THE IMPACT OF SITUATIONAL CUES AND BYSTANDER EMOTION ON LABELING AN EVENT AS A ROBBERY

Andrew Langsdale
Martin S. Greenberg

University of Pittsburgh

This study examined the influence of situational cues and observer mood on labeling an ambiguous event as a robbery. Participants (210 women) were randomly assigned to one of 12 cells in a 2 x 2 x 3 between-subjects factorial design. Participants viewed a short video of a street interaction between a man and a woman. Two independent variables were manipulated in the video: (a) duration of their conversation (10 vs. 30 seconds), and (b) the man's speed of departure (walk vs. run). Prior to viewing the video, participants' completed (c) a mood induction task (positive, neutral, or negative). Results revealed that running from the scene was labeled as a robbery only when the actors conversed for a short duration. When they conversed for a longer duration, speed of departure did not affect how the event was labeled. The participant's mood had minimal effect on how the event was labeled. The implications of the findings for bystanders' failure to intervene or notify the police were discussed.

The murder of Kitty Genovese in 1964 and the failure of 38 witnesses to intervene or notify the police called attention to the important role played by bystanders in controlling crime (Rosenthal, 1964). According to results from The National Crime Victim Survey (NCVS), bystanders are present during two-thirds of all violent crime victimizations and their actions more often help

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Correspondence concerning this article should be addressed to Martin S. Greenberg, Email: greenber@pitt.edu

(36%) than worsen (11%) the situation (Bureau of Justice Statistics, 2002). The importance of bystander involvement is further attested to by the finding that 27% of violent crimes that come to the attention of the authorities result from bystander notification (Bureau of Justice Statistics, 2003).

In the years following the murder of Kitty Genovese, several theoretical models were proposed to account for bystanders' decision to intervene or summon help (Batson, 1998; Latane & Darley, 1970; Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991). These models share the assumption that the decision process involves a series of decisions. For example, Latané and Darley (1970) proposed that the bystander must: (a) notice something is happening, (b) interpret it as an emergency, (c) decide that it is his/her responsibility to help, (d) figure out how they can assist the victim, and then finally, (e) implement their action. The vast majority of the research on bystander reactions has focused on perceptions of responsibility in response to non-criminal emergencies such as accidents and medical emergencies (e.g., Batson, 1998). These studies consistently demonstrate that the presence of other bystanders defuses responsibility, resulting in bystanders offering less help to such victims (Latane & Nida, 1981).

Of the small number of studies that have investigated bystander reactions to criminal emergencies, few have focused on the second step in Latané and Darley's (1970) model, how the event is labeled as a criminal emergency. Indeed, little is known about how bystanders define an ambiguous street encounter as a crime. Since criminals want to avoid detection when confronting a "victim" in the presence of others, they are likely to conceal cues that suggest a crime is being committed. For example, in public settings it would be unusual for a robber to order his victim to raise his hands. Instead, the robber would instruct the victim to act "natural" and not do anything that would draw attention to the encounter. With few exceptions (e.g., Wendel & Greenberg, 1997), almost all of the studies that have investigated how bystanders label such encounters as a crime have focused not on the situational cues, but rather on the role of social influence (Batson,

1998; Bickman & Rosenbaum, 1977; Latane & Darley, 1970). Consistent with social psychological theorizing, this research shows that a bystander's definition of a situation is highly susceptible to social influence, particularly when the situation is ambiguous and confusing.

An important question to address is how do bystanders resolve their uncertainty when others are not present? Presumably, bystanders rely on situational cues to make sense of what they are observing. When observing a street encounter between two people, bystanders might consider the setting (i.e., neighborhood), the gender of the participants, the time of day, and various nonverbal cues emitted by the participants, such as their facial reactions, postural cues, and hand gestures. Given the relative absence of research on the cues relied upon by bystanders, the purpose of the present study was to investigate the joint influence of situational cues and bystander characteristics on the labeling of an ambiguous street encounter as a robbery.

Situational Cues and Labeling an Ambiguous Event as a Robbery

Robbery is defined by the NCVS as "completed or attempted theft directly from a person, of property or cash by force or threat of force, with or without a weapon, and with or without an injury" (Bureau of Justice Statistics, 2002, p. 7). This definition calls attention to certain situational cues that may cause bystanders to label an event as a robbery. As robbers are typically strangers to their victims, threat is involved, and the suspect wants to avoid apprehension, we reasoned that the duration of the interaction and the speed of the suspect's departure would be salient cues for labeling an event as a robbery. We predicted, therefore, that observers are most likely to perceive a robbery when there is a very brief interaction between two people followed by a very swift departure by the suspect. Thus, we manipulated the length of the interaction (10 seconds vs. 30 seconds) and the suspect's speed of departure (run vs. walk).

Bystander's Affect and its Effect on the Labeling Process

In addition to features of the stimulus situation, perceptions are influenced by features of the bystander, such as their affective

state. How one labels an encounter between two people depends in part on the accessibility of the label. Research on the relationship between affect and cognition shows that one's affective state can influence such accessibility (Bower & Forgas, 2001). To account for this relationship, Bower (1981) developed an associative network model of mental representations, linking affect and cognition. This model proposes that a person's current affective state activates affectively congruent cognitions, thereby making such cognitions more easily accessible (Bower & Forgas, 2001). Bower (1983) succinctly described what he calls such "mood-congruent processing" in the following way:

> When emotions are strongly aroused, concepts, words, themes, and rules of inference that are associated with that emotion will become primed and highly available for use by the emotional subject. . . . That is, his emotional state will bring into readiness certain perceptual categories, certain themes, certain ways of interpreting the world that are congruent with his emotional state; these mental sets then act as filters of reality and as biases in his judgments (p. 395)

Based on the mood-congruent associative network model (Bower, 1981), we reasoned that when observing an ambiguous interaction, bystanders who are placed in a negative mood would have easier access to negative labels (e.g., robbery) than participants in a neutral or positive mood who would have easier access to more benign, non-criminal interpretations (e.g., chance meeting between two acquaintances).

METHOD

Participants and Design

Participants consisted of 210[1] women ranging in age from 18 to 24 (M = 18.70) who were randomly assigned to 1 of 12 cells in a 2 x 2 x 3 between-subjects factorial design. The independent variables consisted of: (a) the duration of the conversation between the actors in a video (10 vs. 30 seconds), (b) the suspect's speed of departure (run vs. walk), and (c) the participant's mood (positive,

neutral, or negative). All participants were recruited from the Psychology Department subject pool. This pool consists of undergraduates enrolled in a number of sections of the introductory psychology course. All received course credit for their participation. We chose to study undergraduates because the vast majority of experimental research on bystander intervention has involved college students. Thus, by using a population similar to what has been studied in the past, we hoped to produce cumulative findings that could build upon this body of research.

Manipulation of the Independent Variables

Mood induction. In order to induce mood, we chose a procedure previously used in mood manipulation experiments (e.g., Forgas, Laham, & Vargas, 2005; Gasper, 2004). Participants who were in the negative mood condition were asked to write about a recent experience that put them in a bad mood, that was left unresolved, and that they still think about from time to time. They were told to focus on the feelings associated with the episode. Participants in the positive mood condition were asked to write about a recent experience that put them in a good mood and that they still think about from time to time. Participants receiving the neutral mood induction were asked to write about the last time they went grocery shopping. All participants were told that no one was going to read what they had written, and that they would be taking their writing home with them after the experiment. During piloting, we discovered that anonymity allowed participants to candidly describe the incident and their attendant feelings without feeling inhibited by evaluation apprehension. They were given eight minutes to complete the task.

Manipulation of conversation duration and speed of departure. Participants viewed a one-minute videotape in color with no sound. The tapes, which were created and standardized by Wendel and Greenberg (1997), showed a man and a woman in their twenties engaging in an ambiguous interaction on an urban street corner at dusk. The video began with the man, wearing a long dark overcoat, leaning against a red brick building, with his hands in his pockets. The woman, wearing a dark overcoat, came around the corner. The man stepped in front of the woman,

blocking her path. They stood approximately three feet apart and appeared to be conversing. No overt body language was present to discern the purpose of the interaction. They conversed for either 10 or 30 seconds. The woman then reached into her pocket and handed the man an indiscernible object. Upon receipt, the man departed by either running or walking away.

Questionnaires

Initial mood assessment questionnaire. Immediately after the mood induction, participants completed a questionnaire that asked them to retrospectively evaluate their feelings while they were writing their personal stories. The questionnaire consisted of a series (n = 13) of 7-point bipolar rating scales (pleasant/unpleasant, cruel/kind, foolish/wise, tense/relaxed, happy/sad, angry/not angry, warm/cold, weak/strong, awful/nice, good/bad, active/passive, surprised/not surprised, dissatisfied/satisfied).

Post-questionnaire. The purpose of this questionnaire was to measure the impact of the independent variables on the dependent measures, and to check the success of the manipulations. The questionnaire contained an open-ended item to assess participants' interpretation of the interaction. It read: "How would you interpret what you just saw? That is, what do you think was happening? Provide reasons for your interpretation." In addition, there was a closed-ended 7-point bipolar rating scale that measured the strength of their belief that they witnessed a robbery. The item read: "How likely is it that what you observed was a robbery?" Response alternatives ranged from *Very likely = 7* to *Very unlikely = 1*. The manipulation check for duration of conversation consisted of an open-ended response to the question, "About how many seconds did the individuals converse before something was handed over?" Perception of the man's speed of departure was measured by responses to the question, "How would you characterize the man's departure from the scene?" Response alternatives included: He ran (scored 1), He walked quickly (scored 2), and He walked slowly (scored 3). The questionnaire also included the same 13 items previously used on the initial questionnaire to measure the success of the mood induction (but in

a different order). Rather than measure their feelings while writing their story, however, the items were used to evaluate their feelings when they first started watching the video. The purpose of measuring mood at two different times was to test the stability of the mood induction. Finally, in order to assess suspicion and the presence of demand characteristics, they were asked to describe what they believed the purpose of the experiment to be.

PROCEDURE

Each session included up to four participants, with all participants in a session being placed in the same condition. After seating participants at their individual desks, the experimenter distributed consent forms for each to read and sign. They were given eight minutes to complete the mood induction task (described previously). Following the induction of either a positive, neutral, or negative mood, participants completed the initial mood assessment questionnaire, which was designed to measure their mood while completing the induction task. After collecting the completed questionnaires, they were instructed to watch a short video and complete a questionnaire about what they saw. Participants were shown one of the four taped versions of the interaction (i.e., 10-second – run, 30-second – run, 10-second – walk, 30-second – walk). After viewing the video, participants completed the post-questionnaire. Participants in the neutral and positive mood conditions were then debriefed. Participants in the negative mood condition were given the positive mood induction in order to neutralize the negative mood before being debriefed.

RESULTS

The data were analyzed by means of a series of 2 x 2 x 3 ANOVAS. The three independent variables consisted of: (a) duration of the conversation, (b) the man's speed of departure, and (c) the mood of the participant. All post hoc comparisons were conducted using the Tukey HSD procedure (alpha = .05). Responses to the post-questionnaire item measuring suspicion revealed that no participant guessed the purpose of the experiment or was suspicious of the intention.

Manipulation Checks

Mood. Two manipulation checks of mood were employed. The first was performed immediately after the mood induction task (i.e., initial mood assessment questionnaire). A principal components factor analysis performed on the 13 items assessing mood while the participants were writing their story yielded a single 9-item cluster (Eigenvalue = 6.98) that was labeled Positive Mood (see Table 1). As predicted, the ANOVA performed on this factor score yielded a significant main effect for mood, $F(2, 198) = 243.72$, $p < .01$. Post hoc comparisons showed that the three levels were significantly different from each other with the positive mood condition scoring the highest ($M = 55.74$), the negative mood condition scoring the lowest ($M = 27.71$), and the neutral mood condition scoring between the two ($M = 46.12$). Three specific scales (i.e., good-bad, happy-sad, tense-relaxed), previously used by Forgas and his colleagues (Forgas, 1995; Forgas & Ciarrochi, 2002), served as another measure to assess the success of mood manipulation (Cronbach's $\alpha = .87$). The ANOVA performed on this measure of mood also confirmed the success of the manipulation, $F(2, 198) = 174.55$, $p < .01$. Post hoc tests revealed that those in the positive mood condition ($M = 18.54$) scored higher than those in the neutral mood condition ($M = 15.26$) and negative mood condition ($M = 9.01$). Further, those in the neutral mood condition scored significantly higher than those in the negative mood condition.

The second mood manipulation check was administered on the post-questionnaire. It asked participants to rate their mood while watching the video. A similar factor analysis identified the same 9-item factor as the first manipulation check (Eigenvalue = 6.26) (see Table 1). Once again, there was a significant main effect for mood, $F(2, 195) = 13.75$, $p < .01$. This effect was qualified, however, by a Mood x Duration interaction, $F(2, 195) = 3.41$, $p < .05$. As Table 2 shows, those in the positive mood condition scored significantly higher than those in the neutral and negative mood conditions only in the 10-second duration condition, but not in the 30-second duration condition. Additionally, those in the neutral mood condition had higher scores than those in the negative mood

condition, but only in the 30-second condition. Again, the three-item scale used by Forgas (Cronbach's α = .80) produced the exact same findings as the 9-item Positive Mood factor (see Table 3). A main effect for mood was detected, $F(2, 195) = 13.68$, $p < .01$, which was qualified by a Mood x Duration interaction, $F(2, 195) = 3.617$, $p < .05$. The mean for the positive mood condition was significantly higher than the means for both the neutral and negative mood conditions, but only in the 10-second condition. Additionally, those in the neutral mood condition had higher mean scores than those in the negative mood condition, but only in the 30-second condition.

Duration of conversation and speed of departure. The manipulation check for duration of conversation involved a single item on the post-questionnaire. As predicted, there was a significant main effect for duration, $F(1, 198) = 43.17$, $p < .01$, with participants in the 30-second duration condition producing a higher duration estimate ($M = 24.95$) than those in the 10-second duration condition ($M = 10.80$). The ANOVA performed on the post-questionnaire item measuring the perpetrator's speed of departure yielded a significant main effect as well, $F(1, 198) = 243.98$, $p < .01$. As expected, when the perpetrator ran, he was perceived as fleeing the scene significantly faster ($M = 1.24$) than when he walked away ($M = 2.13$).

Main Dependent Measures

Labeling the event as a robbery. There were two measures of how participants labeled the interaction – one open-ended and one closed-ended measure. With regard to the open-ended item, participants were asked to describe what they had witnessed. Responses were coded 1 = robbery, 0 = not a robbery. The ANOVA performed on these data yielded a duration of conversation main effect, $F(1, 198) = 7.37$, $p < .01$, and a speed of departure main effect, $F(1, 198) = 36.7)$ $p < .001$. The event was more likely to be labeled as a robbery when the duration was brief and the man ran from the scene. However, these main effects were qualified by a significant Duration x Departure interaction, $F(1, 198) = 10.09$, $p < .01$. As shown in Table 4, observing the man run from the scene increased the likelihood of labeling the interaction

as a robbery when they had interacted for 10 seconds, but not when they had interacted for 30 seconds. No significant effects were found with regard to participants' mood. The ANOVA performed on the closed-ended measure of "likelihood of a robbery" yielded a very similar pattern of results: main effects for duration of conversation, $F(1, 198) = 7.77$, $p < .01$, and the man's speed of departure, $F(1, 198) = 39.44$, $p < .01$. Similar to the results for the open-ended item, both of these main effects were qualified by a significant Duration x Departure interaction, $F(1, 198) = 16.67$, $p < .01$, (see Table 5). Participants were more likely to label the event as a robbery when the man ran from the scene, but only when they had conversed for 10 seconds. In addition, a Mood x Duration interaction was detected, $F(2, 198) = 4.63$, $p = .011$. The short duration of conversation between the two actors was more likely to be labeled as a robbery than the longer conversation duration, but only when the participants received the positive mood induction, not when they received the negative or neutral mood induction (see Table 6).

DISCUSSION

The results of this study help fill an important gap in theoretical models that attempt to account for bystanders' involvement in preventing crime. Before such involvement can occur, bystanders must first label what they witness as a crime. Failure to do so will abort the decision process. Our data indicate that the duration of an interaction between two people and the speed of departure of one of the persons are cues to labeling the event as a robbery. Robbery involves force or the threat of force and the robber wants to avoid apprehension, therefore it stands to reason that a short interaction followed by a speedy departure would result in bystanders labeling the event as a robbery. The significant interaction effect obtained for both measures of labeling (i.e., the open- and closed-ended measures) suggests that the presence of just one cue is not sufficient to evoke the robbery label, but rather it is the co-occurrence of the two cues that prompts bystanders to label the event as a robbery. That is, for a robbery to be perceived, the cues had to be complementary in suggesting a robbery (i.e., 10-second interaction, speedy departure)

rather than contradictory (i.e., 10-second interaction, slow departure, or 30-second interaction, speedy departure), or complementary in not suggesting a robbery (i.e., 30-second, slow departure).

It is noteworthy that very similar results were obtained using the open- and closed-ended items. Recall that the open-ended item simply asked participants to describe what they saw and what they thought was happening. That is, the response was spontaneous rather than being prompted as might be the case with the closed-ended item: "How likely is it that what you observed was a robbery?" The fact that the two very different measures yielded similar results testifies to the robustness of the findings.

Contrary to expectations, participants' emotional state did not influence their perception of the encounter. With the exception of a Mood x Duration interaction, which was difficult to interpret (see Table 6), participants' mood appeared not to influence how they labeled the event. However, it would be premature to conclude that a bystander's emotional state is less important than situational cues in labeling an event as a crime. Mood effects are most likely to occur when the stimulus event is ambiguous and complex (Forgas, 2006). The short encounter depicted in the video may not have been sufficiently ambiguous to generate mood effects. Future research on the impact of emotional states on the labeling process should include stimulus events of varying degrees of ambiguity.

Limitations and Recommendations for Future Research

There are, of course, several limitations to the current findings. The external validity of the results is limited by the population studied. Only female undergraduates ranging in age from 18 to 24 years participated in this experiment. To increase the external validity of the findings, future research should employ a more diverse sample of participants. Conceivably, a more diverse sample would yield a different pattern of results. Another limitation concerns the manner in which the stimulus event was presented to participants. Participants were instructed to observe an interaction on video and then answer a questionnaire. In a real-

life situation, bystanders are not instructed to attend to a particular stimulus, but rather are subjected to a host of distractions that could interfere with their ability to process an ambiguous street interaction. Future research should investigate the labeling process under more involving circumstances. Finally, future research should examine the mechanisms by which bystanders integrate multiple cues to conclude that a crime is occurring. For instance, are there order effects such that cues occurring early in the sequence play a more significant role (i.e., a primacy effect) or do cues occurring at the end of the sequence play a more significant role (i.e., a recency effect)?

This experiment confirmed the importance of two stimulus features: duration of conversation and the alleged perpetrator's speed of departure. As other cues are tested and the role of mood better defined, we may gain a better understanding of how people label street encounters and why bystanders often fail to intervene and/or report crimes to the police.

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FOOTNOTE

[1] Originally, there were 211 participants, but one was eliminated because of a significant age difference (i.e., 41 years old).

Table 1
Factor Loadings for Positive Mood Factor

	Unstandardized factor loading	
Variable	Initial questionnaire	Post-questionnaire
Pleasant	.91	.83
Good	.91	.82
Nice	.90	.88
Happy	.88	.83
Satisfied	.88	.73
Not Angry	.85	.73
Kind	.84	.73
Warm	.76	.78
Relaxed	.74	.73

Note. Factor loadings greater than or equal to .70 were included on the positive factor scale.

Table 2
Means for 9-Item Positive Mood Factor by Duration x Mood

	Mood		
Duration of Conversation	Positive	Neutral	Negative
10 seconds	46.91 $_{a}$	39.73 $_{b}$	36.11 $_{b\,c}$
30 seconds	42.03 $_{a\,c}$	43.37 $_{a\,b}$	35.97 $_{c}$

Note. Means with the same subscript are not significantly different at the .05 level.

Table 3
Means for Positive Mood Factor Using the 3-Item Forgas Scale by Duration x Mood

	Mood		
Duration of Conversation	Positive	Neutral	Negative
10 seconds	15.52 $_{a}$	13.06 $_{b}$	11.53 $_{b\,c}$
30 seconds	13.40 $_{a\,c}$	14.18 $_{a\,b}$	11.29 $_{c}$

Note. Means having the same subscript are not significantly different at the .05 level.

Table 4
Mean Probability that Event was a Robbery by Duration x Departure – Open-Ended Measure

	Duration of conversation	
Speed of departure	10 seconds	30 seconds
Walk	.16$_{a}$	.19a
Run	.71$_{b}$	.35a

Note. Means with the same subscript are not significantly different at the .05 level.

Table 5
Mean Likelihood Estimate that Event was a Robbery by Duration x Departure – Closed Ended Measure

	Duration or conversation	
Speed of departure	10 seconds	30 seconds
Walk	2.61 $_{a}$	2.93 $_{a}$
Run	4.88 $_{b}$	3.35 $_{a}$

Note. Means with the same subscript are not significantly different at the .05 level.

Table 6
Mean Likelihood Estimate that Event was a Robbery by Mood x Duration – Closed Ended Measure

	Mood		
Duration of Conversation	Positive	Neutral	Negative
10 seconds	3.97 $_{a}$	4.12 $_{a}$	3.15 $_{a}$
30 seconds	2.74 $_{b}$	3.21 $_{a\,b}$	3.47 $_{a\,b}$

Note. Means with the same subscript are not significantly different at the .05 level.