The Effects of Similarity on Altruism and its Relationship to Predicted versus Actual Helping Behavior

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ABSTRACT
This study consisted of two experiments that were conducted in order to determine whether similarity affects an individual's decision to help someone in need. Students from two college campuses in the same city served as participants for both experiments. The first experiment consisted of a questionnaire that asked students to predict their helping behavior while the second experiment involved a field experiment that examined actual helping behavior. Both experiments involved a situation where participants found a letter that needed to be mailed from either the participant's school or from another school. It was predicted that similarity would increase altruism and that a higher level of helping would result from the hypothetical situation than from the actual one. However, the results failed to support the hypotheses.

Cultures and societies across the world value altruism, or helping behavior. People generally view altruism as a moral obligation to family members and to society. Whether helping involves holding a door open for someone, picking up something a person has dropped, or doing a favor for a friend, one can identify these simple altruistic occurrences quite often. This study examines one reason why people may help others in need.

Over the past several decades, psychologists have studied the reasons why a person provides help to someone in need. These reasons range from differences in mood states (e.g., Kerber, 1984; Schroeder, Penner, Dovidio, & Piliavin, 1995; Weiss, Buchanan, Altstatt, & Lombardo, 1971) to situational factors (e.g., Darley & Batson, 1973; Kerber, 1984). For example, in Darley and Batson's (1973) study of time as a situational factor, they found that subjects pressed for time were less helpful than those not pressed for time.

Similarity is another situational factor that affects helping behavior. A perception of similarity to the person in need increases the would-be helper's desire to intercede. Perceptions of similarity include salient characteristics such as race, gender, or the school that one attends. When two people share one or more of these traits, a common bond between the two people can form because they can establish a common ground through which they relate to one another. As stated in Cialdini, Brown, Lewis, Luce, & Neuberg (1997), it is this commonality that leads to subsequent helping behavior. The more people have in common, the stronger the initial bond between two people.

These similarities enable a potential helper to relate to the victim. When people find a similarity between themselves and another person, they transpose their orientation toward themselves to the person in need (Karylowksi, 1976). In other words, perceptions of similarity can help a potential helper empathize with the other person and realize that he or she would want someone to provide help if she or he were in the same situation. Moreover, perceiving someone else as similar and imagining how one would feel in another person's place can cause a person to experience a concerned emotional arousal vicariously (Krebs, 1975). Thus, finding a similarity to the other person not only helps put a potential helper in the other person's place, it also increases the empathy and emotion one feels for the person in need. These feelings in turn, may increase the desire to help. Finally, there is evidence that altruism is affected by similarity characteristics, such as race (Bryan & Test, 1967; Glassman, Packel, & Brown, 1986; Rushton, Russel, & Wells, 1984), gender (Eagly & Crowley, 1986), appearance (Emswiller, Deaux, & Willis, 1971), and employment status (Wellman & Wortley, 1990). Therefore, the first experiment was conducted to investigate the hypothesis that people who perceive themselves as similar to someone in need of help become more likely to provide help than those who do not perceive a similarity between themselves and the person in need.

EXPERIMENT 1

Method

The participants in the first experiment were comprised of 141 upper-level Psychology students from two college campuses located approximately three miles apart in mid-sized Midwestern town. There were 78 participants from college A and 63 from college B. The participants consisted of 48 males and 92 females (one student did not provide gender information). Participants received course credit for their voluntary participation.

The study used a 2 (subjects: from College A or College B) X 2 (hypothetical person in need: from College A or College B) between-subjects design. The helping behavior was the
dependent variable, and the similarity between the person in need and the participant was the independent variable.

A questionnaire packet consisting of a Prosocial Behavior Questionnaire, the Communal Orientation Scale (Clark, Ouellette, Powell, & Milberg, 1987), and questions concerning demographics and interests were administered to the participant. The Prosocial Behavior Questionnaire, which was created by the experimenter for this study, consisted of fourteen different hypothetical situations involving opportunities for prosocial action. For each situation, the participants had four choices and participants had to choose the one that best described how they would handle each situation. For example, one situation depicts someone unsuccessfully trying to steal a woman's purse and all her belongings fell out of her purse onto the ground. For this example, the response choices were (A) Help her pick up the things that fell out of her purse, (B) Go back inside and let the cashier know what happened, (C) Ask her if she is all right, but don't pick up the things for her, or (D) Walk out the door and hurry to your vehicle. For each question, the experimenter scored the answers on a scale of 1 to 4, with 4 being the most helpful and 1 being the least helpful.

All participants received identical questionnaires with the following exception. One question on the questionnaire varied in two ways. This question asked what the subject would do if he or she found an addressed stamped envelope that had college A (or college B) as the return address with an attached note that said it was a resume and had to be mailed by today's date. This question varied randomly between subjects in order to determine whether people's hypothetical responses hold true for actual situations. Half of the subjects received the question with college A as the return address, whereas the other half received the question with college B as the return address.

The next part of the questionnaire contained the Communal Orientation Scale (Clark et al., 1987) which consisted of fourteen descriptive statements. An example of an item is "I don't consider myself to be a particularly helpful person." The experimenter asked the participants to rate each of these items on a Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). The experimenter used this scale to assess whether the participants generally exhibit helpful behavior toward people and whether they expect other people to act in a helpful way towards them. Previous research has found that the Communal Orientation Scale has adequate internal consistency (Cronbach's Alpha=.78) and test-retest reliability (correlation=.68).

The questionnaire packet also included questions concerning demographics and interests of the participant, including gender, age, race, clothing styles, and college major. The participants chose an answer from the options given. The experimenter used these questions later in supplementary analyses to determine the similarity between the hypothetical person needing help and the participant. Each scenario contained one or more similarity factors and the experimenter matched these factors with the demographic information of each participant to determine whether similarity played a role in people's decisions to help.

The experimenter administered questionnaires to students in four upper-level Psychology courses at college A and in one upper-level Psychology course at college B. The participants provided their consent to participate and were then given the questionnaire packet. After the questionnaires were collected, participants were given debriefing statements that explained the purpose of the study.

Results & Discussion

The major hypothesis stated that people who perceive themselves as similar to someone in need of help are more likely to provide help than those who do not perceive a similarity between themselves and the person in need. In order to test this hypothesis, the experimenter used calculations to predict helping behavior using a two-way ANOVA on the scenario concerning the letters left at both campuses. This analysis did not reveal significant effects for the subject's school (F(1,137)=.218, p=641), or site (the school at which the letter was left), (F(1,137)=1.723, p=.191. This analysis also did not reveal the predicted interaction between student and site, F(1,137)=1.338, p=.249. As shown in Table 1, students from college A said they would be equally willing to mail a letter for someone at college A or college B. Students from college B said they would help mail a letter from college B slightly more than they said they would mail a letter from college A, although this effect did not reveal significance. Thus, the analysis did not support the hypothesis.

<table>
<thead>
<tr>
<th>Student Letterhead</th>
<th>M</th>
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<tr>
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Table 1. College A vs. College B Student Predictions of Helping Mail a Letter. M=mean; SD=standard deviation; N=number of students

Supplementary Analyses.

The experimenter also conducted supplementary analyses using independent t-tests to determine whether any differences existed in predicted helping behavior between students from both colleges and between males and females. Overall, there were no differences in predictions of helping between students from college A (M=3.15) and those from college B (M=3.10), t(138)=.061, p=.95. Furthermore, the helping scenarios revealed no differences in predictions of helping behavior between men (M=3.08) and women (M=3.08), t(138)=.061, ns(not significant). 1 On the other hand, the Communal Orientation Scale showed that students from college B (M=4.04) described themselves as significantly more helpful than those from college A (M=3.80), t(138)=2.64, p=.009. Furthermore, according to the Communal Orientation Scale, females (M=4.01) described themselves as significantly more helpful than did males (M=3.71), t(138)=3.25, p=.001.
Even though the Communal Orientation Scale showed significant differences in people's self-descriptions of their usual helping behavior between males and females and between college A and college B, the results of the Prosocial Behavior Questionnaire indicated no differences in the way people responded to the scenarios. This discrepancy may result from the differences in structure between the scenarios and the Communal Orientation Scale. The Communal Orientation Scale asks specific questions concerning the subject's general helping behavior. The scenarios require people to imagine themselves in a helping situation and determine whether they would help the person in need. This suggests that predicted helping behavior may differ from actual helping behavior.

**OVERVIEW & PURPOSE FOR EXPERIMENT 2**

Although several studies have examined the relationship between similarity and altruism, few have directly investigated what people predict they would do in comparison to what behavior is manifested in an actual helping situation. To my knowledge, no one has examined whether similarity has the same effect on helping behavior in a hypothetical situation as similarity does in an actual situation.

People's hypothetical and actual actions do not always coincide. People often say they will do something in a certain situation, but many times their actions are completely different (Harrell & Bennett, 1974). One reason for this behavior is that people may have a difficult time predicting actual behavior until that particular situation occurs. Additionally, Baz-Tal, Raviv, & Leiser (1980) state that verbal motives do not always correspond with actual motives behind behavior. This means that people's reasons for stating what they will do in a particular situation may differ from the real reasons they behave in an actual situation. Similarly, on a questionnaire people may state what they will do something just because they know they should do the right thing, even though they may not make the same decisions when they actually face identical circumstances.

Other factors that can affect an individual's behavior in an actual situation include the situational and personality factors described earlier. Rokeach (1967) believes unwanted situational variables can trigger an attitude toward a particular situation that did not appear until the situational variable became involved. Rokeach also believes that these attitudes toward a situation can affect people's subsequent behavior toward a situation depending on the level of importance of the attitude. These attitudes can cause people's reactions to a hypothetical situation to alter how they respond when confronted with an actual situation.

Furthermore, people have a tendency to exaggerate and brag to make themselves look better. Kochman (1979) states that boasting and bragging occur among both blacks and whites, and many times other people view these behaviors as "self-aggrandizement." These people may "self-aggrandize" themselves or they may say they would help someone in need because many adults have a strong motive to want to appear as a good, moral person. Batsen & Fultz (1987) believe adults like to view themselves as moral, mature, caring, and altruistic people. Many adults would like to believe they would do what seems morally right, therefore they automatically exaggerate hypothetical predictions of their own helping behavior.

The previous research concerning predicted versus actual helping behavior has produced mixed results, and none has examined how similarity plays a role in hypothetical and actual helping. Some researchers have found that what people say they will do differs from what they actually do (e.g., Harrell & Bennett, 1974), while other researchers have found that people's stated intentions and actual behavior generally remain congruent (e.g., Kaha & Tice, 1973; Pieters & Verplanken, 1995). The results of other studies demonstrate a higher level of helping in a real situation than in a hypothetical situation (e.g., LaPiere, 1934; Sharpely & Rodd, 1985). Still others have found no significant relationship between behavioral intentions and actual behavior (e.g., Berndt, 1981). These mixed results cause difficulty in understanding and interpreting the relationship between predicted and actual helping behavior.

One possible reason for the conflicting results in the previous research may stem from researcher's focus on the predicted versus actual helping behavior of children. For example, Sharpely and Rodd's (1985) study of preschool children's reactions to a hypothetical and an actual helping situation show that children have a higher level of helping in a real situation than in a hypothetical situation. Although these results contradict the hypothesis for the present study, a reason for these findings considers children may not understand the abstract content of a hypothetical situation and find difficulty relating to the situation (Sharpely & Rodd 1985). Children may lack the cognitive ability and experience to completely comprehend a hypothetical situation. Another reason for these findings considers the idea that children will often distort their answers owing to their beliefs of behaviors acceptable and unacceptable of them (Baz-Tal et al., 1980) and fears of punishment (Sharpely & Rodd 1985). These beliefs and fears can affect children's perceptions of the situation and their appropriate responses. Children also may lack the capacity to translate their knowledge of expected behavior or intentions into actual behavioral actions (Baz-Tal et al., 1980). Adults also may have a difficult time predicting helping behavior, but not because of a cognitive inability. Instead, adults may believe they will help as much as they say they will, but find that situational and personality factors prevent them from helping to the extent they would like. Simply put, children and adults may not demonstrate similar behaviors when comparing hypothetical and actual situations. This demonstrates a problem when using results from research conducted on children to generalize to research about adults.

Experiment 2 examined differences between hypothetical responses (Experiment 1) and actual actions involving helping behavior and similarity in college students. This study will contribute to research because it not only will examine the differences between hypothetical and actual helping behaviors, but also will consider whether similarity has an effect on hypothetical and actual helping situations. Additionally, this study expanded the literature because no studies found related similarity to hypothetical and actual helping. Therefore, the second experiment had two hypotheses. The first hypothesis states that people say they will help more in a hypothetical situation than they actually will help in a real
The Effects of Similarity on Altruism

life situation. The second hypothesis states that similarity increases the likelihood of helping in both hypothetical and real life situations. The hypothetical scenario concerning the envelopes in Experiment 1 was used in an actual situation in Experiment 2.

**Experiment 2**

**Method**

There were 65 participants in Experiment 2, 30 from college A and 35 from college B. The participants determined their own participation by choosing to mail a letter found on their campus. These people did not know they participated in a study.

The experimenter conducted a 2 (Envelop letterhead: college A or college B) X 2 (Campus location: college A or college B) field experiment on both college campuses. The dependent variable consisted of the percentage of people who returned the envelopes. The independent variables consisted of the envelopes (college A or college B) and the location of the envelopes (college A or college B).

The experimenter used eighty envelopes at the two college campuses. Forty of these had letterhead with college A’s Psychology Department in the return address while another forty had letterhead with college B’s Psychology Department in the return address. Forty of these envelopes were placed at each university (twenty from college A and twenty from college B). To avoid leaving envelopes all over the campuses, the experimenter only used twenty envelopes (ten from college A and ten from college B) on any one day; and the experimenter left the envelopes on two separate occasions. All the letters were left around 8:00AM on fairly pleasant days. During the first week the letters were left at college A on Tuesday and college B on Wednesday. The next week the letters were left at college B on Tuesday and college A on Wednesday. On each occasion, the experimenter went to each school and left the envelopes at various places around campus. The letters were left in lounges, stairways, elevators, phone booths, and benches. If people were around, the experimenter would sit in the lounge and make it appear as if the letter was left accidentally when the experimenter got up to leave. In other areas, the experimenter watched to make sure no one saw the letters being dropped.

Each envelope was addressed to a business and stamped ahead of time. To increase the importance of mailing the letter, a post-it note was attached to the front of the envelope saying, “Resume, Don’t forget to mail by _.” The date on the post-it note was the date the experimenter left the letters on each campus. Each letter was coded on the inside to indicate on which campus they were left.

**Results & Discussion**

A chi-square analysis was used to determine whether any differences existed in actual letter return rates due to school similarity as a factor in people’s helping behavior. As shown in Table 2, the percentage return rate appears along with the number of letters returned from each school. Letters from college A left on college B’s campus had a slightly higher return rate than letters from college A left on college A’s campus. Letters from college B left on college B’s campus had a slightly higher return rate than letters from college B left on college A’s campus. However, this analysis did not reveal statistical significance, $\chi^2(3)=3.25$, ns. Thus, the analysis did not support the hypothesis. Although this analysis did not reveal significance, the envelopes had a much higher return rate than expected. Participants mailed all the envelopes within a few days of being dropped. Participants returned four envelopes from college A and two envelopes from college B that were dropped on college A’s campus directly to the Psychology Department at college A and a participant returned one envelope from college B dropped on college B’s campus to the Psychology Department at college B, which was completely unexpected. The experimenter counted these envelopes as returned because they were returned to where they originated.

Returning the envelopes to the Psychology Departments could demonstrate a higher degree of helping because a greater amount of effort is required from the participant who personally delivered the letter to the Psychology Department instead of just dropping it in the mail. However, this personal delivery could be viewed as less helpful because letters after being returned to the Psychology Department could delay the letter. However, this analysis did not reveal statistical significance, $\chi^2(3)=3.25$, ns. Thus, the analysis did not support the hypothesis. Although this analysis did not reveal significance, the envelopes had a much higher return rate than expected. Participants mailed all the envelopes within a few days of being dropped. Participants returned four envelopes from college A and two envelopes from college B that were dropped on college A’s campus directly to the Psychology Department at college A and a participant returned one envelope from college B dropped on college B’s campus to the Psychology Department at college B, which was completely unexpected. The experimenter counted these envelopes as returned because they were returned to where they originated.

The results of the second experiment failed to support the hypothesis that people say they will help more in a hypothetical situation than they actually help in a real life situation. Therefore the results did not support either of the hypotheses because participants said they would help mail a letter equally as often as people actually mailed letters.

**General Discussion**

The results suggest that college similarity may not be salient enough to affect altruism and that helping behavior is not
significantly different in hypothetical situations versus actual situations. Even though the results did not support the hypotheses, one important result from a broader perspective considers the fact that the results demonstrated a high percentage of helping in both the hypothetical and actual situations. This result demonstrates the positive role altruism plays in the lives of college students.

One explanation for the results of this study considers the possibility that the similarity of being a college student could have a strong enough effect for people to overlook the differences between the two schools, especially because both studies took place in academic settings. An idea for future research might involve leaving the letters in a non-academic setting with a similarity factor other than college similarity (e.g., different or competing corporations). Participants also may have found helping easy and ignored reasons for helping or they may have felt that helping was not very important in the scenarios given.

A few problems with the present study exist that may have contributed to the results. One of the problems involves the difference between the schools studied. College A is a commuter campus and college B is a residential campus. This difference could become problematic because the differences in population and lifestyles of the students may have led to differences in the way participants perceived and answered questions. Another problem was that the study used upper-level psychology students as subjects for the first experiment. The experimenter has no way of knowing how much background these students already have in Psychology. Students familiar with psychological research may have been able to determine the study's true purpose.

Finally, the difference between Experiment 1 and Experiment 2 also demonstrates additional problems. The two studies did not use the same set of participants to compare hypothetical versus actual helping behavior. This can be potentially problematic because people who participated in the first experiment were psychology students. Participants in the second experiment most likely included other students, faculty members, or even campus visitors. The difference in participants between Experiment 1 and Experiment 2 causes difficulty in determining the validity of the results.

A second problem with the comparison results from the design of the second experiment. In the second experiment there was no way of knowing how many people passed by the envelope without mailing it before someone actually mailed the letter. Therefore, the rate of helping may not be as high as it appears. However, direct observation would have proved quite difficult. These differences between Experiment 1 and Experiment 2 cause difficulty in comparing the results.

An idea for future research is to design a situation in which the same people who took the questionnaire also were subject to finding the letter and to calculate the percentage return rate of the letters based on those people who actually helped. Darley and Batson's (1973) Good Samaritan study provides an example of how future research can accomplish this. Subjects in their study participated in the first part of the experiment in one building and the second part in another. When the subjects moved from one building to the next, they came upon someone in need of help. The researchers staged the experiment in a way that forced the participants to come across the person in need of help as they moved between buildings and it allowed subjects to be observed. Research such as this is necessary to better understand differences between predicted and actual helping behavior.

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