

A Controlled Investigation of Altruistic Behavior: Helping the Hitchhiker
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The number of published reports of field studies on the situational determinants of altruistic behavior has declined rapidly in the past two years. Much of this decline is attributable to the problems of replicability in "real world" settings. Some of the established determinants of helping in New York City simply do not produce desired effects in Knoxville, Tennessee (Morgan, in press). The present study investigated several situational variables affecting the frequency of rides offered a hitchhiker, and is intended to demonstrate how a number of methodological problems inherent in naturalistic research were minimized, thereby increasing the probability of replication.

Under controlled laboratory conditions, Darley and Latane (1968) discovered significant evidence of a "diffusion of responsibility effect" in bystander reactions to emergencies; that is, the likelihood of a person's receiving aid in an emergency varies inversely with the number of potential helpers. Field studies in both emergency (Piliavin, Rodin & Piliavin, 1969) and non-emergency situations (Lerner, Solomon & Brody, 1971) have failed to replicate this finding; however, the results of these studies may be confounded by the potential helpers' inability to escape the presence of the aid-seeker. A natural control for the variable of physical proximity is provided in the hitchhiking situation. A major focus of the present study was naturalistic replication of the conditions found by Darley and Latane to affect helping responses. From their theory it was predicted that drivers would feel a greater responsibility and, therefore, more drivers would stop for a hitchhiker when traffic volume was light, than when many others were available to offer rides.

Degree of need of the stimulus person can be another powerful determinant of helping behavior. It was hypothesized that a hitchhiker with a gasoline can in hand would appear more in need of a ride than one without the can, and would therefore elicit more ride offers. Naturalistic studies of altruistic response to differing levels of need (cf. Schaps, 1972; Wagner & Wheeler, 1969) have shown high need to increase helping responses when costs to the helper were low, but not when the costs were high. In the present study cost was held constant in both high and low need situations. Finally, the hypothesis was tested that male motorists would stop significantly more often for a hitchhiker whose hair length was similar to their own, than for one whose hair length was dissimilar. Bryan and Test (1967) found support for this similarity hypothesis along racial dimensions in a well-controlled field study; however, later studies confounded by variables such as sex of the stimulus person (cf. Wispe & Freshley, 1971) have not supported the theory of discriminative helping.

Method

Drivers of 4,836 private automobiles passing by a hitchhiker (H) served as Ss for the experiment. Only those vehicles with the capacity to admit at least one more passenger were included in this sample.

All conditions of the experiment were conducted by a team of two white males in their mid-twenties, who were of medium weight and height. Each served alternately as the H or the observer. Their clothing was chosen to be as plain and non-descript as possible, so that only one aspect of their physical appearance was varied. One H had nearly shoulder length hair, the other's was cut much shorter in a more conventional fashion.

Data were collected at two locations near a predominately white middle-class suburb of San Jose, California, in the Spring of 1972. The speed of traffic, number of lanes, visibility of H and safety of stopping were comparable at both sites. The locations were differentiated only by their traffic densities. At the low responsibility (Lo-R) location the rate of Ss passing H was approximately one every six seconds; the high responsibility (Hi-R) location had an approximate rate of one S every 60 seconds. The length of observational periods was established separately for the Lo-R and Hi-R conditions, based on the ratio of traffic flow. Five minutes of observation in the Lo-R and 50 minutes in the Hi-R treatments allowed the testing of approximately 50 potential helpers in each condition.

The standard condition consisted of H's standing on the shoulder of the road, clearly visible to oncoming traffic and attempting to "thumb" a ride. Any given period of observation was one of the eight experimental treatment conditions involving some combination of the

three dichotomous variables of high or low driver responsibility, high or low hitchhiker need, and long or short hair length. The nearby observer, concealed from passing motorists, tallied the number of Ss both stopping for and passing by H. Whenever a ride was offered, H informed S that this was a project on "Good Samaritanism" for a psychology class, and that S was one of the few helpful people he had found. After thanking S, H recorded whether a male S's hair was long (over the collar or ears) or short. Timing of the interval and counting of passing cars were suspended until H resumed the hitchhiking stance.

Results

Ss were observed on 12 separate occasions in each of the eight experimental treatments for a total of 96 observational periods. Ss within each observational period were treated as a single group, and each group was assigned a percentage helper score based on the percentage of Ss stopping to offer rides within that observational period. The total N of the study then was the 96 observational periods, rather than the 4,836 motorists. The differences between treatment groups on percentage helper score formed the critical comparisons for the first two hypotheses. The means and standard deviations for each of the eight treatment groups are presented in Table 1.

Table 1
Means and Standard Deviations of Percentage Helper Scores by
S's Level of Responsibility, H's Degree of Need, and Hair Length of the H

	Low Need		High Need	
	Short Hair	Long Hair	Short Hair	Long Hair
Low Responsibility	1.56 (1.88)*	2.99 (2.80)	2.96 (2.53)	4.34 (2.33)
High Responsibility	3.00 (2.25)	5.72 (3.00)	4.83 (2.83)	9.79 (3.42)

*Standard deviations are in parentheses directly below Mean score.

The effects of responsibility, need, and hair length and their interactions were analyzed in a three way analysis of variance. Significant main effects in the predicted directions were found for responsibility ($F = 27.9$, $df = 1$, $p < .001$) and need ($F = 15.8$, $df = 1$, $p < .001$). The long-haired H was found to elicit significantly more helping responses than the short-haired H ($F = 23.2$, $df = 1$, $p < .001$), and a significant interaction was recorded between responsibility and hair length ($F = 4.96$, $df = 1$, $p < .05$). The critical test of the similarity hypothesis was provided by a chi-square analysis of the proportion of male Ss by hair length who offered rides in the short hair and long hair conditions. The hypothesis found significant support in this experiment ($\chi^2 = 14.41$, $df = 1$, $p < .001$).

Discussion

The major conclusion to be drawn from these results is that situational variables external to the actors have been shown to affect helping behavior in a predictable manner. The diffusion of responsibility hypothesis received strong support in this study. Although the main effect of the variable of need was highly significant, inspection of Table 1 reveals it did not tend to be as powerful a determinant of helping as was responsibility (or even hair length). This unexpected result runs counter to normative theories of altruism and dependency (eg. Berkowitz & Daniels, 1963). It is noteworthy that no manipulation of the variables resulted in a dramatic, geometric increase in the number of ride offers. A factor which may have accounted for the relatively low frequency of helping responses elicited in the experiment (an average of 4.39% over all conditions) is the perceived cost of helping to the potential helper. In spite of the fact that the experiment was designed to minimize the cost of helping, it seems quite logical that the costs involved in admitting a stranger into their

cars may have been perceived as prohibitive by many of the Ss. This is especially evident among women, as pointed out by the fact that only six of approximately 1,533 female Ss made ride offers. Fear of robbery, rape or assault undoubtedly deters many drivers from picking up hitchhikers.

The hypothesis of discriminative helping evidenced strong support in this study. Surprisingly, the long-haired H received many more ride offers than the short-haired H despite the predominance of short-haired Ss in the sample. This finding is partially explained by the fact that 84% of the male Ss offering rides across all conditions wore their hair long; long hair may be the current mode of hair style for that segment of the driving population which is predisposed to stopping for hitchhikers. It may be concluded then that hair length, like race (Bryan & Test, 1967), is a physical characteristic of the stimulus person which may facilitate helping if it is shared by the potential helper. It appears that ecological variables are of primary importance in help seeking situations, like hitchhiking, in which the potential helper has only seconds to decide whether or not to offer aid. Decisions are influenced by the presence of other by-standers, perceived cost and by stimulus characteristics of the requestor-e.g. apparent degree of need, sex, or a similarity of race, age, dress or even hair length. If field studies of altruistic responding are to be replicable, these sources of extraneous variance must be considered and controls attempted. Limiting the scope of the study by focusing only a few potential determinants and using dependent measures that are simple and unequivocal reduce the number of alternative interpretations of results and increases the probability of replication.

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