was rated highest on the

TABLE VIII

SUMMARY OF ANALYSIS OF VARIANCE OF LIKEABILITY SCORES

Source	df	MS	F
Stimulus Information	3	4.01	*5.39
Ethical Perceptions Index	1	3.16	*4.25
Error	55	0.75	

likeability scale by participants who read the anecdote about ethical behavior, lowest by those who read the anecdote about unethical behavior. Surprisingly, Linda was liked more by participants who were told she lost the scholarship than by those told she won it, although the difference was not statistically significant. Linda was liked significantly more when she was honest (E+) than when she chose to

be underhanded toward her competitor (E-). Thus, two of the hypotheses were confirmed. No significant difference in Linda's likeability resulted from variations in her ability to achieve, whereas a sizeable difference occurred between groups reading about ethical or unethical behavior. In addition, Linda was liked significantly more when she was honest (E+) than when she won the scholarship (A+) and significantly less when she was underhanded (E-) than when she lost the scholarship.

TABLE IX
MEAN LIKEABILITY SCORES BY TYPE OF STIMULUS INFORMATION

Won scholarship (A+)	Lost scholarship (A-)	Honest with competitor (E+)	Underhanded with competitor (E-)
4.60 _{ab}	5.07 _{ac}	5.40 _c	4.00 _b

The Ethical Perceptions Index was a significant predictor of Likeability Scores, which tended to be higher for those participants with a high score on the index. The effect of the Ethical Perceptions Index on the likeability ratings did not vary according to the type of stimulus information presented.*

Multiple regression analysis was used to test the predictive strength of the three dimensional scores on the Likeability Score.

* It should again be pointed out that results from the analysis of the covariate must be accepted only with extreme caution. See footnote, page 26.

The Ethical Score was expected to be the strongest predictor; the Achievement Score was not expected to be related to the Likeability Score. In accord with these expectations, the Achievement Score failed to predict how likeable participants rated Linda. Both the Social Score and the Ethical Score were significant predictors of the Likeability Score, with the Ethical Score explaining slightly more variance than the variance explained by the Social Score. Since the Ethical Perceptions Index failed to achieve statistical significance when entered jointly in the multiple regression equations, the effects of the three dimensional scores were considered separately (Table X).

TABLE X
 MULTIPLE REGRESSION ANALYSIS OF THE EFFECT OF
 ETHICAL, SOCIAL AND ACHIEVEMENT SCORES ON
 LIKEABILITY SCORES

Dependent variable: Likeability Score

Independent variable	B	Beta	F.	Simple r
Ethical Score	.60660	.52219	12.1	.11515
Social Score	.18435	.10298	4.80	.06367
Achievement Score	-.18184	-.10501	.675	.08141
Constant	1.94742			

Multiple R: .54278
 R Square: .30540
 F: 8.06075
 N: 60

Memory recall task

The memory recall task was designed to measure to what extent highly ethical or unethical information affects the schema used to understand, store and recall information about another person. All of the ten traits presented in the stimulus information were social traits, five positive and five negative. The 60-word trait checklist included the ten social traits presented in the stimulus information, ten nonpresented social traits, 20 nonpresented ethically related and 20 nonpresented achievement related traits. The type of intrusions of nonpresented traits was analyzed as an indicator of the schema used by subjects while forming an impression of Linda.

Participants reading anecdotes about ethical or unethical behavior were expected to mistakenly recall more ethically related nonpresented traits with corresponding valences. Also, the proportion of nonpresented positive traits was expected to be greatest for subjects who read information about ethical behavior and least for those who read about unethical behavior. Since information about achievement related behavior was not thought to have a similarly central function, in impression formation, no significant differences in the valence or classification of nonpresented traits inaccurately recalled was anticipated between groups reading about positive or negative achievement-related behavior. The proportion of all traits recalled which were positive in evaluative tone, whether presented or nonpresented traits, was also expected to be greatest for subjects reading about ethical behavior and least for those reading about unethical behavior.

Judgments measured directly from the impression formation tasks and those measured from the memory recall task were expected to

correspond for all four groups. Therefore, two additional hypotheses were advanced. One, subjects who recalled a larger proportion of positive traits, regardless of accuracy, were expected to like Linda more; two, a correspondance was anticipated between the proportion of positive ethical traits recalled and a subject's evaluation of Linda on the ethical dimension.

Since some participants recalled more or less than ten traits when performing this task, the proportions of correct positive and of correct negative responses to the total number of traits recalled were computed. On the average 72 percent of the responses were correct. fairly evenly divided between positive (53.7 percent) and negative (46.3 percent) correct recollections.

Of the 28 percent of intrusions, or incorrect responses, by far the greatest proportion were positive social traits (49.7 percent). Another 25.9 percent of the intrusions were ethically related, positive traits and 9.7 percent were achievement-related, positive traits. The proportion of intrusions which were negative in evaluative tone made up less than 15 percent in total: 7.7 percent social, 3.7 percent ethically related and 3.6 percent achievement-related negative traits. The overwhelming proportion of incorrectly recalled traits were positive in evaluative tone (84.6 percent).

To test for differences in the type of errors made, the proportions of intrusions were tabulated for the three classifications of positive traits. Since so few of the negative nonpresented traits were inaccurately recalled, it was not meaningful to test for significant differences by trait classification among the four types of stimulus information. Analysis of variance was used to test for significant

differences among the four types of information in the proportion of intrusions which were either positive social, positive ethically related or positive achievement-related traits. Only the proportion of intrusions of positive ethically related traits varied according to the type of information read (Table XI). Mean proportions of intrusions which were positive ethically related traits are presented in Table XII. T-tests confirmed that the mean proportion of positive ethically related traits inaccurately recalled was significantly greater both for the group reading that Linda won the scholarship and by the group reading that she acted ethically when compared to the corresponding mean proportion of the group reading she failed to qualify for the scholarship. Thus, the hypothesis that ethical information provokes a unique schema used to understand, store and recall information about another was not substantiated.

TABLE XI
SUMMARY OF ANALYSIS OF VARIANCE OF INTRUSIONS
OF POSITIVE ETHICALLY RELATED TRAITS

Source	df	MS	F
Stimulus Information	3	0.20	*3.13
Error	56	0.07	

Analysis of variance tested for significant differences in the proportion of intrusions of positive traits for all three trait classifications combined. No significant differences emerged among the four types of stimulus information presented. Nor was there a significant

TABLE XI I

MEAN PROPORTIONS OF INTRUSIONS WHICH WERE
POSITIVE ETHICALLY RELATED TRAITS

Won scholarship (A+)	Lost scholarship (A-)	Honest with competitor (E+)	Underhanded with competitor (E-)
.395 _a	.125 _b	.324 _{ac}	.173 _{abc}

difference found when analysis of variance was used to test for variations in the proportion of all positive traits recalled, regardless of accuracy.

Multiple regression analysis indicated that the proportion of positive traits recalled, regardless of accuracy, was not a significant predictor of how much Linda was liked. Multiple regression analysis was also used to test whether the proportion of errors due to positive ethical traits inaccurately recalled would predict Linda's evaluation on an ethical dimension; the results were not significant.*

The results of the memory recall task were apparently due to a rather high rate of accuracy of recall; on the average less than three out of ten of the traits remembered as true were nonpresented traits. More than half of the intrusions were nonpresented social traits and nearly 85 percent of the intrusions were positive in evaluative tone.

* Although the analysis indicated subjects reading about unethical behavior who recalled fewer positive, ethically related traits were likely to rate Linda significantly lower on the ethical dimension, the standard error of the B term was so large as to make acceptance of these results untenable.

Less than one of the ten traits recalled involved the misrecall of a nonpresented ethical trait. Because of the high rate of accurate recall and the small variation in types of intrusions, variability among the four experimental groups was not such that comparisons were meaningful.

CONCLUSIONS

Dimensions of interpersonal judgment were shown conclusively to be operative in impression formation. Three distinct dimensions of judgment were demonstrated by the results of the study: social, ethical and achievement-related dimensions. The social dimension includes judgments about a person's interpersonal skills and social interactions with others; the achievement dimension rates a person's attitudes, capabilities and behavior relevant to the performance of a task. Judgments on an ethical dimension attend to whether a person's behavior and attitudes conform to principles of right and wrong.

Results clearly support these three concepts as distinct dimensions of judgment in impression formation. Variations in the stimulus information had a significant main effect on both the Ethical and Achievement Scores but not on the Social Score. Since the stimulus information was varied along the ethical and the achievement dimensions, the significant effects on the appropriate scores indicate participants were distinguishing information according to these dimensions when forming an impression of Linda. T-tests between groups means confirmed this conclusion. Evaluations of Linda on the achievement information corresponded with the valence of achievement information presented; inferences about her ethical qualities were strongly influenced by the described behavior relevant to ethics.

The primary focus of this study was the presumed central function of ethically related information in impression formation. Ethical information was expected to affect judgments along not only the ethical dimension but also the social and achievement dimensions. Results

confirmed that ethical scores were sensitive to the ethical information presented; social scores were not significantly different. Despite the connection between the two dimensions, participants apparently distinguished between a schema evaluating ethical behavior and one concerned with social, interpersonal skills.

The hypothesis that ethical information would affect evaluations on the achievement dimension was predicated on assumptions about the intensity of our beliefs about ethical behavior, characteristics suggested by previous studies (Anderson, 1968a; Asch, 1946). It was proposed that we like to imagine that good people are also more capable, bad people less so, and unless we are confronted with information that violates this ideal, we prefer to form our impressions accordingly. This phenomenon conforms to Heider's principle of balance. However, the opposite phenomenon, inferences of ethical behavior from information about a person's achievements, was not expected, contrary to the principle of balance, because (a) traits categorized as related to achievement are less important to a person's likeability (Anderson, 1968a) and (b) such traits appear not to function as central traits within a given set of traits (Asch, 1946). Therefore, it was theorized that evaluations on an ethical dimension do not necessarily conform to the valence of information presented about a person's achievements.

Results concerning the impact of ethical information on evaluations of a person on the achievement dimension were inconclusive. Although the results of the analysis were in the expected direction, judgments of Linda's capabilities did not differ significantly whether she was ascribed ethical or unethical behavior. Variations in behavior relevant to success or failure did not affect subjects' evaluations

of Linda on any dimension other than the achievement dimension.

Given the assumption of the central function of ethically related information in impression formation, it was also hypothesized that descriptions of another's behavior relevant to ethics would be a strong determinant of how much the person described was liked, whereas a person's achievements or lack thereof would not significantly affect the person's likeability. These hypotheses were substantiated by the results. Linda was most liked by subjects who were told she acted fairly toward her competitor and least liked when she behaved in an underhanded manner; there was no significant difference in her likeability whether she failed or succeeded in achieving her goal.

The relationship between the ethics of a person's behavior and that person's likeability is also supported by the relationship between inferences made about the ethical nature of a person's behavior in other circumstances and how much the person described is liked. As predicted, the evaluation of Linda on an ethical dimension was the strongest predictor of how much a subject liked her. To a lesser extent evaluations on the social dimension corresponded to judgments of her likeability. There was no correspondance between evaluations on the achievement dimension and how much subjects thought they would like Linda.

Whether people for whom ethical judgments are more central also tend to make more polarized judgments when forming impressions from ethically related material could not, unfortunately, be adequately assessed. There was some support for the hypothesis that people do vary considerably in how central ethical judgments are to the impressions they form of others. The number of traits considered relevant

to ethical judgments ranged from a low of three to a high of 98, and evaluations of Linda on both the social and ethical dimensions tended to be higher when the proportions of traits considered relevant to ethics was higher. Since the Ethical Perceptions Index had no significant effect on the Achievement Score, it cannot be assumed that the relationships found for the Ethical and Social Scores are a result of an extremeness effect causing those more willing to categorize a trait as ethical or unethical to also rate Linda higher on all the scales. Participants with high scores on the Ethical Perceptions Index apparently differentiated between the dimensions, rating Linda more positively on the social and ethical dimensions. However, because only one experimental session was feasible, the design of the study did not permit the distribution of subjects for the four types of stimulus information according to scores on the Ethical Perceptions Index. In fact, only three persons with scores from the Ethical Perceptions Index higher than the median read information containing the unethical anecdote. Had two experimental sessions been possible, a more equal distribution of subjects according to this score within the four groups would have been possible and a more accurate assessment of this variable could have been made.

The hypotheses concerning accurate recall of information, the impact of schemata on what facts and inferences are remembered as true, and the relationship between inferences drawn, information recalled, and the impression formed, were not substantiated. Assessment of these variables was hampered by the high rate of accurate recall and the low variability in errors made, an apparent result of the fact that subjects were asked to recall traits ascribed to Linda within minutes of

their having read the stimulus information.

It is possible that the hypotheses concerning memory recall could also have been more adequately tested if two experimental sessions separated in time had been feasible. In a study designed to assess the role of schemata on memory recall, Mark Snyder (1978) demonstrated systematic variations in the reconstruction of past events according to a schema invoked after a case history about the stimulus person had been presented. Whether participants were presented schematic material immediately after the case history or immediately preceding reconstructions of past events made one week later, overall reconstructions of past events, the type of accurate recollections and the type of errors made were substantially influenced by the schemata invoked. A second session in the present study might have permitted the memory task to be a more genuine test of the processes used to store and recall impressions of another person.

Dimensions of judgment do appear to be useful concepts for understanding how people deal with evaluating inconsistent information when forming impressions of others. The three dimensions identified by this study -- social, achievement and ethical -- were clearly demonstrated by the results. The governing role of ethical information and evaluations, however, was only partially substantiated. In concert with contradictory information along the social dimension, descriptions of behavior relevant to ethical considerations had only a small impact on inferences about social behavior. In the absence of direct information about a person's capabilities, subjects were somewhat willing to infer traits incompatible with achievement from unethical behavior, but evaluations derived from descriptions of ethical behavior did not differ

significantly from those stemming from descriptions of unethical behavior. Nevertheless, the central function of ethical considerations in how well a person is liked was substantiated. Both the information presented and the inferences made relevant to ethics had a sizeable impact on likeability ratings. In strong contrast to the lack of impact by information presented and evaluations made about a person's capabilities, the ethical dimension was the primary determinant of how much we like another person.

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APPENDIX

CLASSIFICATION FREQUENCIES OF TRAITS BY JUDGES

Social traits

Unanimous classification

Warm	Amiable	Unemotional	Gloomy
Friendly	Sociable	Angry	Complaining
Happy	Modest	Rude	Unappreciative
Humorous	Easygoing	Envious	Cold
Cheerful	Outgoing	Hot-tempered	Bossy
Pleasant	Sentimental	Uninteresting	Jealous
Polite	Quiet	Irritable	Unpleasant
Witty	Emotional	Unhappy	Unfriendly
Well-mannered	Bashful	Stubborn	Boring
Amusing	Lonesome	Moody	Obnoxious
Frank	Sarcastic	Tactless	Short-tempered

Classification by six judges

Plus one rating as an achievement related trait:

Patient	Excitable	Conformist	Domineering
Talkative	Shy	Argumentative	
Excited	Rebellious	Insecure	

Plus one rating as an ethically related trait:

Courteous	Helpful	Tolerant	Self-centered
Smug	Forgiving	Stingy	Hostile

Classification by five judges

Plus two ratings as an achievement-related trait:

Enthusiastic	Well-spoken	Restless
Timid	Calm	Superstitious

Plus two ratings as an ethically related trait:

Sympathetic	Thoughtful	Unselfish	Unsympathetic
Understanding	Considerate	Discourteous	Selfish
Spiteful	Phony	Unselfish	

Plus one rating as achievement-related trait, one as an ethically related trait:

Generous

Social traits (continued)

Classification by four judges

Plus three ratings as an achievement-related trait:

Cooperative	Proud	Fearful
Attentive	Gullible	Clumsy

Plus three ratings as an ethically related trait:

Greedy Insincere

Plus two ratings as an achievement-related trait, one as an ethically related trait:

Dependable

Achievement-related traits

Unanimous classification

Intelligent	Productive	Skillful	Self-sufficient
Educated	Logical	Enterprising	Unimaginative
Imaginative	Inaccurate	Systematic	Unindustrious
Ambitious	Creative	Disciplined	Unenterprising
Efficient	Self-reliant	Persistent	Inefficient
Talented	Energetic	Bold	Unintelligent
Wise	Inventive	Indecisive	Incompetent
Capable	Competent		

Classification by six judges

Plus one rating as an ethically related trait:

Diligent Decisive Self-disciplined

Plus one rating as a social trait:

Curious	Studious	Careful	Unintellectual
Practical	Persuasive	Daring	Irrational
Deliberate	Inconsistent	Illogical	Clear-headed
Perfectionistic			

Classification by five judges

Plus two ratings as an ethically related trait:

Opportunistic

Achievement-related traits (continued)

Classification by five judges (continued)

Plus two ratings as a social trait:

Observant	Inquisitive	Confident	Sloppy
Self-confident	Self-assured	Forgetful	Lazy

Plus one rating as an ethically related trait, one as a social trait:

Irresponsible

Classification by four judges

Plus three ratings as a social trait:

Punctual	Neat	Self-critical	Absent-minded
Overconfident	Tidy	Serious	Impractical
Clever	Orderly	Cautious	Listless
Alert			

Plus two ratings as a social trait, one as an ethically related trait:

Sensible	Objective	Responsible
Thrifty	Reliable	Level-headed

Ethically related traits

Unanimous classification

Honest	Moral	Liar	Good
Truthful	Deceptive	Honorable	Dishonest
Ethical	Deceitful	Unscrupulous	

Classification by six judges

Plus one rating as a social trait:

Trustworthy	Underhanded	Untruthful
Prejudiced	Untrustworthy	Cruel

Classification by five judges

Plus two ratings as a social trait:

Trustful	Malicious	Loyal to persons
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Ethically related traits (continued)

Classification by four judges

Plus three ratings as a social trait:

Sincere	Sly	Unkind	Mean
Kind			

Plus two ratings as a social trait, one as an achievement-related trait.

Manipulative

Unclassified trait

Three ratings as a social trait, two as an achievement-related trait, two as an ethically related trait:

Broadminded

Consent Statement

The Department of Speech Communications and Human Relations support the practice of protection for human subjects participating in research. The following information is provided so that you can decide whether you wish to participate in the present study. You should be aware that even if you agree to participate you are free to withdraw at any time.

The study is concerned with how people form first impressions of others. You will be given a story describing a person and will be asked to record your impressions in several ways.

Your participation is solicited, but is strictly voluntary. Do not hesitate to ask any questions about the study. Be assured that your name will not be associated in any way with the research findings. We appreciate your cooperation very much.

Sincerely,

Joyce J. Newman
Principal Investigator

Imagine that you are going on a weekend camping trip with several people you know fairly well. However, you are told that Linda, a woman whom you have never met, plans to go also. In an effort to get some idea of what she is like, you ask several of her friends how they would describe her. Five people relate a short anecdote typical of Linda's behavior. Another ten people identify a particular, single word trait that characterizes her. Below are the five anecdotes and ten traits. Take about five minutes to read them and try to form an impression of Linda.

Anecdote 1 (Positive social -- friendliness)

At the beginning of second semester, a new girl moved onto our dormitory floor. Since the girl was a new student at the college and apparently didn't know anyone in the dorm, Linda invited her to eat with us.

Anecdote 2 (Positive achievement)

Linda wanted to go to a particular college but could not afford the cost of tuition. She applied for a scholarship given to students on the basis of exceptional academic achievement and was awarded a scholarship which would pay for the entire cost of tuition.

Anecdote 3 (Negative social -- stubbornness)

Once Linda has taken a position on a particular issue, she continues to adhere to her opinion no matter how persuasively the other side is presented. The other day, we were discussing how far it is to a particular city. Linda insisted it was only 100 miles, even though everyone else thought it was 150, including one girl who lives there and makes the drive often. Linda seemed to stick to her position just because it was her original estimate until someone looked it up on a map.

Anecdote 4 (Positive social -- cheerfulness)

Although Linda's moods have their ups and downs like everyone else's, she generally has a smile and a pleasant word for people and puts others in good spirits. The other day, several of us were at lunch feeling grumpy because of the continued bad weather. Linda arrived and because of her good mood soon had everyone else feeling better.

Anecdote 5 (Negative social -- lack of tact)

Linda sometimes says things that offend people without realizing what she is doing. The other day at lunch, she started making fun of fraternity students, forgetting that Fran's boyfriend belongs to a fraternity.

Variations in stimulus information presented in Anecdote 2

Positive ethical

Linda wanted to go to a particular college but could not afford the cost of tuition. She was told of a scholarship fund awarded largely on the basis of need, and applied. Competition for the scholarship narrowed to Linda and another girl, Mary. Selection for the scholarship was to be made on the basis of a personal interview with the scholarship committee. A week before the scheduled interview, Linda received a letter from the committee asking her to be prepared to discuss her career goals for five to ten minutes. In talking to Mary that week, Linda realized that Mary hadn't received notification of this expectation. Linda knew she would have a better chance of winning the scholarship if Mary arrived unprepared, but she told Mary about the letter and what they would be expected to talk about.

Negative ethical

Linda wanted to go to a particular college but could not afford the cost of tuition. She was told of a scholarship fund awarded largely on the basis of need, and applied. Competition for the scholarship narrowed to Linda and another girl, Mary. Selection for the scholarship was to be made on the basis of a personal interview with the scholarship committee. A week before the scheduled interview, Linda received a letter from the committee asking her to be prepared to discuss her career goals for five to ten minutes. In talking to Mary that week, Linda realized that Mary hadn't received notification of this expectation. Linda knew she would have a better chance of winning the scholarship if Mary arrived unprepared, so she decided not to tell Mary about the letter or what they would be expected to talk about.

Negative achievement

Linda wanted to go to a particular college but could not afford the cost of tuition. She was told of a scholarship fund available to upperclassmen with a grade point average of at least a "B" (3.0) during their first two years of college. Even though she worked hard, Linda maintained only a 2.5 g.p.a. her first two years at state college, so her application for the scholarship was rejected.

The following ten traits were attributed to Linda by people who know her:

Warm
Outgoing
Moody
Witty

Unappreciative
Modest
Hot-tempered

Frank
Sarcastic
Envious

Take about 10 minutes to solve the following arithmetic problems.

Add:

54		475	81	897,423
29		203	17	321,118
70	10,279	1071	30	<u>9,895</u>
<u>12</u>	<u>543</u>	<u>88</u>	66	
		<u>117</u>	<u>97</u>	

Multiply:

1780	267	292	17	11,478
<u>x 43.7</u>	<u>x .0804</u>	<u>x 2.45</u>	<u>x 13</u>	<u>x 5.2</u>

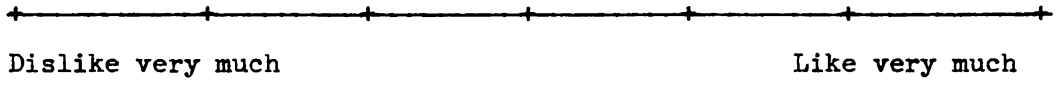
Divide:

42 $\overline{)2352}$	3.5 $\overline{)2.835}$.006 $\overline{)4.3434}$
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189 $\overline{)11927}$	6872 $\overline{)371,088}$
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Imagine you are describing Linda to someone who knows nothing about her. Try to tell that person everything you know, think and feel about Linda. In general write as elaborate an impression as possible. Take 5 to 10 minutes.

Please indicate below how much you think you would like or dislike Linda.



Experimenter's Instructions to Participants

On the following pages are 60 words commonly used to describe people. Please examine these words and circle the 10 traits used to describe Linda by her friends.

(Ten minutes were allowed for the memory recall task).

Now examine each of the 60 words and indicate how likely you think it is the word applies or doesn't apply to Linda. Place an X directly on one of the seven notches in the scale provided below each trait to indicate how likely you think it is the word describes Linda. You can place the X on any one of the seven notches of the scale for each trait provided to reflect how likely or unlikely it is the trait applies to Linda. Be sure to mark the X squarely over one of the seven notches provided.

Happy
+-----+-----+-----+-----+-----+
Very likely doesn't apply Very likely applies

Underhanded
+-----+-----+-----+-----+-----+
Very likely doesn't apply Very likely applies

Persistent
+-----+-----+-----+-----+-----+
Very likely doesn't apply Very likely applies

Disciplined
+-----+-----+-----+-----+-----+
Very likely doesn't apply Very likely applies

Warm
+-----+-----+-----+-----+-----+
Very likely doesn't apply Very likely applies

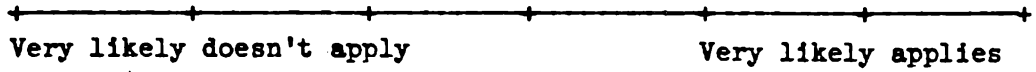
Irritable
+-----+-----+-----+-----+-----+
Very likely doesn't apply Very likely applies

Unenterprising
+-----+-----+-----+-----+-----+
Very likely doesn't apply Very likely applies

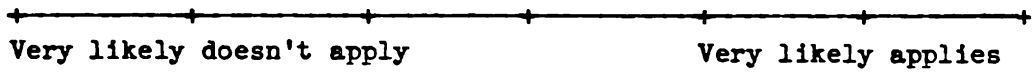
Irrational
+-----+-----+-----+-----+-----+
Very likely doesn't apply Very likely applies

Truthful
+-----+-----+-----+-----+-----+
Very likely doesn't apply Very likely applies

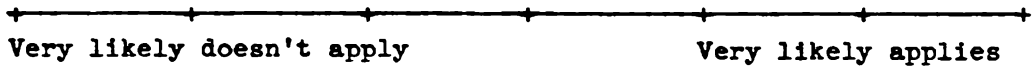
Pleasant



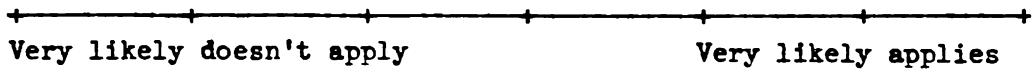
Honest



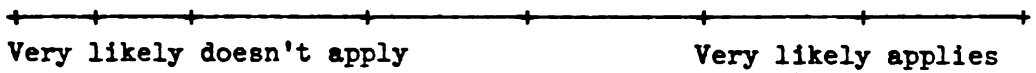
Moral



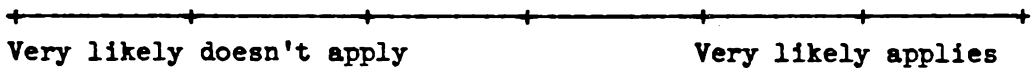
Self-sufficient



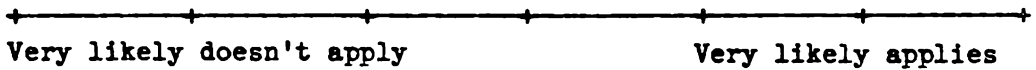
Sociable



Kind



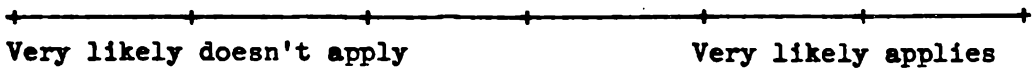
Inefficient



Untrustworthy



Creative



Trustful

Very likely doesn't apply Very likely applies

Modest

Very likely doesn't apply Very likely applies

Unappreciative

Very likely doesn't apply Very likely applies

Dishonest

Very likely doesn't apply Very likely applies

Friendly

Very likely doesn't apply Very likely applies

Illogical

Very likely doesn't apply Very likely applies

Unindustrious

Very likely doesn't apply Very likely applies

Energetic

Very likely doesn't apply Very likely applies

Argumentative

Very likely doesn't apply Very likely applies

Prejudiced

Very likely doesn't apply Very likely applies

Frank

Very likely doesn't apply Very likely applies

Easygoing

Very likely doesn't apply Very likely applies

Indecisive

Very likely doesn't apply Very likely applies

Unscrupulous

Very likely doesn't apply Very likely applies

Incompetent

Very likely doesn't apply Very likely applies

Untruthful

Very likely doesn't apply Very likely applies

Capable

Very likely doesn't apply Very likely applies

Efficient

Very likely doesn't apply Very likely applies

Cruel

Very likely doesn't apply | | | | | | | | | | Very likely applies

Moody

Very likely doesn't apply | | | | | | | | | | Very likely applies

Gloomy

Very likely doesn't apply | | | | | | | | | | Very likely applies

Educated

Very likely doesn't apply | | | | | | | | | | Very likely applies

Honorable

Very likely doesn't apply | | | | | | | | | | Very likely applies

Unintelligent

Very likely doesn't apply | | | | | | | | | | Very likely applies

Experimenter's instructions to participants

On the following pages are 100 words commonly used to describe people. You are to judge each trait as either ethical, unethical or neither. Ethical and unethical traits give information about a person's attitude or behavior relative to principles of right and wrong. A trait which is neither gives you no information about whether a person's behavior or attitude is ethical or unethical, right or wrong.

Please examine each word and place an X in the parentheses to the right of the category you select. If you believe the word describes a behavior or attitude which is ethically right, place an X next to Ethical. If the behavior is wrong or ethically unacceptable, select the category Unethical. If the word describes a behavior or attitude which is not relevant to ethical judgments, select the Neither category.

Each trait should be categorized separately and independently of the others. Do not infer a behavior or attitude which is not described by the word itself. For example, if a trait gives you information about a person's capabilities, mark the trait as ethical or unethical only if you believe the behavior or attitude described to be right or wrong ethically. Do not categorize the trait as ethical or unethical only because you assume that a person with that characteristic would also possess a particular trait related to ethical judgments.