

Ethical Ideology and Judgments of Social Psychological Research: Multidimensional Analysis

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Through multidimensional scaling three factors—potential subject harm, use of manipulative illegitimate procedures, and the ratio between benefits and risks—were identified as the key characteristics associated with moral judgments of social psychological studies. Individuals who endorsed different ethical ideologies, however, differed in their emphasis of these factors. *Situationists* emphasized risks relative to benefits and the potential for subject harm. *Absolutists* based their judgments on costs created for participating subjects and the riskiness of the procedures. *Subjectivists'* judgments were associated with the harmfulness, legitimacy, and invasiveness of the procedures. *Exceptionists* emphasized the consequentiality of the research, as well as scientific legitimacy, magnitude of costs, and deception. These findings are in general consistent with a taxonomy of ethical ideologies based on individual differences in relativism and idealism and have implications for current debates concerning the ethics of social psychological research.

In recent years researchers have succeeded in identifying several factors that influence ethical reactions to research: the use of randomization (Hillis & Wortman, 1976), the nature of the results (Schlenker & Forsyth, 1977), the experimenter's prestige (Tanke, 1979), and the estimated scientific worth of the project (Wilson & Donnerstein, 1976). However, less attention has been paid to the possibility that individuals who differ in their moral outlook react very differently when appraising research. Extending previous work (Forsyth, 1980; Schlenker & Forsyth, 1977), this article examines reactions to social psychological research in the context of individual differences in ethical ideology.

Four Perspectives on the Ethics of Research

Unlike Hogan's (1973) and Kohlberg's (1976) alternative approaches to moral thought, Forsyth (1980) suggests that individual differences in idealism and relativism influence moral judgments. First, idealistic individuals assume that good consequences can always be obtained, but people who are less idealistic admit that bad consequences are of-

ten mixed with good ones. Second, people who are highly relativistic in their moral outlook believe that universal moral principles are of little value when making moral judgments, whereas less relativistic individuals underscore the use and importance of fundamental principles.

Forsyth (1980) developed the Ethics Position Questionnaire (EPQ) to measure individual differences in idealism and relativism. The Idealism subscale of the questionnaire asks individuals to indicate degree of agreement with items like "If an action could harm an innocent other, then it should not be done" and "It is never necessary to sacrifice the welfare of others." The Relativism subscale, in contrast, contains such items as "There are no ethical principles that are so important that they should be part of any code of ethics" and "Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action." Forsyth (1980) also suggests that individuals can be classified as to ethical ideology on the basis of their scores on the Idealism and Relativism subscales. As shown in Table 1, individuals who are identified as either high or low in idealism and high or low in relativism fall into one of four ethical ideologies: situationism, absolutism, subjectivism, or exceptionism.

Situationists are idealistic for they feel that people should strive to produce the best consequences possible, but they are also relativistic

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Table 1
Taxonomy of Ethical Ideologies Based on Idealism and Relativism

Characteristic	Ethical ideologies			
	Situationism	Absolutism	Subjectivism	Exceptionism
Idealism	High	High	Low	Low
Relativism	High	Low	High	Low
Approach to moral judgments	Rejects moral rules; asks if the action yielded the best possible outcome given the situation.	Feels actions are moral provided they yield positive consequences through conformity to moral absolutes.	Rejects moral rules; bases judgments on personal feelings about the action and setting.	Feels conformity to moral rules is desirable, but exceptions to these principles is often permissible.
Application to deception	Deception can be used provided it yields the best possible outcome in the given situation.	Deception should be avoided since it violates fundamental moral principles.	Judgments about deception are a personal matter to be decided by those involved.	If the deception cannot be avoided, then the deception is allowable if safeguards used.

for they believe moral rules cannot be applied across situations. This ethical ideology is labeled situationism because its adherents prescribe close inspection of the situation (e.g., the desirability of the consequences, possible alternative courses of action, and constraints acting on the individual), in reaching a contextually appropriate moral evaluation. Applied to the example in Table 1—evaluating the use of deception in psychological research—situationists would condone deception only if it is necessary to maximize positive outcomes while minimizing the potential for harm.

Absolutists are also idealistic; they approve of actions that yield many positive consequences and minimal negative consequences (see Table 1). However, in their approach to moral judgments, unlike situationists, absolutists feel that actions should also be consistent with absolute moral principles. Whereas the situationist believes moral rules are individualistic and nonuniversal, the absolutist feels that some ethical principles are so important that they must be included in any code of ethics. As applied to deception, situationists would argue that the morality of subterfuge depends on the circumstances surrounding the action, whereas absolutists would condemn the deception because it violates principles of honesty and fairness.

Subjectivists, like situationists, are skeptical of moral principles. However, they are much less idealistic than situationists, for they feel that in many cases it is impossible to avoid negative behaviors. This ideology is labeled subjectivism because its adherents describe their moral decisions as subjective, individualistic judgments that cannot be made on the basis of more "objective" information, such as universal moral absolutes or the extent to which the action harms innocent others. With regard to deception, a subjectivist would argue that general conclusions cannot be reached because morality is an individualistic matter.

Exceptionists, as their name implies, permit exceptions to moral principles. Both nonrelativistic and pragmatic, these individuals admit that in some instances one must break moral norms to avoid producing negative consequences. Applied to deception, exceptionists feel that deceiving others is generally wrong, but that this moral norm may be broken if the deception is deemed unavoidable.

Research on Ethics

The relation between ethical ideology and judgments of research was previously investigated (Schlenker & Forsyth, 1977) by assessing subjects' perceptions of the risks and benefits created by an obedience experiment. After correlating moral judgments and these perceptions, the researchers were able to show that (a) situationists' moral judgments were correlated with both risks and benefits, (b) absolutists' moral judgments of the study covaried most closely with the perceived amount of risks, (c) subjectivists' moral judgments were more closely related to risks rather than benefits, and (d) exceptionists' moral judgments were most closely associated with the benefits of the research.

This research follows the method used in an earlier study in three ways: First, subjects judged the morality of 15 different research projects, including field, laboratory, deception, unobtrusive, and scenario research. Second, subjects rated the "ethical similarity" of the 15 stimulus studies via a series of paired-comparison judgments, and these ratings were examined with multidimensional scaling (MDS). Through this scaling process, the dimensions that best accounted for subjects' perceptions of the 15 studies were identified and labeled by examining (a) the location of the experiments in the spatial configuration and (b) the relation between the obtained dimensions and a series of subject-supplied ratings of the experiments. And third, individuals were classified according to ethical ideology—situationism, absolutism, subjectivism, or exceptionism—to determine (a) if different dimensions underlie the moral appraisals of individuals in the four ethical ideologies and (b) if these dimensional differences lead to divergencies in moral judgments.

Predictions concerning these ideology-linked differences were derived from the individual differences in idealism and relativism that underlie the four ideologies as well as previous research (Forsyth, 1980, 1981; Schlenker & Forsyth, 1977). To be specific, we predicted the following:

1. The high idealism and relativism of situationists would lead to an emphasis on obtaining positive outcomes while incurring very little harm to subjects.

2. Analysis of absolutists' judgments would reveal a strong focus on the costs of research, including harm done to subjects (high idealism) as well as the violation of moral standards (low relativism).

3. The high relativism of the subjectivists would lead to an emphasis on the consequences of the research for the participants in the given situation rather than strict conformity to moral principles, whereas their low idealism would lead to an increased tolerance for negative consequences.

4. The low idealism and relativism of exceptionists suggested that their judgments would be largely determined by the perceived justification for research; violations of moral standards will be permitted provided proper scientific safeguards are used.

5. We also predicted that absolutists, because of their greater focus on negative aspects of research, would judge the studies more harshly than the other three ethical ideologies.

Method

Subjects

The 8 males and 16 females who participated were drawn from a larger pool of 157 individuals who had completed the EPQ in their introductory psychology classes at Virginia Commonwealth University. The EPQ includes two 10-item scales that measure idealism and relativism. Respondents indicate degree of agreement with each item using a 9-point scale that ranges from *completely disagree* (1) to *completely agree* (9). Situationists' scores were 1 *SD* above the sample mean on each subscale, whereas exceptionists scored 1 *SD* below the mean on each subscale. Absolutists scored low on the Relativism subscale and high on the Idealism subscale, whereas subjectivists were high on the Relativism subscale and low on the Idealism subscale. Although every attempt was made to locate at least 6 subjects for each of the four ideologies described by the EPQ, because of the number of subjects available and the time investment required, the final subjects included 6 situationists, 5 absolutists, 6 subjectivists, and 7 exceptionists. Subjects completed all materials in a single laboratory session, which lasted about 4 hours.

Procedure

Paired comparisons. First the subjects studied the list of 15 experiments summarized in Table 2. Thirteen were selected mainly for their ethically controversial procedures, and two "mild" studies were included to serve as controls. In all cases, the descriptions (written in nontechnical language) focused on the procedures used, rather than on the results. The subjects could refer to the experiment descriptions during all phases of the testing.

After familiarizing themselves with the 15 studies, the subjects compared the experiments through a series of

105 paired comparisons. Each pair of studies was presented on a separate page of a questionnaire booklet, in the following format:

The Salesperson _____ Foot-in-the-Door
 very 9 8 7 6 5 4 3 2 1 very
 dissimilar similar

Subjects were instructed to circle the number that indicated the ethical similarity or dissimilarity of the two stimulus studies. The order of the comparisons was randomly varied across all the subjects.

Labeling items. After completing the paired-comparison tasks, the subjects rated each study on nine items by

using the nine-interval response format of the EPQ. These items, which would be used to label the dimensions extracted via MDS, included measures of the invasiveness of the procedures, the possible harm to subjects, and the scientific value of the study.

Moral judgments. Subjects were also asked to rate each study, from *strongly agree* (9) to *strongly disagree* (1), on the item "The study was unethical," using the response format of the EPQ.

Results

We conducted four separate MDS analyses for the four ethical ideologies, by using an al-

Table 2
Stimulus Experiments

Study	Citation	Summary of description ^a
The Salesperson	Schaps (1972)	During busy periods a confederate rejects whatever shoes shown to her while salesperson's reaction is noted.
Foot-in-the-Door	Freedman & Fraser (1966)	After telephone interview experimenter recontacts homemakers to determine if they would allow all their household products to be enumerated and classified.
Subway	Piliavin & Piliavin (1972)	Subway riders witness man walking with a cane collapse and bleed from the mouth.
Initiation	Gerard & Mathewson (1966)	One group of subjects is given moderately painful shocks as an initiation to join a boring group.
Bathroom	Middlemist, Knowles, & Matter (1976)	Males urinating in a public restroom are joined by confederate who uses next urinal or one further away. Micturation is measured by an unobtrusive observer.
Obedience	Milgram (1963)	In supposed learning experiment subjects are led to believe they are delivering painful, dangerous shocks to a confederate.
The Electrician	Clark & Word (1974)	Subjects, while in groups or while alone, witness a confederate appear to receive a severe electric shock.
Boring Task	Festinger & Carlsmith (1959)	After working on a boring task, subjects are paid \$1 or \$20 to tell a waiting confederate the task is interesting.
Memory	Ebbinghaus (1913)	Subject memorizes nonsense syllables, works other problems, then memory of syllables is tested.
Religious Beliefs	Batson (1975)	Youth group members' religious beliefs are measured after they receive information suggesting New Testament is fraudulent.
Emotions	Schachter & Singer (1962)	The emotional reactions of subjects who have been given an injection of either saline or epinephrine are observed after they are exposed to either a happy or angry confederate.
Conformity	Asch (1955)	Subjects make judgments about the length of stimulus lines in the presence of confederates who make deliberate errors.
Person Perception	Asch (1946)	Subjects give their perceptions of persons who are described in a short statement that includes either the word "warm" or "cold."
The Prison Simulation	Haney, Banks, & Zimbardo (1973)	Subjects are randomly assigned to the role of either prisoner or guard in a simulated prison setting.
Bogus Feedback	Feather (1969)	The reactions of subjects given false feedback about their performance on a laboratory test are recorded.

^a The actual descriptions were more detailed than the summaries presented here.

ternating least squares approach (ALSCAL) described by Takane, Young, and deLeeuw (1977) and Young, deLeeuw, and Lewycky (1978). This nonmetric analysis treated the data as ordinal through a least squares monotonic transformation (Kruskal & Wish, 1978), and any ties in the similarity ratings were "untied" by treating the data as continuous rather than discrete.¹

Dimensional Analyses

The matrices representing subjects' paired comparisons were submitted to MDS, which generated spatial representations of the 15 stimulus experiments on the basis of two, three, four, and five dimensions. A decision was then made regarding the number of dimensions needed to adequately describe the similarity judgments by taking into account (a) the conceptual interpretability of the various spatial representations (e.g., two-dimensional map, three-dimensional map, etc.), (b) the improvement in fit from one solution to the next as indicated by the proportion of variance in the similarities data accounted for by the spatial configuration (R^2), and (c) decreases in stress achieved by each solution. According to Kruskal and Wish (1978), stress is a goodness-of-fit test based on the square root of the normalized sum of squares.

As expected, R^2 increased and stress levels decreased as more and more dimensions were added to the solution. However, for two of the four ideologies—absolutists and subjectivists—a three-dimensional solution was most appropriate; four- and five-dimensional solutions added little in terms of stress reduction or increase in R^2 . Stress values were 0.17 and 0.21 for the two respective ideologies; R^2 values were .76 and .60, respectively. For exceptionists and situationists the "elbow" of stress and R^2 values (the turning point in decreasing stress and increasing R^2) occurred when we calculated the four-dimensional solution. Stress values were 0.17 and 0.16 for these ideologies, and R^2 values were .56 and .70, respectively.

The dimensions obtained through MDS were labeled by examining the correlations between the dimensional coordinates of the 15 experiments and the average ratings of the experiments on the various labeling items. Briefly, if a simple one-dimensional solution

was obtained through MDS, each of the 15 experiments was assigned a single spatial coordinate. Experiments with extremely positive coordinates were located at one end of the dimension, experiments with extremely negative coordinates fell at the other end of the dimension, and studies with coordinates close to zero were located near the midpoint. Although in some cases the meaning of the dimension could be interpreted by studying the dispersion of the experiments along the dimension, the conceptual meaning could also be inferred from the relation between the spatial coordinates and any supplemental ratings of the studies available. In these analyses the studies are treated as cases ($n = 15$), and the correlations between the studies' coordinates and ratings on the labeling items (averaged across individuals in the same ethical ideology) are calculated. If the coordinates for the dimension are highly correlated with ratings on any particular item, then the dimension probably reflects the content of the item.² When more than one dimension is obtained, this correlational analysis is repeated using the coordinates from each dimension.

¹ A preliminary analysis was also conducted to test the assumption that subjects' similarity judgments could be accounted for in terms of the same basic dimensions; that is, although judges with different ethical ideologies may stress one dimension more than another in formulating their judgments, the dimensions themselves would be the same across ideological types. Therefore, an individual differences model of MDS was used to both (a) extract these underlying dimensions and (b) test for differential emphasis of these dimensions by the four ethical types. However, as anticipated subjects' judgments could not be accounted for with a single solution. Regardless of the number of dimensions extracted by MDS, stress values remained high, correlations between the stimulus weights and the labeling items were low, and the stimulus weights themselves fluctuated with each iteration. These factors indicate that a single solution for all ethical types is inappropriate (Kruskal & Wish, 1978). The four ethical ideologies do not simply weight various factors different; rather, different dimensions underlie their similarity judgments.

² The labeling of dimensions was also facilitated by examining correlations between the dimensional coordinates and ratings of the experiments provided by a second set of subjects ($n = 18$) who served as a validation sample. This second group of subjects using 15 items developed after the initial MDS analyses, rated the experiments and in general these ratings confirm the appropriateness of the initial dimensional labels. In the interest of brevity these correlations are not presented here, but they are available—along with the spatial coordinates of the 15 experiments—on request from the first author.

By examining the correlations between the coordinates of the studies generated by MDS and the ratings of the stimulus on the nine ancillary items shown in Table 3, the dimensions underlying subjects' judgments were conceptually labeled. These findings are summarized in Table 3.

Situationists. As anticipated, situationists' first dimension was related to both *costs and benefits* of the studies. As Table 3 shows, negative factors—such as deception, invasion of privacy, and harm—were negatively correlated with Dimension 1, whereas positive features of research—potential for self-knowledge, use of informed consent—were positively correlated with this dimension. The other three dimensions were more specific in meaning, for their correlates were far fewer in number. Dimension 2 was significantly related to only one item—"The study could have upset the people who participated"—suggesting this dimension would be most appropriately labeled *subject upset*. Dimension 3, in contrast, referred primarily to *subject harm*, whereas Dimension 4 corresponded to the use of *informed consent* procedures.

Although four dimensions were needed to account for situationists' comparisons of the studies, only Dimensions 1 and 2 were significantly correlated with moral evaluations (see Table 3). Situationists generally reacted most favorably to studies that offered few risks relative to many benefits, although the likelihood of upsetting the subjects was also a consideration. Dimensions 1 and 2 account for 83.1% of the variance in ethics ratings.

Absolutists. Also as predicted, the correlations shown in Table 3 indicate that absolutists' perceptions were more closely related to costs. Only negative aspects of the projects (potential for physical harm, psychological harm, and upset) are correlates of Dimension 1, which can be appropriately labeled *potential costs*. Dimension 2 is also closely related to negative aspects of the studies, but is focused more on potential for *psychological harm*. Dimension 3, however, is associated with both the negative and positive aspects of the studies, suggestive of a *risky/safe procedures* dimension.

Dimensions 2 and 3 are more strongly correlated with moral judgments than Dimension 1, but together these three factors account for

78.5% of the variance in ratings of ethics. In general, studies were most strongly condemned if they (a) created high costs for participants, (b) produced psychological harm, or (c) involved risky rather than safe procedures.

Subjectivists. Returning once more to Table 3, the patterns of correlations suggest that the three dimensions underlying subjectivists' judgments concern *potential harm for subjects*, the *scientific legitimacy* of the procedures, and the *invasiveness of the methods* employed by the researchers. In general, Dimensions 1 and 3 had a greater impact on judgments than Dimension 2, but together they accounted for 67.9% of the variance in subjectivists' judgments of ethicality.

Exceptionists. As Table 3 indicates, both positive and negative features of the experiments are related to Dimension 1 in the exceptionists' configuration, but in most cases the direction of the relation is the same for both costs and benefits. Thus unlike the cost/benefit dimension found for both situationists and absolutists, this dimension seems to refer to the *consequences* of the research, including both good and bad effects. The remaining dimensions found in correlations for the exceptionists include *scientific legitimacy*, *magnitude of costs*, and use of *deceptive methods* that preclude fully informed consent. These four dimensions account for 81.8% of the variance in judgments of ethicality, with Dimension 3 being more closely associated with these judgments than the other three.

Comparisons Across Ideologies

Because the stimuli for most analyses are treated as the unit of analysis ($n = 15$), the dimensions obtained for the four ethical ideologies can be easily compared by correlating the configuration weights for any one dimension with the configuration weights for another dimension. These correlations are of interest because they permit us to directly assess the degree of relation between similar-sounding dimensions obtained for different ethical ideologies.

Cost/benefit. As predicted, the cost/benefit dimension dominated situationists' perceptions of research, but a "cost/benefit" dimension that focused on procedures was also found for absolutists. The correlation between these

Table 3
Correlations Between Dimension Weights and Ancillary Items

Item	Situationists				Absolutists			Subjectivists			Exceptionists			
	Dim 1	Dim 2	Dim 3	Dim 4	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3	Dim 4
Subjects were deceived	-.93	.22	.09	.09	.26	-.35	.43	.40	-.42	-.10	.19	.36	.14	.47
Invaded Subjects privacy	-.50	.37	-.40	.17	.35	-.60	.63	.19	-.34	.61	-.30	.43	.47	.22
Potential for Subjects to gain self-insight	.50	-.22	.41	-.03	-.09	.24	-.51	.04	.04	-.24	.36	.01	-.13	-.31
Subjects could have been physically harmed	-.15	.07	.51	.20	.77	-.10	.21	.51	-.14	.44	.41	.15	.41	-.03
Subjects were "manipulated"	-.63	.09	.49	-.08	.39	-.37	.24	.29	-.19	.17	.39	.81	-.02	.08
Subjects could have been psychologically harmed	-.62	.24	.61	.33	.46	-.87	.32	.80	-.25	.04	.40	.20	.50	.05
Subjects could have been upset	-.75	.55	.32	.22	.59	-.82	.43	.82	-.35	.25	.07	.36	.55	.01
Contribution to psychological knowledge	.30	-.34	.30	.11	.28	-.17	-.39	-.16	.68	-.34	.28	-.39	-.13	-.30
Subjects gave consent	.58	-.26	.34	-.60	-.19	.33	-.45	-.13	.67	-.10	.45	-.03	-.55	-.48
Study was unethical	-.84	.49	-.03	-.07	.55	-.73	-.73	.56	-.32	.60	.30	.43	.70	.38

Note. Dim = dimension. Because the number of stimuli determines the number of cases, $n = 15$. Correlations of .51 are significant at the $p = .05$ level. Subjects in this table refer to those described in the stimulus experiments.

two dimensions was a modest $-.43$, suggestive of some overlapping, but as noted earlier, this dimension played a much more central role for situationists than for absolutists. In fact, examination of Table 3 reveals that this cost/benefit ratio was computed differently by the two ideologies; for situationists, this dimension was highly correlated with a wide range of factors, whereas for absolutists mostly procedural factors—and not potential for harm—were interrelated. The consequence dimension found for exceptionists, although definitely related to both the costs and benefits of the projects, was not a cost/benefit ratio. The correlations between this dimension and the absolutists' and situationists' cost/benefit dimensions were negligible ($r = .15$ and $-.24$, respectively). This consequence dimension, however, is completely consistent with exceptionists' pragmatic belief that positive consequences are generally mixed with some negative consequences. To the exceptionist, studies that yield advances in psychological understanding or personal insight necessarily involve some amount of subject upset, potential harm, and deception.

Costs. Various cost and harm dimensions were obtained for all four of the ideologies, but they differed from one another in subtle ways. On the one hand, the judgments of each one of the ethical ideologies revealed at least one cost or harm dimension that was so specific in meaning that it was almost unique to that particular ideology: For situationists, this dimension concerned potential for subject upset; for absolutists, the potential for psychological harm; for subjectivists, invasiveness; and for exceptionists, potential for generally harmful consequences. However, analysis of the judgments of each ideology also produced harm dimensions that were systematically interrelated. For example, the subject harm dimension found for situationists (Dimension 3) was significantly correlated with the subject harm dimension found for subjectivists (Dimension 1; $r = -.73$). Furthermore, this same subjectivists' dimension was also significantly related to the potential costs dimension found for absolutists (Dimension 1; $r = -.70$) and the scientific legitimacy dimension found for exceptionists ($r = .76$). These interrelations suggest that individuals are sensitive to costs that studies may create, particularly in terms of harm for subjects.

Methods. The spatial configurations derived from the judgments of the four ideologies seem to be partly based on a reaction to the methods used in the research projects. For example, the configurations for both subjectivists and exceptionists reveal a scientific legitimacy dimension based on the use of appropriate scientific safeguards (i.e., informed consent) in studies that involved deception, invasion of privacy, or potential subject upset. Despite some differences in emphasis between these two dimensions found for subjectivists and exceptionists, the two are highly correlated ($r = .80$). Furthermore, the methods dimensions for subjectivists and exceptionists were both moderately correlated with the use of the informed consent dimension (Dimension 4) found for situationists ($r_s = .57$ and $.55$, respectively) and the risky/safe procedures dimension (Dimension 3) found for absolutists ($r_s = .56$ and $.67$, respectively).

Moral Judgments

As predicted, the four ethical ideologies differed in the severity of their appraisals of the ethics of the research. As is consistent with previous research (Forsyth, 1980, 1981) and the costs dimension predominating absolutists' perceptions, far more of the 15 experiments clustered at the unethical end of the absolutists' moral judgment continuum. The significant interaction of ideology and experiment obtained when judgments of ethicality were submitted to a $2 \times 2 \times 15$ (Relativism \times Idealism \times Stimulus Experiment) repeated measures analysis of variance (ANOVA), $F(14, 226) = 1.95$, $p < .05$, was primarily due to the negativity of the absolutists. As Figure 1 shows, on 5 of the 15 experiments, absolutists were more condemning than members of the other groups.

Discussion

Extending previous attempts to better understand the link between moral evaluations and certain features of social psychological experiments (Hillis & Wortman, 1976; Schlenker & Forsyth, 1977), the current study succeeds in more comprehensively enumerating the key factors that influence ethical reactions to research. These findings, which are summarized in Table 4, indicate that moral judgments are

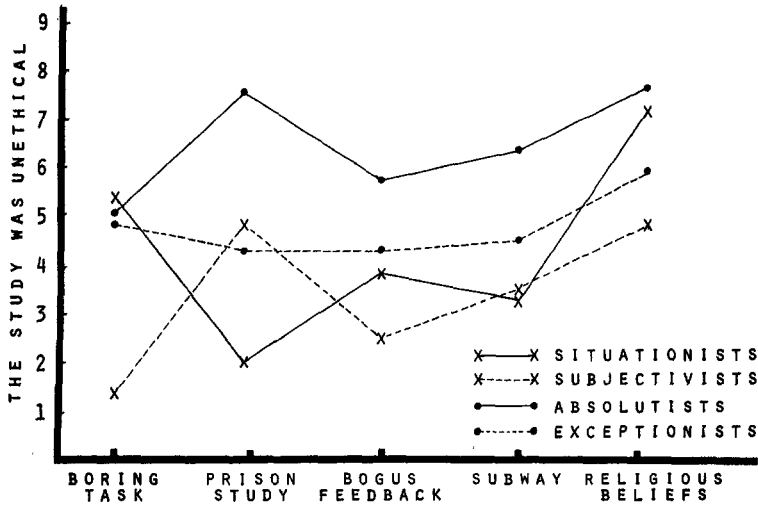


Figure 1. Differences across ideologies in judgments of five stimulus studies.

influenced by at least three general factors. First, virtually all subjects were sensitive to the possibility that harm might befall participants in experiments; most were likely to condemn projects that exposed subjects to unwarranted physical or psychological harm. Second, perceptions of the research techniques used influenced judgments for some methods. Deception or field research without informed consent, for example, was rejected as illegitimate. Third, positive aspects of research—such as the use of appropriate procedural safeguards and potential benefits for subjects—also influenced judgments, although these benefits were often balanced against potential risks. In consequence, certain studies, such as Freedman and Fraser's (1966) foot-in-the-door field study, Mittleman, Knowles, and Matter's (1976) micturition study, and Batson's (1975) study of religious beliefs, were evaluated in fairly negative terms, apparently because subjects felt they were potentially harmful to participants, illegitimate in method, or less beneficial. Other studies, such as an Asch-like person perception study (Asch, 1946), an Asch conformity study (1955), and a study of memory (Ebbinghaus, 1913), were viewed as non-harmful, legitimate, and beneficial. (These judgments of acceptance and rejection are, of course, based only on the descriptions subjects were given to read; after more detailed study of these experiments, the same individuals may have reached different conclusions about the

harmfulness, legitimacy, benefits, and ethicality of the study.

The extent to which the previously mentioned ethical factors influenced judgments depended, however, on the perceiver's ethical ideology. Supporting the general notion that moral evaluations are related to the evaluator's prescriptive beliefs about how moral judgments should be formulated, individuals who endorsed different ideologies seemed to base their appraisals of the 15 experiments on different judgmental dimensions. Situationists, who espouse the careful contextual analysis of all relevant factors in the situation, took into consideration both positive and negative aspects of the studies when formulating their judgments. Provided potential for benefits was high and the risks for subjects were low (or at least minimized through the use of appropriate procedural safeguards), situationists found the study to be acceptable. Hence, Zimbardo's prison simulation (Haney, Banks, & Zimbardo, 1973), although obviously upsetting for participants, was deemed ethical because subjects felt its many benefits offset its potential costs. In contrast, Batson's (1975) study of religious beliefs was condemned because the situationists felt its benefits did not compensate for its costs.

Absolutists' judgments were more heavily influenced by the perceived costs of research, and this emphasis led to consistently more negative evaluations of the stimulus studies.

Table 4
Summary of the Dimensions Obtained Through Multidimensional Scaling

Ethical ideologies			
Situationism ($R^2 = 83.1$)	Absolutism ($R^2 = 78.5$)	Subjectivism ($R^2 = 67.9$)	Exceptionism ($R^2 = 81.8$)
<ol style="list-style-type: none"> 1. Costs/benefits 2. Subject upset 3. Subject harm 4. Informed consent 	<ol style="list-style-type: none"> 1. Potential costs 2. Psychological harm 3. Risky/safe procedures 	<ol style="list-style-type: none"> 1. Subject harm 2. Scientific legitimacy 3. Invasiveness 	<ol style="list-style-type: none"> 1. Consequence 2. Scientific legitimacy 3. Magnitude of costs 4. Deception

Note. R^2 is the percentage of variance in ethics ratings accounted for by the dimensions obtained through multidimensional scaling.

Surprisingly, a risk/safe dimension was also found for absolutists, but it focused more on procedures rather than on overall positive and negative factors.

Turning to subjectivists, we find these pragmatic but relativistic individuals considering potential harm to research subjects and the invasiveness of the methods employed by the experimenter when making their ethical assessments of a study. High scientific legitimacy was also a positive factor that partially mitigated the negative aspects of privacy invasion and potential subject harm, but a risk/safe dimension per se was not obtained. As predicted, subjectivists were cost oriented, but they did not seem to balance these costs against potential benefits. Instead, dimensions corresponding to the negative and positive aspects of the research were weighed independently.

Although the dimensions obtained for situationists, absolutists, and subjectivists were fairly consistent with initial predictions, the findings for exceptionists were more unexpected. And although exceptionists adopt a nonrelativistic position that emphasizes universal moral principles, their pragmatic orientation and past research (Forsyth, 1980, 1981; Schlenker & Forsyth, 1977) suggested that these judges would be quite willing to make exceptions to these general moral rules provided positive consequences could be obtained. In the current study, however, exceptionists proved to be surprisingly "principled" in their judgments. They were moderately concerned over the use of manipulative procedures (Dimension 2) and lying to subjects (Dimension 4). Their moral judgments were most closely associated with perceived harm to subjects ($r = .70$). A consequences dimension was, in fact, obtained (Dimension 1), but this factor was a relatively unimportant correlate of judgments. Clearly, additional research is needed to more fully understand the judgmental processes underlying exceptionistic moral thought. Furthermore, at a more general level, future efforts should be directed toward the study of the causal link between the dimensions found through MDS and subjects' judgments. Although here we have assumed that the dimensions are causally related to judgments, MDS is primarily an inductive, correlational procedure; experimental evidence involving the systematic manipulation

of each dimension is required before any firm cause-effect conclusions can be drawn.

Ending on a more philosophical note, these findings have certain implications for the current debate over the ethics of social psychological research. Given that individuals appear to differ systematically in the way that they formulate moral appraisals of research, perfect consensus among researchers, members of institutional review boards, and the public regarding the ethics of a particular experiment can never be expected. However, if the relative importance of the many factors that influence moral judgments of research can be enumerated, clarified, and weighed through research and informed discussion, psychologists will be able to deal effectively with the ethical problems that confront their research endeavors. Although the concept of individual differences in ethical ideology suggests that we probably will never reach the ideal of complete agreement, at least we can aim for a fuller understanding of our own and others' reactions to research involving human participants.

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