

A. "FROM JERUSALEM TO JERICHO": A STUDY OF SITUATIONAL AND DISPOSITIONAL VARIABLES IN HELPING BEHAVIOR

Helping other people in distress is, among other things, an ethical act. That is, it is an act governed by ethical norms and precepts taught to children at home, in school, and in church. From Freudian and other personality theories, one would expect individual differences in internalization of these standards that would lead to differences between individuals in the likelihood with which they would help others. But recent research on bystander intervention in emergency situations (Bickman, 1969; Darley & Latané, 1968; Korte, 1969; but see also Schwartz & Clausen, 1970) has had bad luck in finding personality determinants of helping behavior. Although personality variables that one might expect to correlate with helping behavior have been measured (Machiavellianism, authoritarianism, social desirability, alienation, and social responsibility), these were not predictive of helping. Nor was this due to a generalized lack of predictability in the helping situation examined, since variations in the experimental situation, such as the availability of other people who might also help, produced marked changes in rates of helping behavior. These findings are reminiscent of Hartshorne and May's (1928) discovery that resistance to temptation, another ethically relevant act, did not seem to be a fixed characteristic of an individual. That is, a person who was likely to be honest in one situation was not particularly likely to be honest in the next (but see also Burton, 1963).

The rather disappointing correlation between the social psychologist's traditional set of personality variables and helping behavior in emergency

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situations suggests the need for a fresh perspective on possible predictors of helping and possible situations in which to test them. Therefore, for inspiration we turned to the Bible, to what is perhaps the classical helping story in the Judeo-Christian tradition, the parable of the Good Samaritan. The parable proved of value in suggesting both personality and situational variables relevant to helping.

“And who is my neighbor?” Jesus replied, “A man was going down from Jerusalem to Jericho, and he fell among robbers, who stripped him and beat him, and departed, leaving him half dead. Now by chance a priest was going down the road; and when he saw him he passed by on the other side. So likewise a Levite, when he came to the place and saw him, passed by on the other side. But a Samaritan, as he journeyed, came to where he was; and when he saw him, he had compassion, and went to him and bound his wounds, pouring on oil and wine; then he set him on his own beast and brought him to an inn, and took care of him. And the next day he took out two denarii and gave them to the innkeeper, saying, ‘Take care of him; and whatever more you spend, I will repay you when I come back.’ Which of these three, do you think, proved neighbor to him who fell among the robbers?” He said, “The one who showed mercy on him.” And Jesus said to him, “Go and do likewise.” (Luke 10: 29-37 RSV)

To psychologists who reflect on the parable, it seems to suggest situational and personality differences between the nonhelpful priest and Levite and the helpful Samaritan. What might each have been thinking and doing when he came upon the robbery victim on that desolate road? What sort of persons were they?

Once can speculate on differences in thought. Both the priest and the Levite were religious functionaries who could be expected to have their minds occupied with religious matters. The priest's role in religious activities is obvious. The Levite's role, although less obvious, is equally important: The Levites were necessary participants in temple ceremonies. Much less can be said with any confidence about what the Samaritan might have been thinking, but, in contrast to the others, it was most likely not of a religious nature, for Samaritans were religious outcasts.

Not only was the Samaritan most likely thinking about more mundane matters than the priest and Levite, but, because he was socially less important, it seems likely that he was operating on a quite different time schedule. One can imagine the priest and Levite, prominent public figures, hurrying along with little black books full of meetings and appointments, glancing furtively at their sundials. In contrast, the Samaritan would likely have far fewer and less important people counting on him to be at a particular place at a particular time, and therefore might be expected to be in less of a hurry than the prominent priest or Levite.

In addition to these situational variables, one finds personality factors suggested as well. Central among these, and apparently basic to the point that Jesus was trying to make, is a distinction between types of religiosity. Both the priest and Levite are extremely “religious.” But it seems to be

precisely their type of religiosity that the parable challenges. At issue is the motivation for one's religion and ethical behavior. Jesus seems to feel that the religious leaders of his time, though certainly respected and upstanding citizens, may be “virtuous” for what it will get them, both in terms of the admiration of their fellowmen and in the eyes of God. New Testament scholar R. W. Funk (1966) noted that the Samaritan is at the other end of the spectrum:

The Samaritan does not love with side glances at God. The need of neighbor alone is made self-evident, and the Samaritan responds without other motivation (pp. 218-219).

That is, the Samaritan is interpreted as responding spontaneously to the situation, not as being preoccupied with the abstract ethical or organizational do's and don'ts of religion as the priest and Levite would seem to be. This is not to say that the Samaritan is portrayed as irreligious. A major intent of the parable would seem to be to present the Samaritan as a religious and ethical example, but at the same time to contrast his type of religiosity with the more common conception of religiosity that the priest and Levite represent.

To summarize the variables suggested as affecting helping behavior by the parable, the situational variables include the content of one's thinking and the amount of hurry in one's journey. The major dispositional variable seems to be differing types of religiosity. Certainly these variables do not exhaust the list that could be elicited from the parable, but they do suggest several research hypotheses.

Hypothesis 1 The parable implies that people who encounter a situation possibly calling for a helping response while thinking religious and ethical thoughts will be no more likely to offer aid than persons thinking about something else. Such a hypothesis seems to run counter to a theory that focuses on norms as determining helping behavior because a normative account would predict that the increased salience of helping norms produced by thinking about religious and ethical examples would increase helping behavior.

Hypothesis 2 Persons encountering a possible helping situation when they are in a hurry will be less likely to offer aid than persons not in a hurry.

Hypothesis 3 Concerning types of religiosity, persons who are religious in a Samaritanlike fashion will help more frequently than those religious in a priest or Levite fashion.

Obviously, this last hypothesis is hardly operationalized as stated. Prior research by one of the investigators on types of religiosity (Batson, 1971), however, led us to differentiate three distinct ways of being religious: (a) for what it will gain one (cf. Freud, 1953, and perhaps the priest and Levite), (b) for its own intrinsic value (cf. Allport & Ross, 1967), and (c) as a response to and quest for meaning in one's everyday life (cf. Batson, 1971). Both of the

latter conceptions would be proposed by their exponents as related to the more Samaritanlike "true" religiosity. Therefore, depending on the theorist one follows, the third hypothesis may be stated like this: People (a) who are religious for intrinsic reasons (Allport & Ross, 1967) or (b) whose religion emerges out of questioning the meaning of their everyday lives (Batson, 1971) will be more likely to stop to offer help to the victim.

The parable of the Good Samaritan also suggested how we would measure people's helping behavior—their response to a stranger slumped by the side of one's path. The victim should appear somewhat ambiguous—ill-dressed, possibly in need of help, but also possibly drunk or even potentially dangerous.

Further, the parable suggests a means by which the incident could be perceived as a real one rather than part of a psychological experiment in which one's behavior was under surveillance and might be shaped by demand characteristics (Orne, 1962), evaluation apprehension (Rosenberg, 1965), or other potentially artifactual determinants of helping behavior. The victim should be encountered not in the experimental context but on the road between various tasks.

METHOD

In order to examine the influence of these variables on helping behavior, seminary students were asked to participate in a study on religious education and vocations. In the first testing session, personality questionnaires concerning types of religiosity were administered. In a second individual session, the subject began experimental procedures in one building and was asked to report to another building for later procedures. While in transit, the subject passed a slumped "victim" planted in an alleyway. The dependent variable was whether and how the subject helped the victim. The independent variables were the degree to which the subject was told to hurry in reaching the other building and the talk he was to give when he arrived there. Some subjects were to give a talk on the jobs in which seminary students would be most effective, others, on the parable of the Good Samaritan.

Subjects

The subjects for the questionnaire administration were 67 students at Princeton Theological Seminary. Forty-seven of them, those who could be reached by telephone, were scheduled for the experiment. Of the 47, 7 subjects' data were not included in the analyses—3 because of contamination of the experimental procedures during their testing and 4 due to suspicion of the experimental situation. Each subject was paid \$1 for the questionnaire session and \$1.50 for the experimental session.

Personality Measures

Detailed discussion of the personality scales used may be found elsewhere (Batson, 1971), so the present discussion will be brief. The general personality construct under examination was religiosity. Various conceptions of religiosity have been offered in recent years based on different psychometric scales. The conception seeming to generate the most interest is the Allport and Ross (1967) distinction between "intrinsic" versus "extrinsic" religiosity (cf. also Allen & Spilka, 1967, on "committed" versus "consensual" religion). This bipolar conception of religiosity has been questioned by Brown (1964) and Batson (1971), who suggested three-dimensional analyses instead. Therefore, in the present research, types of religiosity were measured with three instruments which together provided six separate scales: (a) a *doctrinal orthodoxy* (D-O) scale patterned after that used by Glock and Stark (1966), scaling agreement with classic doctrines of Protestant theology; (b) the Allport-Ross *extrinsic* (AR-E) scale, measuring the use of religion as a means to an end rather than as an end in itself; (c) the Allport-Ross *intrinsic* (AR-I) scale, measuring the use of religion as an end in itself; (d) the *extrinsic external* scale of Batson's Religious Life Inventory (RELI-EE), designed to measure the influence of significant others and situations in generating one's religiosity; (e) the *extrinsic internal* scale of the Religious Life Inventory (RELI-EI), designed to measure the degree of "driveness" in one's religiosity; and (f) the *intrinsic* scale of the Religious Life Inventory (RELI-I), designed to measure the degree to which one's religiosity involves a questioning of the meaning of life arising out of one's interactions with his social environment. The order of presentation of the scales in the questionnaire was RELI, AR, D-O.

Consistent with prior research (Batson, 1971), a principal-component analysis of the total scale scores and individual items for the 67 seminarians produced a theoretically meaningful, orthogonally rotated three-component structure with the following loadings:

Religion as means received a single very high loading from AR-E (.903) and therefore was defined by Allport and Ross's (1967) conception of this scale as measuring religiosity as a means to other ends. This component also received moderate negative loadings from D-O (−.400) and AR-I (−.372) and a moderate positive loading from RELI-EE (.301).

Religion as end received high loadings from RELI-EI (.874), RELI-EE (.725), AR-I (.768), and D-O (.704). Given this configuration, and again following Allport and Ross's conceptualization, this component seemed to involve religiosity as an end in itself with some intrinsic value.

Religion as quest received a single very high loading from RELI-I (.945) and a moderate loading from RELI-EE (.75). Following Batson, this component was conceived to involve religiosity emerging out of an individual's search for meaning in his personal and social world.

The three religious personality scales examined in the experimental research were constructed through the use of complete-estimation factor score coefficients from these three components.

Scheduling of Experimental Study

Since the incident requiring a helping response was staged outdoors, the entire experimental study was run in 3 days, December 14-16, 1970, between 10 A.M. and 4 P.M. A tight schedule was used in an attempt to maintain reasonably consistent weather and light conditions. Temperature fluctuation according to the *New York Times* for the 3 days during these hours was not more than 5 degrees Fahrenheit. No rain or snow fell, although the third day was cloudy, whereas the first two were sunny. Within days the subjects were randomly assigned to experimental conditions.¹

Procedure

When a subject appeared for the experiment, an assistant (who was blind with respect to the personality scores) asked him to read a brief statement which explained that he was participating in a study of the vocational careers of seminary students. After developing the rationale for the study, the statement read:

What we have called you in for today is to provide us with some additional material which will give us a clearer picture of how you think than does the questionnaire material we have gathered thus far. Questionnaires are helpful, but tend to be somewhat oversimplified. Therefore, we would like to record a 3-5 minute talk you give based on the following passage. . . .

Variable 1: Message In the task-relevant condition the passage read, With increasing frequency the question is being asked: What jobs or professions do seminary students subsequently enjoy most, and in what jobs are they most effective? The answer to this question used to be so obvious that the question was not even asked. Seminary students were being trained for the ministry, and since both society at large and the seminary student himself had a relatively clear understanding of what made a "good" minister, there was no need even to raise the question of for what other jobs seminary experience seems to be an asset. Today, however, neither society nor many seminaries have a very clearly defined conception of what a "good" minister is or of what sorts of jobs and professions are the best context in which to minister. Many seminary students, apparently genuinely concerned with "ministering," seem to feel that it is impossible to minister in the professional clergy. Other students, no less concerned, find the clergy the most viable profession for ministry. But are there other jobs and/or professions for which seminary experience is an asset? And, indeed, how much of an asset is it for the professional ministry? Or, even more broadly, can one minister through an "establishment" job at all?

1. An error was made in randomizing that increased the number of subjects in the intermediate-hurry conditions. This worked against the prediction that was most highly confirmed (the hurry prediction) and made no difference to the message variable tests.

In the helping-relevant condition, the subject was given the parable of the Good Samaritan exactly as printed earlier in this article. Next, regardless of condition, all subjects were told,

You can say whatever you wish based on the passage. Because we are interested in how you think on your feet, you will not be allowed to use notes in giving the talk. Do you understand what you are to do? If not, the assistant will be glad to answer questions.

After a few minutes the assistant returned, asked if there were any questions, and then said:

Since they're rather tight on space in this building we're using a free office in the building next door for recording the talks. Let me show you how to get there [draws and explains map on 3 x 5]. This is where Professor Steiner's laboratory is. If you go in this door [points at map], there's a secretary right here, and she'll direct you to the office we're using for recording. Another of Professor Steiner's assistants will set you up for recording your talk. Is the map clear?

Variable 2: Hurry In the high-hurry condition the assistant then looked at his watch and said, "Oh, you're late. They were expecting you a few minutes ago. We'd better get moving. The assistant should be waiting for you so you'd better hurry. It shouldn't take but just a minute." In the intermediate-hurry condition he said, "The assistant is ready for you, so please go right over." In the low-hurry condition he said, "It'll be a few minutes before they're ready for you, but you might as well head on over. If you have to wait over there, it shouldn't be long."

The Incident When the subject passed through the alley, the victim was sitting slumped in a doorway, head down, eyes closed, not moving. As the subject went by, the victim coughed twice and groaned, keeping his head down. If the subject stopped and asked if something was wrong or offered to help, the victim, startled and somewhat groggy, said, "Oh, thank you [cough]. . . . No, it's all right. [Pause] I've got this respiratory condition [cough]. . . . The doctor's given me these pills to take, and I just took one. . . . If I just sit and rest for a few minutes I'll be O.K. . . . Thanks very much for stopping though [smiles weakly]." If the subject persisted, insisting on taking the victim inside the building, the victim allowed him to do so and thanked him.

Helping Ratings The victim rated each subject on a scale of helping behavior as follows:

0 = failed to notice the victim as possibly in need at all; 1 = perceived the victim as possibly in need but did not offer aid; 2 = did not stop but helped indirectly (e.g., by telling Steiner's assistant about the victim); 3 = stopped and asked if victim needed help; 4 = after stopping, insisted on taking the victim inside and then left him.

The victim was blind to the personality scale scores and experimental conditions of all subjects. At the suggestion of the victim, another category

was added to the rating scales, based on his observations of pilot subjects' behavior:

5 = after stopping, refused to leave the victim (after 3-5 minutes) and/or insisted on taking him somewhere outside experimental context (e.g., for coffee or to the infirmary).

(In some cases it was necessary to distinguish Category 0 from Category 1 by the postexperimental questionnaire and Category 2 from Category 1 on the report of the experimental assistant.)

This 6-point scale of helping behavior and a description of the victim were given to a panel of 10 judges (unacquainted with the research) who were asked to rank order the (unnumbered) categories in terms of "the amount of helping behavior displayed toward the person in the doorway." Of the 10, 1 judge reversed the order of Categories 0 and 1. Otherwise there was complete agreement with the ranking implied in the presentation of the scale above.

The Speech After passing through the alley and entering the door marked on the map, the subject entered a secretary's office. She introduced him to the assistant who gave the subject time to prepare and privately record his talk.

Helping Behavior Questionnaire After recording the talk, the subject was sent to another experimenter, who administered "an exploratory questionnaire on personal and social ethics." The questionnaire contained several initial questions about the interrelationship between social and personal ethics, and then asked three key questions: (a) "When was the last time you saw a person who seemed to be in need of help?" (b) "When was the last time you stopped to help someone in need?" (c) "Have you had experience helping persons in need? If so, outline briefly." These data were collected as a check on the victim's ratings of whether subjects who did not stop perceived the situation in the alley as one possibly involving need or not.

When he returned, the experimenter reviewed the subject's questionnaire, and, if no mention was made of the situation in the alley, probed for reactions to it and then phased into an elaborate debriefing and discussion session.

Debriefing

In the debriefing, the subject was told the exact nature of the study, including the deception involved, and the reasons for the deception were explained. The subject's reactions to the victim and to the study in general were discussed. The role of situational determinants of helping behavior was explained in relation to this particular incident and to other experiences of the subject. All subjects seemed readily to understand the necessity for the deception, and none indicated any resentment of it. After debriefing, the subject was thanked for his time and paid, then he left.

RESULTS AND DISCUSSION

Overall Helping Behavior

The average amount of help that a subject offered the victim, by condition, is shown in Table 1. The unequal-*N* analysis of variance indicates that while the hurry variable was significantly ($F = 3.56$, $df = 2/34$, $p < .05$) related to helping behavior, the message variable was not. Subjects in a hurry were likely to offer less help than were subjects not in a hurry. Whether the subject was going to give a speech on the parable of the Good Samaritan or not did not significantly affect his helping behavior on this analysis.

Other studies have focused on the question of whether a person initiates helping action or not, rather than on scaled kinds of helping. The data from the present study can also be analyzed on the following terms: Of the 40 subjects, 16 (40%) offered some form of direct or indirect aid to the victim (Coding Categories 2-5), 24 (60%) did not (Coding Categories 0 and 1). The percentages of subjects who offered aid by situational variable were, for low hurry, 63% offered help, intermediate hurry 45%, and high hurry 10%; for helping-relevant message 53%, task-relevant message 29%. With regard to this more general question of whether help was offered or not, an unequal-*N* analysis of variance (arc sine transformation of percentages of helpers, with low- and intermediate-hurry conditions pooled) indicated that again only the hurry main effect was significantly ($F = 5.22$, $p < .05$) related to helping behavior; the subjects in a hurry were more likely to pass by the victim than were those in less of a hurry.

Reviewing the predictions in the light of these results, the second hypothesis, that the degree of hurry a person is in determines his helping behavior, was supported. The prediction involved in the first hypothesis concerning the message content was based on the parable. The parable itself

TABLE 1
Means and Analysis of Variance of Graded Helping Responses

Message	Means			
	Hurry			Summary
	Low	Medium	High	
Helping relevant	3.800	2.000	1.000	2.263
Task relevant	1.667	1.667	.500	1.333
Summary	3.000	1.818	.700	
Analysis of Variance				
Source	SS	df	MS	F
Message (A)	7.766	1	7.766	2.65
Hurry (B)	20.884	2	10.442	3.56*
A X B	5.237	2	2.619	.89
Error	99.633	34	2.930	

Note: $N = 40$.
* $p < .05$.

TABLE 2
Stepwise Multiple Regression Analysis

Help vs. No Help				
Step	Individual Variable		Overall Equation	
	<i>r</i> ^a	<i>F</i>	<i>R</i>	<i>F</i>
1. Hurry ^b	-.37	4.537*	.37	5.884*
2. Message ^c .....	.25	1.495	.41	3.834*
3. Religion as quest	-.03	.081	.42	2.521
4. Religion as means	-.03	.003	.42	1.838*
5. Religion as end .....	.06	.000	.42	1.430

Graded Helping				
Step	Individual Variable		Variable Equation	
	<i>r</i>	<i>F</i>	<i>R</i>	<i>F</i>
1. Hurry	-.42	6.665*	.42	8.196**
2. Message .....	.25	1.719	.46	5.083*
3. Religion as quest	-.16	1.297	.50	3.897*
4. Religion as means	-.08	.018	.50	2.848*
5. Religion as end	-.07	.001	.50	2.213

Note: *N* = 40. Helping is the dependent variable. *df* = 1/34.

^aIndividual variable correlation coefficient is a point biserial where appropriate.

^bVariables are listed in order of entry into stepwise regression equations.

^cHelping-relevant message is positive.

**p* < .05.

***p* < .01.

seemed to suggest that thinking pious thoughts would not increase helping. Another and conflicting prediction might be produced by a norm salience theory. Thinking about the parable should make norms for helping salient and therefore produce more helping. The data, as hypothesized, are more congruent with the prediction drawn from the parable. A person going to speak on the parable of the Good Samaritan is not significantly more likely to stop to help a person by the side of the road than is a person going to talk about possible occupations for seminary graduates.

Since both situational hypotheses are confirmed, it is tempting to stop the analysis of these variables at this point. However, multiple regression analysis procedures were also used to analyze the relationship of all of the independent variables of the study and the helping behavior. In addition to often being more statistically powerful due to the use of more data information, multiple regression analysis has an advantage over analysis of variance in that it allows for a comparison of the relative effect of the various independent variables in accounting for variance in the dependent variable. Also, multiple regression analysis can compare the effects of continuous as well as nominal independent variables on both continuous and nominal dependent variables (through the use of point biserial correlations, *r_{pb}*) and shows considerable robustness to violation of normality assumptions (Cohen, 1965, 1968). Table 2 reports the results of the multiple regression analysis using both help versus no help and the graded helping scale as dependent measures. In this table the overall equation *F*s show the *F* value of the entire

regression equation as a particular row variable enters the equation. Individual variable *F*s were computed with all five independent variables in the equation. Although the two situational variables, hurry and message condition, correlated more highly with the dependent measure than any of the religious dispositional variables, only hurry was a significant predictor of whether one will help or not (column 1) or of the overall amount of help given (column 2). These results corroborate the findings of the analysis of variance.²

Notice also that neither form of the third hypothesis, that types of religiosity will predict helping, received support from these data. No correlation between the various measures of religiosity and any form of the dependent measure ever came near statistical significance, even though the multiple regression analysis procedure is a powerful and not particularly conservative statistical test.

Personality Difference among Subjects Who Helped

To further investigate the possible influence of personality variables, analyses were carried out using only the data from subjects who offered some kind of help to the victim. Surprisingly (since the number of these subjects was small, only 16) when this was done, one religiosity variable seemed to be significantly related to the kind of helping behavior offered. (The situational variables had no significant effect.) Subjects high on the religion as quest dimension appear likely, when they stop for the victim, to offer help of a more tentative or incomplete nature than are subjects scoring low on this dimension (*r* = -.53, *p* < .05).

This result seemed unsettling for the thinking behind either form of Hypothesis 3. Not only do the data suggest that the Allport-Ross-based conception of religion as *end* does not predict the degree of helping, but the religion as quest component is a significant predictor of offering less help. This latter result seems counterintuitive and out of keeping with previous research (Batson, 1971), which found that this type of religiosity correlated positively with other socially valued characteristics. Further data analysis, however, seemed to suggest a different interpretation of this result.

It will be remembered that one helping coding category was added at the suggestion of the victim after his observation of pilot subjects. The correlation of religious personality variables with helping behavior dichotomized between the added category (1) and all of the others (0) was examined. The correlation between religion as quest and this dichotomous helping scale was

2. To check the legitimacy of the use of both analysis of variance and multiple regression analysis, parametric analyses on this ordinal data, Kendall rank correlation coefficients, were calculated between the helping scale and the five independent variables. As expected τ approximated the correlation quite closely in each case and was significant for hurry only (hurry, τ = -.38, *p* < .001).

essentially unchanged ($r_{pb} = -.54, p < .05$). Thus, the previously found correlation between the helping scale and religion as quest seems to reflect the tendency of those who score low on the quest dimension to offer help in the added helping category.

What does help in this added category represent? Within the context of the experiment, it represented an embarrassment. The victim's response to persistent offers of help was to assure the helper he was all right, had taken his medicine, just needed to rest for a minute or so, and, if ultimately necessary, to request the helper to leave. But the *super* helpers in this added category often would not leave until the final appeal was repeated several times by the victim (who was growing increasingly panicky at the possibility of the arrival of the next subject). Since it usually involved the subject's attempting to carry through a preset plan (e.g., taking the subject for a cup of coffee or revealing to him the strength to be found in Christ), and did not allow information from the victim to change that plan, we originally labeled this kind of helping as rigid—an interpretation supported by its increased likelihood among highly doctrinal orthodox subjects ($r = .63, p < .01$). It also seemed to have an inappropriate character. If this more extreme form of helping behavior is indeed effectively less helpful, then the second form of Hypothesis 3 does seem to gain support.

But perhaps it is the experimenters rather than the super helpers who are doing the inappropriate thing; perhaps the best characterization of this kind of helping is as different rather than as inappropriate. This kind of helper seems quickly to place a particular interpretation on the situation, and the helping response seems to follow naturally from this interpretation. All that can safely be said is that one style of helping that emerged in this experiment was directed toward the presumed underlying needs of the victim and was little modified by the victim's comments about his own needs. In contrast, another style was more tentative and seemed more responsive to the victim's statements of his need.

The former kind of helping was likely to be displayed by subjects who expressed strong doctrinal orthodoxy. Conversely, this fixed kind of helping was unlikely among subjects high on the religion as quest dimension. These latter subjects, who conceived their religion as involving an ongoing search for meaning in their personal and social world, seemed more responsive to the victim's immediate needs and more open to the victim's definitions of his own needs.

CONCLUSION AND IMPLICATIONS

A person not in a hurry may stop and offer help to a person in distress. A person in a hurry is likely to keep going. Ironically, he is likely to keep going even if he is hurrying to speak on the parable of the Good Samaritan, thus inadvertently confirming the point of the parable. (Indeed, on several occa-

sions, a seminary student going to give his talk on the parable of the Good Samaritan literally stepped over the victim as he hurried on his way!)

Although the degree to which a person was in a hurry had a clearly significant effect on his likelihood of offering the victim help, whether he was going to give a sermon on the parable or on possible vocational roles of ministers did not. This lack of effect of sermon topic raises certain difficulties for an explanation of helping behavior involving helping norms and their salience. It is hard to think of a context in which norms concerning helping those in distress are more salient than for a person thinking about the Good Samaritan, and yet it did not significantly increase helping behavior. The results were in the direction suggested by the norm salience hypothesis, but they were not significant. The most accurate conclusion seems to be that salience of helping norms is a less strong determinant of helping behavior in the present situation than many, including the present authors, would expect.

Thinking about the Good Samaritan did not increase helping behavior, but being in a hurry decreased it. It is difficult not to conclude from this that the frequently cited explanation that ethics becomes a luxury as the speed of our daily lives increases is at least an accurate description. The picture that this explanation conveys is of a person seeing another, consciously noting his distress, and consciously choosing to leave him in distress. But perhaps this is not entirely accurate, for, when a person is in a hurry, something seems to happen that is akin to Tolman's (1948) concept of the "narrowing of the cognitive map." Our seminarians in a hurry noticed the victim in that in the postexperiment interview almost all mentioned him as, on reflection, possibly in need of help. But it seems that they often had not worked this out when they were near the victim. Either the interpretation of their visual picture as a person in distress or the empathic reactions usually associated with that interpretation had been deferred because they were hurrying. According to the reflections of some of the subjects, it would be inaccurate to say that they realized the victim's possible distress, then chose to ignore it; instead, because of the time pressures, they did not perceive the scene in the alley as an occasion for an ethical decision.

For other subjects it seems more accurate to conclude that they decided not to stop. They appeared aroused and anxious after the encounter in the alley. For these subjects, what were the elements of the choice that they were making? Why were the seminarians hurrying? Because the experimenter, *whom the subject was helping*, was depending on him to get to a particular place quickly. In other words, he was in conflict between stopping to help the victim and continuing on his way to help the experimenter. And this is often true of people in a hurry; they hurry because somebody depends on their being somewhere. Conflict, rather than callousness, can explain their failure to stop.

Finally, as in other studies, personality variables were not useful in

predicting whether a person helped or not. But in this study, unlike many previous ones, considerable variations were possible in the kinds of help given, and these variations did relate to personality measures—specifically to religiosity of the quest sort. The clear light of hindsight suggests that the dimension of kinds of helping would have been the appropriate place to look for personality differences all along; *whether* a person helps or not is an instant decision likely to be situationally controlled. How a person helps involves a more complex and considered number of decisions, including the time and scope to permit personality characteristics to shape them.

REFERENCES

- Allen, R. O., & Spilka, B. Committed and consensual religion. A specification of religion-prejudice relationships. *Journal for the Scientific Study of Religion*, 1967, 6, 191-206.
- Allport, G. W., & Ross, J. M. Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 1967, 5, 432-443.
- Batson, C. D. Creativity and religious development: Toward a structural-functional psychology of religion. Unpublished doctoral dissertation, Princeton Theological Seminary, 1971.
- Bickman, L. B. The effect of the presence of others on bystander intervention in an emergency. Unpublished doctoral dissertation, City College of the City University of New York, 1969.
- Brown, L. B. Classifications of religious orientation. *Journal for the Scientific Study of Religion*, 1964, 4, 91-99.
- Burton, R. V. The generality of honesty reconsidered. *Psychological Review*, 1963, 70, 481-499.
- Cohen, J. Some statistical issues in psychological research. In B. B. Wolman (Ed.), *Handbook of clinical psychology*. New York: McGraw-Hill, 1965.
- Cohen, J. Multiple regression as a general data-analytic system. *Psychological Bulletin*, 1968, 70, 426-443.
- Darley, J. M., & Latané, B. Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*, 1968, 8, 377-383.
- Freud, S. *The future of an illusion*. New York: Liveright, 1953.
- Funk, R. W. *Language, hermeneutic, and word of God*. New York: Harper & Row, 1966.
- Glock, C. Y., & Stark, R. *Christian beliefs and anti-Semitism*. New York: Harper & Row, 1966.
- Hartshorne, H., & May, M. A. *Studies in the nature of character*. Vol. 1. *Studies in deceit*. New York: Macmillan, 1928.
- Korte, C. Group effects on help-giving in an emergency. *Proceedings of the 77th Annual Convention of the American Psychological Association*, 1969, 4, 383-384. (Summary)
- Orne, M. T. On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. *American Psychologist*, 1962, 17, 776-783.
- Rosenberg, M. J. When dissonance fails: On eliminating evaluation apprehension from attitude measurement. *Journal of Personality and Social Psychology*, 1965, 1, 28-42.

- Schwartz, S. H., & Clausen, G. T. Responsibility, norms, and helping in an emergency. *Journal of Personality and Social Psychology*, 1970, 16, 299-310.
- Tolman, E. C. Cognitive maps in rats and men. *Psychological Review*, 1948, 55, 189-208.

Personal Journal

B. LATENT ASPECTS OF "FROM JERUSALEM TO JERICHO"

C. Daniel Batson

Freud contended that dreams include both a manifest or surface meaning and a deeper and more personally significant latent content. The same might be said of a research project. The published version of a piece of research is the manifest meaning, but there is much which lies unsaid behind the published report. And like a psychoanalyst the task here is to probe behind the manifest to the more latent aspects of the research—or, in the language of Chapter 1 of this volume, to probe behind the context of justification to the context of discovery. The psychoanalyst is convinced that all behavior is sensible once one understands the motivations or whys behind it. In parallel fashion, I shall attempt to answer two why questions: Why did we do this research? Why did we do it the way we did?

WHY DID WE DO THIS RESEARCH?

At a most obvious level the answer may seem apparent: I was a graduate student at the time and people were beginning to mumble, "When is he going to get his ass in gear and do something?" In a more positive but equally crass vein, as a student I had access to both money and facilities for running a study on someone else's grant. At an institution where one must pay subjects for participation in research, available funds can be a more real incentive than the threat of flunking out. But neither of these rather cynical pat answers shed light on the question of why *this* research. And since in the case of this particular study the desire to do *this* research was much stronger than the sense of necessity to do *some* research (a sequence which is all too often reversed), I would like to focus attention on that question. There are, of

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course, still a number of answers which could be given; some are scholarly reasons, others are more serendipitous.

Scholarly Reasons

One would like to think that each piece of research he does lies at a nexus where competing explanations of some aspect of social behavior come head to head. For the present research such a nexus was assured, in terms of biases, at least, if not well-formulated scientific theories.

John Darley had been working for five or six years on bystander intervention in emergencies (cf. Latané & Darley, 1970). He came to that research with a fairly strong bias toward the importance of factors in the social environment, as opposed to dispositional or personality characteristics in determining social behavior. John's bias was grounded largely in Festinger's (1954) theory of social comparison, on which he did considerable work during his graduate training at Harvard. His research on bystander intervention added to the conviction that situational factors are far more salient than dispositional ones in determining social behavior. Examining the circumstances under which a person will offer to help in a possible emergency, he and Bibb Latané consistently found variation of the social situation had strong effects on subjects' responses. Specifically, the number of other bystanders and whether they were known or not significantly affected the speed and frequency of bystander intervention. Persons alone tended to respond to the possible crisis most frequently, those with friends less frequently, and those with strangers least frequently. This was found regardless of whether the bystanders could see and talk with one another (Latané & Rodin, 1969) or not (Darley & Latané, 1968). A person seems both to cue on the response (or lack of response) of others in determining whether the situation is in fact an emergency and also to diffuse responsibility for acting in an emergency to others.

The presence or absence of others when a possible emergency arises is a situational variable. But what about dispositional variables, the personality characteristics of the bystander; should these not also affect his response? Even if one's bias runs toward the greater importance of situational determinants of helping, as John's did, one must also consider the other possibility, that who the helper is is at least as important as who else is present. John did consider this possibility by having persons who had been subjects in one of his emergency studies fill out several personality scales. As is frequently done in probing for personality determinants of social behavior, John administered a barrage of scales, all those he thought might predict helping or not helping. He used the Berkowitz and Daniels Social Responsibility Scale, the Marlowe-Crowne Need for Approval Scale, and Christie's revision of the F scale (measuring authoritarianism), Christie's anomia scale, and Christie's Machiavellianism scale.

But all of these personality scales failed to predict helping. The best any of the scales could do in explaining the data was to account for only a minor amount of the variance (4 percent) beyond that attributable to the situational determinants. John concluded: "In general, we found our failure to demonstrate personality correlates of helping somewhat discouraging, although, of course, further research may well uncover other variables which are more effective, or other situations in which more effects occur" (Latané & Darley, 1970, p. 115).

It was fortunate for me that John maintained an open mind toward "other variables" and "other situations." For while he was finding strong effects for situational factors in determining helping and was getting his fingers burned on what seemed to be plausible personality predictors, I had been spending several years at Princeton Theological Seminary trying to develop a new personality measure which I felt should relate to helping behavior. The measure attempted to distinguish three styles or ways of being religious: as a *means* to some other end, as an *end* in itself, and as an ongoing *quest*. The first two styles I borrowed from Allport and Ross (1967), though I sought to elaborate upon and extend them a bit. The third was my own addition, an attempt to tap what I considered a more mature, flexible type of religiosity than the other two.

As virtually all religious leaders will argue, one reason religion is important is that it calls for changes in the way people act. The believer is admonished to love his neighbor (and even his enemy), to turn the other cheek, and so on. Religion is supposed to make a difference in behavior. But almost all studies in the psychology of religion simply relate a person's responses on one questionnaire (e.g., doctrinal orthodoxy) to his responses on another questionnaire (e.g., racial prejudice), or perhaps to such factors as his religious affiliation, race, or sex. I, too, had been doing correlational studies of this sort but had become increasingly dissatisfied with them. If we are to find out whether religion makes a difference in behavior, we must look at behavior. It was with this motivation that I applied to Princeton University to do graduate work in experimental social psychology.

I arrived at Princeton carrying my new personality measure, which I was anxious to test in a behavioral setting, to find that John, although open to the possible importance of dispositional determinants of helping, was far more prone to look toward situational variables. Obviously, there was a study we both wanted and needed to do, comparing the relative power of the religious personality variables and situational variables in a helping situation. To do so, we needed a helping context for which it was clear that religious belief and training should be relevant. But after looking around, none of the contexts that had been used previously seemed quite appropriate.

Fortunately, Jesus showed us the way—with his parable of the Good Samaritan. Not only did the parable suggest a helping context, it also contained a relevant and more complex configuration of variables than we had

originally conceived. First, the parable pointed to a distinction between types of religiosity, that of the scribe and Pharisee and that of the Samaritan. Second, it suggested a relevant situational variable, social status or importance, of which we adopted only one aspect, hurry. Further, the fact that the parable was told at all suggested a third variable which might affect helping—having such exemplary stories among one's mental furniture to serve as a guide to right action. Thus, thanks to the parable of the Good Samaritan, we found ourselves with a rich research design, one which focused simultaneously upon the effects of religious style and training (disposition) and on the hurry (situation) of the potential helper.

We had our design. But further, the richness of the parable of the Good Samaritan convinced us of the immense potential value of parables, fables, and other literary lore for the social science researcher. Presumably, such literature is maintained in the culture because it rings true in behavior, and often with a sophistication and subtlety far beyond that of any of our present psychological or sociological theories. The scientist of human behavior may, it seems, do well to listen to the poet, the prophet, and the sage in conceptualizing his research problems.

Serendipitous Reasons

These somewhat rational scholarly reasons are only part of why we did this study at this time. Let me mention a few more serendipitous reasons. The list is by no means exhaustive, but it should illustrate the more accidental aspects of research.

First, although I was acquainted with and interested in John's work on helping in emergencies, I did not plan to study or collaborate on research with him when I decided to do graduate work in social psychology at Princeton. I chose Princeton because I had explicit plans to work with another professor there. But between the time I accepted Princeton's acceptance of me for graduate study in the spring and when I entered the program in the fall, the other professor left Princeton. Casting about for another advisor, John and I both, somewhat guardedly, I think, decided to take a chance on one another.

A second serendipitous factor: if one is to do research comparing different types of religiosity, one must first have people who are religious. This means that the standard college sophomore subject pool may be less than totally appropriate. Fortunately, while doing my graduate work at Princeton University, I was also teaching part time at Princeton Theological Seminary. Virtually all the seminary students considered themselves religious in *some* way, and they presented a rather wide range of conceptions and styles of being religious, at least within Protestantism. Therefore, the religious personality scales "made sense" to them (indeed, they had originally been developed on an earlier sample of Princeton Seminary students). Some

agreed strongly and some disagreed strongly with almost every item, but as a group they seemed to find the items relevant to their experience. Thus it appeared legitimate to speak of different styles of religiosity in a sample drawn from these seminarians.

Third, as we began to play with the idea of attempting to simulate some of the aspects of the parable of the Good Samaritan under experimental control, an ideal physical environment presented itself. We knew what we wanted. First we felt it was necessary to set the scene outside of the laboratory or, indeed, any place associated with the psychology department, for all of the seminarians were college graduates and aware of the possible deviousness of psychologists in the lab. Second, we wanted a moderately sinister "road from Jerusalem to Jericho"—not one frequented by robbers and cutthroats, perhaps, but also not without some element of uncertainty and possible threat. We also had to be able to control traffic in the area. One of the major difficulties in taking an experimental design into the real world is to maintain some semblance of control of extraneous variables so that different subjects will experience the same situation. Finally, logistically we needed a place either close to the psychology department or where we could get free office space to make the cover story, our explanation to the subject of why the research in which he was participating required that he "take a walk," plausible.

"You don't ask for *too* much," you may say. Agreed, but we found the spot. A short dead-end alley ran between the building which housed the psychology department and a partially condemned old building in which some members of the sociology department had their offices. The only people who used the alley regularly were these sociology faculty members, some of their students, a secretary, and various service trucks. We asked the faculty members to help us by taking a longer route to their offices which avoided the alley. They graciously complied. We ran the study when classes were not meeting so student traffic was minimal. Not only did the secretary agree to avoid the alley, she served as part of the cover story, efficiently referring subjects to "the office being used for Professor Steiner's research" when they appeared.

Service traffic was harder to control because it was sporadic. One morning, about ten minutes before the first subject was to be sent through the alley, we found a telephone truck sitting squarely in the middle of the alley, with no phone men in sight. A frantic search produced one of the service men, who rather quizzically but amiably moved his truck out of sight. The janitor also presented a problem. On the second day of running, just as a subject entered the alley, he came out of a side door and cheerily called over to our "victim" huddled ready and waiting, "Feeling better today?" One subject's data, \$2.50, and over an hour of experimenter time evaporated.

But on the whole, the alley served admirably as a research context. It was dim, dingy, and drab. Traffic was comparatively light, and it was very

close at hand. A footnote, however, on an additional danger of using a field setting for experimental research: The alley did prove to have one major drawback. It disappeared. While we were busily planning some follow-up studies using this same general research paradigm, an environmental beautification program at Princeton turned our sinister alley into a park! Instead of asphalt, trash cans, and puddles, it now contains ivy, a winding walk, a bench, and even a tree. Everyone agrees that it is a much prettier place, and of course it is. But it's hard not to regret the loss of a beautiful sinister alley.

A final serendipitous contribution to the design of this study came when I presented our plans to a graduate research seminar. John and I had originally planned simply to record whether a subject stopped to offer aid or not as the major dependent measure. Another graduate student suggested, however, that we should at least code different types of helping responses. This we did, arranging them on an admittedly crude scale of the amount of help offered (including the "super-helper" category added after running a number of pilot subjects). This coding of *how* a person helped as well as *whether* he helped proved extremely important. Not only did it provide a vehicle for interpreting the differential effects of situational and personality variables in the present study, it also provided the stimulus for a whole new research program concerning variables affecting how a person helps, given that he helps. Although it may cost a bit in strain on one's ego, it certainly pays to bounce research designs off of others who have not been involved in developing the design *before* being irrevocably committed to the particular design (i.e., before the data has been collected).

WHY DID WE DO THE RESEARCH THE WAY WE DID?

I have already referred to some of the whys behind the particular experimental procedures we employed. Let me simply restate and expand briefly upon them. We wanted to move outside of the laboratory, where a subject fears he's being watched and evaluated. We thought this evaluation apprehension might be a particular problem with seminary students, our religious and moral leaders of the future, when faced with a possible helping situation. But once you move outside the laboratory, two problems arise.

One is that you must give the subject plausible and impactful reasons why he is doing what you are asking him to do, for if he doesn't follow instructions (as by traveling an alternate route) you are lost. Both plausibility and impact are important. The former is necessary if the subject is to buy your initial explanation of why he is doing what he is doing, the latter if he is to be involved enough while doing it that he doesn't have second thoughts and begin to get suspicious.

In the present study, the cover story was built around a research project on the ministry as a profession in ferment. The seminarians were all well aware that the ministry is a profession in ferment—this is one of the few

consensus items on seminary campuses today—so such a study seemed plausible. Further, specific names of people, places, and organizations were used to increase plausibility. For impact, the seminarians were asked to give a three- to five-minute impromptu talk. As aspiring preachers this was something they would not only consider possible but also would want to do well. It was an ego-engaging task. Most subjects busily scribbled notes before they were sent to give their talks. To reduce the chance of suspicion, the procedure of sending a subject to the other building through the alley was purposely not introduced until after he had a chance to think about and was "into" the topic on which he was about to speak.

The second problem is that control of extraneous variables making it possible to compare different subjects' responses on the experimental variables is far more difficult outside the laboratory. I have already mentioned the difficulties in controlling traffic in the alley, but such subtle factors as variation in temperature and light must also be taken into account. A dark alley at night is quite a different place from the same alley at noon. Also, a young man slouched in a doorway in freezing weather is quite different from the same scene on a balmy summer day. In an attempt to control for such variation, we ran the entire experiment between 10 A.M. and 4 P.M. on three consecutive days in December. Luckily, weather conditions were fairly constant. Further, we tried to balance the number of persons in each experimental condition run on different days and at different times of day.

To control for possible experimenter bias (Rosenthal, 1966) in recording subjects' helping responses, the victim was "blind," or unaware of the experimental condition and personality scores of the subjects. Indeed, he was literally blind, for he kept his eyes closed unless he was approached and spoken to. This led to one snafu in which the victim, having been signaled that a subject was coming, got in position, heard footsteps approach, coughed, heard the footsteps pass by, and went back inside—at which point the real subject rounded the corner and hurriedly walked through the empty alley.

Moving from the particularities of the research design itself, I must comment about the importance of the debriefing in this study. We allotted approximately 30 minutes to the debriefing of each subject, roughly twice as long as the subject spent in the experiment procedure itself. Why? First, as is true in any study, the subject deserves to know exactly what the research is about and why it is being done. Second, our subjects had been deceived. They were told we were studying one thing when in fact we were studying another. No one likes to have one put over on him, and breaking that news is a delicate process (cf. Aronson & Carlsmith, 1968, for a sensitive analysis of how this might be done). Third, the behavior actually being studied was of great importance to most of the seminarians. Most thought it was important to help people in need, and there was the possibility that some of those who did not stop would be inclined to blame themselves. Therefore, it was

extremely important to make clear that we were studying the conditions under which a person will be more or less likely to offer aid and were not passing judgment on any individual's behavior. We focused upon the social forces operative in the situation rather than the rightness or wrongness of a given subject's response. Further, we encouraged subjects to express their feelings and reactions during the experiment, as well as their present feelings. As is true in almost any study, such comments are extremely helpful both in suggesting weaknesses in the research design (manipulations which may not be working, etc.) and in suggesting variables for further study.

The debriefing in any deception study is a bit ticklish. In this study it was particularly so. It is to the credit of the seminarians who served as subjects that all took the deception with good grace. Indeed, many encouraged us to continue such research and showed intense interest in the results.

Finally some things I had recently learned about data analysis affected the way we went about the study. Traditionally, psychologists are given to using analysis of variance (ANOVA) for testing statistical significance in experiments and using correlations on personality data. If personality variables are included within an experimental design, it is through the use of medians or some other centile splitting of the continuous personality variable into discrete levels. This means that a great deal of information contained in the personality data is systematically obliterated. Further, to add three-factor analytically created personality variables (as was the case in the present research) to an ANOVA design would make it extremely complex. It would be difficult to find a computer program to handle the analysis. But, on the other hand, to resort to a correlational analysis of the personality variables would not allow us to compare their strength relative to the situational (hurry) and normative (message) variables.

All these difficulties are nicely overcome by a rather sophisticated statistical technique, long known to the sociologist but rather new to the psychologist—multiple regression analysis (MRA). A more general analysis of which ANOVA is a special case, MRA allows the combination of continuous personality and discrete-level experimental variables in the same analysis, and it provides a clear picture of the amount of variance in the dependent variable accounted for by each.

There are both positive and negative aspects to the power one's available techniques for data analysis may hold over the way one collects the data. On the one hand, it is essential that one give thought to how one plans to thrash the data before reaping the harvest. Otherwise, it may not be possible to separate wheat from chaff, the result being bushels of trash. On the other hand, there is the danger of limiting the areas one explores to those for which clear procedures of analysis are available (indeed, these usually are the procedures in vogue wherever one received his undergraduate or graduate training). The social researcher, caught up with the flush of discovering

exciting and relevant new things, may find it difficult to leave the field long enough to do some reading in recent journals of applied statistics. But it may be time well spent, for it can enable him to tackle exciting and relevant problems in far more relevant and significant ways.

This review of the latent whys behind the "From Jerusalem to Jericho . . ." study may leave the psychoanalyst invoked at the outset disgruntled and suspicious. It all seems to fit together too, too nicely; a symphony of happy circumstances. I agree, but I'm afraid that's the way I feel about this particular study.

Certainly, it has its problems. I could wish that we had been able to run more subjects, particularly in the high- and low-hurry conditions, both to give additional strength to our findings and to improve the balance of the design. Also, although I was pleased to obtain the results we did with the religious personality scales, I wish either that these scales had more general applicability (they seem limited to those with clear involvement in Christianity, and perhaps even to American Protestants) or that we had had available scales which possibly could tap ethical styles which are less overtly religious but lie behind the religious differences found. These difficulties raise questions about the generality of the study's findings. And a satisfactory answer to this question must await further research, on other subject samples and in other contexts.

True, the study has its problems, but more than any other research I've conducted, this study did seem to involve a symphony of happy circumstances. It was enjoyable throughout—from the discovery of the general research design in the parable of the Good Samaritan, through the creation of the cover story, observation of the responses of individuals in a controlled but complex and "real" social situation, and talking with the subjects afterward in the debriefing, to a challenging data analysis and intriguing pattern of results. I'm well aware the world isn't usually that pretty. But it is sometimes. That's when doing social psychological research is not just worthwhile, it's fun.

REFERENCES

- Allport, G. W., & Ross, J. M. Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 1967, 5, 432-443.
- Aronson, F., & Carlsmith, J. M. Experimentation in social psychology. Chapter 9 in G. Lindzey and E. Aronson. *The handbook of social psychology*, 2nd Edition, Volume II. Reading, Mass.: Addison-Wesley, 1968, pp. 1-79.
- Darley, J. M., & Latané, B. Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*, 1968, 8, 377-383.
- Festinger, Leon. A theory of social comparison processes. *Human Relations*, 1954, 7, 117-140.

Latané, B., & Rodin, J. A lady in distress: Inhibiting effects of friends and strangers on bystander intervention. *Journal of Experimental Social Psychology*, 1969, 5, 189-202.

Rosenthal, R. *Experimenter effects in behavioral research*. New York: Appleton-Century-Crofts, 1966.