

## DO GROUPS ALWAYS INHIBIT INDIVIDUALS' RESPONSES TO POTENTIAL EMERGENCIES? <sup>1</sup>

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Previous studies of bystander intervention in emergencies have found that an individual is more likely to intervene if he witnesses the emergency alone than as a member of a group. The present study qualifies this general finding in the framework of group communication processes. Pairs of subjects working on a task overheard a loud crash in an adjoining room. Some pairs of subjects were seated in a pattern that facilitated the visual communication exchanges that naturally occur when a noisy event takes place and others were seated so as to block these communications. When the emergency occurred, groups which could exchange reactions were not reliably less likely to respond than were a third group of subjects who faced the emergency alone. The blocked communications groups tended not to respond and responded significantly less than the other two conditions. These results were interpreted as supporting the hypothesis that a group of people who witness an ambiguous event interact to arrive at a definition or interpretation of it, which then guides each member's reactions to the event.

From studies of bystander intervention in emergencies, one empirical generalization emerges: An individual who witnesses a potential emergency alone is more likely to intervene than one who witnesses it as a member of a group. This has been found whether the emergency involves smoke pouring into a waiting room (Latané & Darley, 1968), a noisy accident to a girl in a nearby room (Latané & Rodin, 1969), a person stealing a case of beer from a liquor store (Latané & Darley, 1970), or a child crying in another room (Staub, 1970, true of older children but not younger ones).

One explanation for this effect postulates a decision process on the part of the individual bystander which is itself the result of two other processes. First, in our culture, "it is considered desirable to appear poised and collected in times of stress [Latané & Darley, 1969, p. 249]." Second, when an am-

biguous event occurs, an individual bystander will be considerably influenced by the ways in which other bystanders are reacting to the event.

Therefore when a bystander is faced with the calm reactions of other bystanders, he may infer that they do not define the event as an emergency, and so he begins to define it himself as no emergency. Thus a state of "pluralistic ignorance" may develop (Latané & Darley, 1969). Although the bystander apparently conforms to the passive, nonhelping behavior of the other people, he does so because he has decided nothing serious is taking place, so that it would be inconsistent with his own thinking to intervene. He has been influenced by the other people, but influenced to accept a particular cognitive definition of the event. This is similar to the process which Asch has labeled, "a change in the object of judgment" rather than a change in the judgment of the object. Inaction, then, is a rational response to a situation that is reinterpreted to require no intervention, rather than an irrational compliance with others' inaction. This explanation might be called the "definition of the situation" hypothesis and can also account for the increase

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in helping behavior that other investigators have found when an individual observes another person helping (Bryan & Test, 1967; Ross, 1970).

This suggests that, as in the case of conformity research (Allen & Levine, 1968; Asch, 1952), any signals which break the uniformity of the group's apparent unanimous indifference to the emergency may free the individual to consider the possibility that the event is in fact an emergency and act accordingly. One set of signals which may work in this manner is the group of signals which we might call "startle responses" (orienting toward the noise, jumping, facial expressions of concern, etc.). In previously mentioned experiments, in which many subjects apparently defined the event as a nonemergency and offered no help, the subjects were either engaged in tasks which made observing each other's startle responses unlikely (Latané & Darley, 1969; Latané & Rodin, 1969; Staub, 1970) or the nature of the emergency was such as not to provoke visible startle responses.

There is some reason to believe that the startle response of an individual, if it is visible, might be taken as particularly revealing of his true thoughts. Goffman (1969) and others have suggested that we tend to place more faith in information from others which is spontaneous and apparently out of their control. Thus facial expressions are often seen as a more valid indication of the feelings of others than is their overt behavior, for the former are thought to be more spontaneous and less subject to control than the latter.

The startle response, then, is a naturally occurring response that signals some break in the unanimity of the group's passive reactions to a potential emergency, and thus provides a mechanism for testing the definition of the situation explanation for the typical lack of response of groups witnessing emergencies. An emergency was staged in a room adjacent to one in which two subjects were working on a visual perception task. The emergency was a noisy crash which signaled that some precariously balanced construction equipment had fallen on a workman. Some of the groups overheard the emergency while facing each other, and thus were in a position to see

each other's startle response. Other groups were oriented away from each other. In a third condition, subjects faced the emergency alone.

The predictions were that the subjects who overheard the crash while alone would intervene, while the nonfacing groups would re-define the event as no emergency and therefore fail to intervene. These experimental conditions replicate those of previous experiments, and the predicted findings would replicate these results. The orientation hypothesis predicts that the subjects from the facing groups will be more likely to define the event as an emergency, and thus more likely to offer help than the subjects from the nonfacing groups.

## METHOD

### *Subjects*

Fifty male Princeton University undergraduate served as subjects. All were volunteers who were paid for their participation.

### *Procedure*

Subjects, either in pairs or alone, arrived at the experimenter's office where they were given a short printed paragraph explaining the two types of activities in which they would be participating. The first activity centered around various tests of vision while the second involved an artistlike sketching situation. They then accompanied the experimenter and his assistant down the corridor to a room where the vision testing was conducted. Here they took several vision tests, while the assistant recorded their responses.

After the vision tests had been completed, the experimenter explained that he had arranged to borrow a room from another research team for the sketching task which would take up the remainder of the session. Subjects then followed the experimenter upstairs to the sketching room where the door was found to be locked. The experimenter expressing consternation over the fact that the door was "supposed to be left open" for him, muttered something about checking to see if there was anyone around who had the key. He knocked next door and after a short delay a workman (actually a confederate of the experimenter) with screwdriver in hand opened the door. The experimenter pointed down the hall to the sketching room and asked if the workman had a key that would open the door. The workman replied that he didn't but speculated that they could get in through a closed but unlocked floor-to-ceiling partition which separated the two rooms. The experimenter asked the subjects to follow him through the workman's room as he pulled open the sliding partition, admitted the subjects

and himself into the sketching room, thanked the workman, and pulled the partition shut.

Both rooms were filled with an array of electronic equipment and construction materials, apparently being used by the other investigators from whom the room had been borrowed. Part of the construction materials included several large, heavy wooden-framed metal screens balanced against a wall, which the subjects had to step around in order to enter the sketching room through the partition.

When the subjects had been seated, the experimenter read a prepared set of instructions which directed them to make a sketch of a model horse that was in front of them. They were told not to be concerned about how *artistic* the sketches were but that the experimenter merely wanted a rough idea of *perspective* in sketching from a real model as compared to other groups who would do their sketching from a photograph of the model. Subjects were instructed not to talk and to do their sketches independently. The experimenter then announced that he was going back downstairs to correlate the results of their vision tests and would be back in about 10 minutes. (Actually the experimenter joined the experimental assistant in an observation room to observe and record the session through a one-way mirror which was disguised by drawings which were hanging in front of it.)

#### Experimental Conditions

In the facing condition pairs of subjects were seated face-to-face across a table on which there was a large plastic model of a horse along with sketching pads and drawing pencils. For the alone condition, single subjects were seated in one of these same two positions 50% of the time on one side of the table and the remaining 50% on the opposite side. In the nonfacing condition pairs of subjects were seated back to back, and each subject had his own horse model in front of him on a small stand. Ten subjects were run in the alone condition and 10 pairs of subjects in each of the other two conditions. The experimenter was blind as to which of the two group conditions was being run until, of course, he entered the sketching room and could see the arrangement of the chairs.

#### The Emergency Incident

Four minutes after the experimenter had left, the workman staged the emergency incident. Pushing over the heavy screens that had been balanced against the wall on his side of the partition produced a resounding crash which was immediately followed by an exclamation of "Oh, my leg!" and a series of painful groans lasting for 3 seconds, which were actually emanating from a concealed tape recorder. After an interval of 5 seconds there was another shorter set of groans heard for 1.5 seconds followed by complete silence. The confederate positioned himself on the floor next to the fallen screens, holding his leg.

TABLE 1  
LIKELIHOOD AND SPEED OF HELPING RESPONSES

Condition	% Responding (N = 10)	Average time of responders in seconds	Average time of all subjects in seconds
Alone	90	11.9 (9 individuals)	46.7
Facing	80	16.6 (8 groups)	85.3
Nonfacing	20	17.0 (2 groups)	291.4
<i>M</i>	63.3	14.4	141.1

#### Dependent Measures and Debriefing

Subjects' reactions to the incident were recorded and timed. The reaction time was measured from the moment of the crash until the occurrence of some overt helping response. For most subjects who helped, the measure of response latency terminated when they grasped the handle of the partition and began to slide it back to investigate the situation in the other room. The shouting of an inquiry through the partition was also considered a helping response and the reaction time measure was ended as soon as the subject called out loudly enough to be heard and acknowledged by the confederate.

After 6 minutes of observation the experimenter returned to the sketching room and inquired how things were going. If there was no spontaneous report of the incident, the experimenter commented that a secretary had mentioned that she had passed by the room several minutes before and had heard some sort of "commotion." After listening to the subjects' replies, the experimenter carefully explained the nature and necessity of the experimental deception and assured the subjects that the other person was uninjured. He then administered a short questionnaire to obtain subjects' impressions of the incident and its perceived seriousness, previous experience with emergencies, and possible suspicion about the experimental procedure.

#### RESULTS AND DISCUSSION

The results supported the experimental hypothesis: As Table 1 indicates, 80% of the groups in a face-to-face orientation responded to the crash with the offer of some kind of help whereas only 20% of those groups not facing each other reacted when the incident occurred. (Fisher's exact test,  $p < .01$ ). Ninety percent of subjects reacted to the crash when alone. Therefore 99% of a set of two-person groups could be expected to contain at least one individual who responds ( $1 - .10^2$ ). If the effect of the group on helping behavior is due to anything other than a simple increase in number of

people over the alone condition, then the rate of helping in a group should be significantly different from 99%. The 80% response rate of the face-to-face groups was not significantly different from the value<sup>4</sup> ( $p = .24$ ) while the 20% response rate of the non-facing condition was significantly smaller (Fisher's exact test,  $p < .01$ ).<sup>5</sup>

Helping rate was thus affected not simply by the presence of other bystanders, but by their physical orientation vis-à-vis each other; groups in a facing orientation were more likely to respond than nonfacing groups. In fact, the facing groups were not significantly slower or less likely to respond than were individuals who were alone when the incident occurred.

What happens in the face-to-face situation which increases the level of helping over the nonfacing situation? There are a number of processes which may be involved—all of which are related to the definition of the situation. First, the observer receives contradictory information (the other observer does not give help, indicating that the situation is *not* an emergency; the other observer also shows a startle response or worried expression, indicating that the situation is an emergency). Since all the available information from the other person does not support any single interpretation, the first observer feels free to respond as do the subjects in the alone condition—that is, as though it were an emergency. Second, the startle response is a spontaneous communication and as such it is given greater weight (following Goffman) than the more controllable and less spontaneous decision to refrain from helping. Third, the individual not only observed the startle response sequence of the bystander, but also produced one himself. Realizing that the other observer in the face-to-face situation

has observed his response, he may feel that he had communicated that he defined the situation as an emergency. He might then feel obligated to behave in a manner consistent with his definition.

There are several other aspects of the subject's behavior which support the idea that the definition of the situation process is a crucial determinant of the subjects' response (but not uniquely predicted by it). First, all of the information that signaled the possibility that the event was an emergency (the crash, groans, and whatever startle responses were given) occurred almost immediately. If the subject were to adopt an emergency definition, therefore, one would expect him to do it early or not at all, since all later information—the other person's inaction—mitigated against the emergency definition. All subjects who were to respond did so within the first 30 seconds of the 6-minute interval (that is, within 20 seconds of the final groan). Those subjects who responded did so in an average of 14.4 seconds (and did not differ by condition; Table 1, Column 3). Second, subjects in the two-group conditions reported different definitions of the event. Nineteen out of the 20 subjects in the facing condition indicated on the postexperimental questionnaire that the crash had signaled that something was *wrong*; while only 11 of the nonfacing subjects did so. (The definitions of pairs of subjects are not statistically independent, therefore they were combined, and a test between the average definition of the 10 facing and the 10 nonfacing pairs was run,  $t = 2.72$ ,  $df = 18$ ,  $p < .05$ .) Subjects in the facing condition consistently emphasized that some equipment had fallen *on* the workman and frequently used adjectives such as "injured" or "hurt" to describe his fate, while subjects in the nonfacing condition tended to report that some equipment had merely fallen down.

To conceptualize the defining process in the face-to-face groups a single exchange of signals may underrate its complexity. An observer kept a record of events throughout the experiment, and these impressions emerged from the protocols: Generally in all conditions, subjects individually showed similar degrees of initial startle response

<sup>4</sup> For simplicity these calculations were made, assuring an expected response rate of 100% rather than 99%.

<sup>5</sup> If the *speed of response* results are analyzed by analysis of variance procedures and multiple comparisons (on the time scores), the above results emerge more strongly ( $F = 9.60$ ,  $p < .01$ ). However, this method of analysis is questionable since the data are essentially dichotomous between quick responders and nonresponders. No usual transformation eliminates this bimodality.

and facial expressions indicating concern or arousal. In the facing condition, a subject could see the other person's startle response and apparently also looked for confirmatory expressions of concern from the other. Usually he got them, but, in the two non-responding facing groups, it was the observer's judgment that one of the dyad members initiated helping but terminated his efforts when he did not observe any signs of concomitant concern on the part of the other subject. In the nonfacing condition, subjects also sought defining cues from the other person. Unable to see the visual cues, many subjects appeared to be listening for possible auditory cues produced by their partner in order to learn how he was reacting. In 8 out of the 10 groups the absence of such cues signaled inaction. In both of the groups which responded, when one subject got up to investigate the incident, the remaining subject, upon hearing indications of his partner's action, helped also.

The findings of the current study may help to explain some of the inconsistencies in the early research on bystander intervention. Darley and Latané (1968) found that the rate of helping was reduced as the number of bystanders increased. However, Piliavin, Rodin, and Piliavin (1969), in a field experiment staged in a subway car, found that rate of helping was unaffected by the number of bystanders present. In subways, however, the seating arrangement is similar to that in the face-to-face condition of the present study. The seats are oriented across from or at right angles to one another—placing the passengers in a facing or semifacing situation. Present results indicate that other bystanders will not decrease the rate of helping in such a situation.

Current results also suggest that when the diffusion and definition processes are both possible, the definition process tends to dominate. The diffusion of personal responsibility felt by a subject in the facing or nonfacing condition of the present study was presumably equal since in each case there was one other person available to help. However, markedly different response rates in fact occurred, caused by processes leading to different definitions of the situation.

Our characterization of the process as one in which the observer arrives at an immediate definition of the situation may also be an oversimplification. It is possible that the process may be extended by various means so that the subject *redefines* the situation at various points, after observing his own behavior or the behavior of the other subject. The present data, however, do not permit us to choose definitely among these alternative explanations.

Despite the problems presented by the competing explanations mentioned above, this study indicates that it may be productive to pay greater attention to the nonverbal aspects of those social influence processes which are operative during the time when a situation is being defined.

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