

Staring and Compliance: A Field Experiment on Hitchhiking

MARK SNYDER¹
University of Minnesota

JOHN GREETHER, AND KRISTINE KELLER
Stanford University

A field experiment was conducted in which a single male, a single female, or a male-female couple attempted to hitch rides at four different traffic locations, under conditions in which the hitchhikers either stared at or looked away from oncoming drivers. It was found that staring increased the probability of a driver stopping from .03 to .067 ($z = 2.96, p = .003$). The female was a more successful hitchhiker than either the male or the couple, ($z = 2.215, p = .026; z = 1.861, p = .063$, respectively).

What is the function of the stare or steady direct gaze in human social interaction? In general, the visual behavior of one participant in a two-person interaction is highly correlated with and dependent upon the visual and other nonverbal behavior of the other participant (e.g., Kendon, 1967). The stare, however, is particularly interesting in that it tends to persist independently of the behavior of the other person. Perhaps because the starrer's visual behavior is not responsive to that of the other person, it may have different effects from other forms of human looking behavior—such as mutual eye contact which often appears to be associated with interpersonal intimacy (Mehrabian, 1969).

In fact, Ellsworth, Carlsmith, and Henson (1972) have demonstrated, in a series of field experiments, that the stare has negative or threatening properties for people and therefore results in attempts to withdraw or escape from a situation. In each of their experiments, *Es* stared or did not stare at persons stopped at a traffic light and measured their speed across the intersection when the light changed. *Es* rode motorscooters or stood on street corners. *Ss* were pedestrians or automobile drivers. In each experiment, crossing time was significantly shorted in the stare condition. Ellsworth et al. (1972) interpret

¹Requests for reprints should be sent to Dr. Mark Snyder, Laboratory for Research in Social Relations, Department of Psychology, University of Minnesota, Minneapolis, Minnesota 55455.

their results in terms of a theoretical mediator of tension avoidance: *Ss* reduce the unpleasant tension associated with being stared at by flight. In support of their suggestion that being stared at is unpleasant and motivates avoidance, they draw parallels between their results and research on primate behavior which suggests that the steady direct gaze or stare is a frequently reported component of threat displays in chimpanzees, gorillas, and monkeys (Van Lawick-Goodall, 1968; Schaller, 1963; Van Hooff, 1967). They also note that staring is a component of the expression of anger in humans (Ekman, 1971). Furthermore, being stared at does seem to result in physiological arousal, at least as measured by GSR (e.g., McBride, King, & James, 1965; Nichols & Champness, 1971).

Despite the consistency of the findings of Ellsworth et al. (1972) across a wide variety of situations, it would seem that the stare need not always serve as a threat nor always motivate avoidance behavior. What if the stare were offered in the context of a request for help or a solicitation for a favor, a situation in which culturally specified "helping norms" or altruistic motivation (c.f., Berkowitz, 1972) was salient? Suppose, for example, if rather than simply standing on a corner and staring at passing cars, *Es* had been hitchhiking while staring at the oncoming drivers. If indeed being stared at is uncomfortable and tension producing, and if being stared at individuates the oncoming driver (c.f., Zimbardo, 1969) and makes it hard to ignore the culturally specified helping norm, the driver could both terminate the tension produced by the stare and conform with helping norm by stopping and offering the staring hitchhiker a ride. Alternately, he may look the other way and drive on. This would have the result of terminating the tension produced by the stare, but would probably result in some unpleasant guilt, regret, or distress at having violated the cultural norm of helping or of altruism.

Thus, in the context of a request for help or solicitation of a favor, a stare might result in greater compliance which would prolong the interaction rather than terminate it.

Accordingly, to test this expectation, a field experiment was conducted in which hitchhikers soliciting a ride either did or did not stare at oncoming cars. In addition, *E* was either a male, female, or male-female couple. The experiment was replicated at several different traffic locations. The dependent variable was the frequency of rides offered by the oncoming motorist to the hitchhiking *Es*. It was expected that in this situation a stare would result in more rides than no stare. It was also expected that females would be offered more rides than males.

METHOD

Overview

A male or female or male-female couple hitchhiked at four locations, each with different traffic characteristics, under conditions in which they either

stared at or looked away from passing motorists. Frequency of rides offered in each condition by the oncoming drivers was the dependent variable.

Procedure

Four locations in and around Palo Alto, California, differing in traffic characteristics, were used as hitchhiking sites in this experiment: (1) the on-ramp of a major freeway, (2) the off-ramp of a major freeway, (3) a six-lane surface street on which traffic averaged 30 miles per hour, and (4) a two-lane surface street on which traffic averaged 15 miles per hour. At all sites *Es* were easily visible and it was possible for the motorist to pull off the road without endangering other motorists. Furthermore, at all times *E* hitchhikers complied with California laws regulating hitchhiking which require that hitchhikers must stand on the curb, stay off the street, not obstruct traffic, and not attempt to hitchhike on a freeway.

Es were a male and a female both 20 years of age and both dressed in bluejeans and dark coats. The male had short, curly blond hair, and the female, straight, shoulder length blond hair. Both could be described as neat, collegiate, attractive in physical appearance, and of an appropriate age to be hitchhiking. They solicited rides either singly or together as a couple and either stared or did not stare at oncoming drivers. In the stare conditions, *E* stared at the driver of the target vehicle and attempted to fixate on the driver's gaze and maintain this gaze as long as possible until the driver either stopped his vehicle or drove on. In the comparison conditions, *E* looked anywhere else but at the driver. Thus, on some trials *E* looked in the general direction of the car; on other trials *E* looked at his feet, the road, the sky, etc. *Es* were specifically instructed to neither smile nor frown, and to maintain a casual (neither rigid nor slouching) body postural orientation while soliciting rides.

At every location, rides were solicited in each of the male, female, or male-female couple stare conditions. A total of 50 cars were included in each condition for each location. Thus, a total of 200 cars were approached for each of the four experimental conditions. Only those cars which could easily be stopped were included in the experiment. For instance, cars in the far lane, school buses, mail trucks, and gasoline tankers were not included. The sequence of experimental conditions was determined by a separate random permutation for each location.

The experiment was conducted on successive weekday afternoon sessions in sunny, clear weather. After a motorist stopped to pick up one of the hitchhikers, he was politely thanked and given a printed description of the nature of the experiment. No driver expressed any discomfort when he learned that the hitchhiker did not actually want a ride.

TABLE 1
 NUMBER OF RIDES OFFERED AND PROPORTIONS OF
 SUCCESSFUL HITCHHIKE ATTEMPTS

	No stare attempted	Stare attempted
Male Hitchhiker	5 ^a (.025) ^b	9 (.045)
Female Hitchhiker	9 (.045)	19 (.095)
Male-female couple	4 (.020)	12 (.060)

^aNumber of rides offered summed across four traffic locations.
 Range = 0,200.

^bProportion of successful hitchhike attempts = N rides offered/
 200.

RESULTS AND DISCUSSION

The major dependent variable for this study was the frequency of successful hitchhike requests. The total number of drivers stopping and offering rides to the hitchhiking *Es* for each experimental condition is presented in Table 1. The same information is also presented in Table 1 in terms of proportions of the total number (200) of rides solicited in each condition.

Clearly, staring at an oncoming driver increased the likelihood that he would stop and offer a hitchhiker a ride ($z = 2.96, p = .003$, combined across male, female, and couple).

In addition, a female hitchhiker was more likely to get a ride than either a male hitchhiker ($z = 2.215, p = .026$) or a male-female couple ($z = 1.861, p = .063$). The latter two conditions did not differ from each other ($z = .37, p = .71$). This sex difference, however, only occurs in the stare conditions (z male vs. female, stare = $1.96, p = .05$; z male vs. female, no stare = $1.09, p = .28$).

Thus, it seems that the effect of attempted eye contact and sex of hitchhikers were such that a staring female got the most rides and a nonstaring male the least, with a staring male and a nonstaring female in between.

Contrary to popular belief and hitchhiking folklore, it was no easier for a male-female couple to hitch a ride than a single male, and a mixed sex couple was less successful at soliciting rides than a single female hitchhiker. Although the generality of this conclusion is limited by the fact that it is based upon results obtained by one male and one female *E*, it is probably the case that couples are less successful hitching rides because of space limitations in the cars they approach. That is, it is more likely that the driver will have room for one additional passenger than that he will have room for two or more additional passengers in his car.

There were no differences in the pattern of results as a function of testing location. At each of the four testing locations, similar effects of staring and sex of hitchhiker were found.

Some demographic information was recorded for each driver who stopped to offer a ride. Of the 69 drivers who stopped, only 11 were female. Of the females who stopped, 36.4% were carrying passengers, whereas only 10.4% of the men had passengers in their car. Perhaps female drivers are more concerned about the potential dangers of offering rides to hitchhikers. Also, it appears that men drivers were more likely to stop for the female hitchhiker than for the male hitchhiker. Seventy-seven percent of all rides offered by male drivers were to female *Es*. Two possible reasons to account for this observation immediately suggest themselves. A direct gaze between a single female hitchhiker and a single male driver may have implicit sexual overtones which would more likely be absent between hitchhiker and driver of the same sex. On the other hand, male drivers as well as female drivers may be concerned about the potential dangers of offering strangers rides and feel less threatened by female riders than by male riders.

The majority of rides (59%) were offered by drivers of similar age to the *Es*. Six percent came from teen-agers and 35% from people classified as "older, adults, or middle-aged" by the *Es*.

The results of this experiment suggest that the stare does not universally serve as a stimulus to flight in humans. In the context of a request or solicitation for a favor, staring at the target of the request produced greater approach behavior (compliance with the request) than not staring at the target person. What is not indicated is the mechanism by which compliance is facilitated by the stare. Neither does this experiment indicate what are the crucial distinctions between those situations in which the stare serves as a stimulus to flight or avoidance and those situations in which it motivates approach acquiescence or compliance. Nor can the cross-cultural generality of this finding be specified. The experiment does suggest, however, that driver behavior may be effectively used to investigate in field situations hypotheses concerning nonverbal behavior and compliance.

REFERENCES

- Berkowitz, L. Social norms, feelings, and other factors affecting helping and altruism. *Advances in Experimental Social Psychology*, 1972, 6, 63-108.
- Ekman, P. Universals and cultural differences in facial expressions of emotion. In J. Cole (Ed.), *Nebraska Symposium on Motivation*, 1971, 19, 207-283.
- Ellsworth, P.C., Carlsmith, J.M., & Henson, A. The stare as a stimulus to flight in human subjects: A series of field experiments. *Journal of Personality and Social Psychology*, 1972, 21, 302-311.
- Kendon, A. Some functions of gaze-direction in social interaction. *Acta Psychologica*, 1967, 26, 22-63.
- McBride, G., King, M. G., and James, J. W. Social proximity effects on galvanic skin response in adult humans. *Journal of Psychology*, 1965, 61, 153-157.
- Mehrabian, A. Significance of posture and position in the communication of attitude and status relationships. *Psychological Bulletin*, 1969, 71, 359-372.

- Nichols, K. A., & Champness, B. G. Eye gaze and the GSR. *Journal of Experimental Social Psychology*, 1971, 7, 623-626.
- Schaller, G. B. *The mountain gorilla: Ecology and behavior*. Chicago: University of Chicago Press, 1963.
- Van Hooff, J. A. The facial displays of the Catarrhine monkey and apes. In D. Morris (Ed.), *Primate ethology*. Chicago: Aldine, 1967.
- Van Lawick-Goodall, J. A. A preliminary report on expressive movements and communication in the Gombe Stream chimpanzees. In P. C. Jay (Ed.), *Primates: Studies in adaptation and variability*. New York: Holt, Rinehart & Winston, 1968.
- Zimbardo, P. G. The human choice: Individuation, reason and order versus deindividuation, impulse, and chaos. In W. J. Arnold & D. Levine, (Eds.), *Nebraska Symposium on Motivation*. Lincoln: University of Nebraska Press, 1969.