

## Within-Target Illusory Correlations and the Formation of Context-Dependent Attitudes

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Two experiments explored the formation of context-dependent attitudes about a single social target. One such mechanism for the development of differential attitudes toward a target in different contexts is illusory correlation formation. It was proposed that within-target illusory correlations (i.e., perceiving unwarranted associations between salient target behaviors and distinctive domains in which the target is observed) can result in biased evaluations of a social target in different domains (e.g., home vs. work). When memory-based (vs. on-line) judgments were induced, perceivers formed context-dependent attitudes for both group (Experiment 1) and individual (Experiment 2) targets. These findings are consistent with theories regarding multiply categorizable attitude objects. Further, they suggest that some apparent discrepancies between attitudes and behavior may reflect holding multiple context-dependent attitudes about social targets.

In a classic intergroup relations study, Minard (1952) documented how White coal miners in the Pocahontas Coal Field of McDowell, West Virginia, treated Black coworkers much more favorably in the coal mines than outside of the coal mines. Although some White miners behaved consistently (either uniformly positive or negative) toward Black miners in the mines and in the local town. Minard found that the majority of White miners showed striking differences in their behaviors in the two situations.<sup>1</sup> Minard (1952) reported that these White miners showed "practical equality of status" toward Black coworkers in the mines, but that in the outside world, the White miners showed an "elevation of status" as they became members of "a superior caste group" (p. 30).

The differential treatment of Blacks in these domains (the mines vs. the surface) reflects the important point that in addition to distinguishing between members of different social groups, perceivers often draw meaningful distinctions *within* a single social target in different contexts. In support of this, Trafimow (1994) found that perceivers are sensitive to information presented about different domains of a single target person's life, resulting in domain-specific attribution errors. For instance, perceivers are much more likely to overgeneralize about one's

dispositional qualities (i.e., demonstrate the fundamental attribution error) in one's work setting from observations of one's work behaviors than from observations of one's home behaviors.

The differential perception and treatment of social targets in different contexts reported by Trafimow (1994) are reminiscent of the findings that Minard (1952) reported for the Pocahontas coal miners. But what processes underlie results such as these? For example, why did the White miners demonstrate different judgments of, and behaviors toward, Black miners on the basis of the context (mine vs. town) in which they were encountered? Minard had suggested several possible reasons for why most White miners held more positive attitudes toward Black coworkers in the mines than in the town. One reason involved the specific norms and motivations that developed in the mine: a strong community atmosphere, equal standards for achievement applied to Black and White miners alike, and the necessity to avoid confrontation or hostility in order to maintain a safe and efficient workplace. Another possibility involved anti-Black attitudes that were normative in the town and the importance of the White miners adhering to these norms when they were in the company of townspeople. Minard's explanations were thus based on the operation of different social norms in the two contexts. The White miners may have held only one predominant internalized attitude toward their Black coworkers, but situational norms and expectancies would have determined whether they acted in accordance with these attitudes (Ajzen, 1988; Ajzen & Fishbein, 1973).

The current work suggests that a process other than normative influence can account for why individuals demonstrate differential behaviors toward the same social target. Specifically, we propose that social perceivers can hold multiple attitudes about a single social target. In the Minard study, for example, the White miners may have held different internalized attitudes to-

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<sup>1</sup> Similar findings have been observed by others, including Pettigrew (1958) and Reitzes (1953).

ward their Black coworkers in the mine context and in the town context. We suggest that individuals can hold very different attitudes toward the same object as the context in which that object is encountered changes.

This idea that attitudes toward a single object can vary with context is consistent with recent conceptualizations of the attitude construct. Fazio (1990) has conceived of attitudes as associations between an object and an evaluation. However, he has recognized that any attitude object can be categorized in multiple ways (Fazio, 1994). For example, Hillary Clinton is White, female, a lawyer, the first lady, and so forth. Each categorization can bring with it its own affective association. When someone evaluates an object or behaves toward it, the evaluation and behaviors depend on how the object has been categorized. In any specific situation, sufficient cues may exist to prompt identification of the object in one or another category, and only the affect associated with that category (and behaviors consistent with that affect) will be activated. These alternative attitudes toward the same object can be activated spontaneously as the object is categorized in one way or another, depending on the contextual cues available.

The Black miners in the Minard (1952) example may have been categorized as "miners" when they were below ground, and White miners may have had very positive attitudes toward the miner category. Above ground, however, on the basis of the cues available, these same Black miners may have been categorized as "Black men," a category toward which the White miners held quite negative attitudes. The different categorizations of the same object can lead to very different affective responses. Whichever category is most strongly activated by the specific contextual cues will determine the nature of the attitudinal response that is expressed. This two-stage model (categorization followed by spontaneous attitude activation) has been supported in recent work by Smith, Fazio, and Cejka (1996).

How is it that people develop different attitudes toward the same object as its predominant categorization changes with context? Several possibilities exist. Clearly, one could have different kinds of experiences with the same object in different situations. Enjoyable days might be spent with a neighbor on the golf course, but terrible evenings might be spent with a neighbor at the bridge table. Pickles might be greatly enjoyed in the context of a corned beef sandwich but not in the context of an ice cream sundae. Thus, the White coal miners may simply have had very positive experiences with their Black coworkers when in the mine, but for a variety of reasons, the experiences above ground may have been quite negative. Thibaut and Kelley (1959) discuss the specificity of experiences with interaction partners and how the specific contextual outcomes determine the interaction pattern for each context.

In addition to holding different attitudes about people based on differential experiences, it is also possible that biased perception, rather than different experiences, can lead to context-dependent attitudes. That is, differential perception and interpretation of evaluatively identical experiences can lead to different reactions to the same target in different contexts. Indeed, in some circumstances, one will perceive equivalent social information as being subjectively different when one forms illusory correlations. The current work uses illusory correlation as one

vehicle to document and explain the formation of context-dependent attitudes. Illusory correlations are demonstrated when perceivers reveal an unwarranted relationship between two variables. In terms of group stereotyping, it has been shown that people often perceive a relationship between salient social groups and salient behaviors. Often, this salience is produced when one observes infrequently encountered (i.e., minority) group members and infrequently performed (i.e., undesirable) behaviors. In typical illusory correlation experiments, individuals report that minority group members perform relatively more undesirable behaviors than majority group members even though members of both groups engaged in exactly the same proportion of desirable to undesirable behaviors (e.g., Hamilton & Gifford, 1976). The prevailing explanation for this outcome is that rarely encountered information categories (i.e., undesirable behaviors that are performed by minority group members) are distinctive because of their infrequency and thus receive additional attention and encoding (Stroessner, Hamilton, & Mackie, 1992), resulting in increased accessibility for these behaviors (Johnson & Mullen, 1994; McConnell, Sherman, & Hamilton, 1994a).

Although these infrequent minority group behaviors are more accessible in memory, they will bias subsequent judgments only if perceivers' group-relevant evaluations are based on what they can recall at the time of judgment. That is, an unwarranted perception that members of the minority group perform relatively more undesirable behaviors than members of the majority group will occur only if evaluations are memory based instead of being formed on-line (Hastie & Park, 1986). Research has shown that, typically, judgments of group targets in this paradigm are memory based (McConnell, Sherman, & Hamilton, 1994b, 1997), resulting in the formation of differential attitudes about equivalent group targets. However, when perceivers integrate information about social targets into strong impressions while they are acquiring additional information, judgments of social targets are formed on-line (the default for individual targets), and differential attitudes do not result (McConnell et al., 1994b; 1997; Sanbonmatsu, Sherman, & Hamilton, 1987). Thus, the type of target encountered (individual vs. group) is one critical determinant of illusory correlation formation. Yet illusory correlations are observed for both group and individual targets when memory-based judgments are induced either by providing processing goals that discourage the formation of strong impressions (McConnell et al., 1994b; Pryor, 1986) or by establishing expectations of social targets with little entitativity and behavioral consistency (McConnell et al., 1997; for a review, see Hamilton & Sherman, 1996).

Although illusory correlations have traditionally been regarded as between-group phenomena (e.g., majority group vs. minority group), it is possible to consider different context domains within a single social target in a distinctiveness-based framework. Specifically, there may be some domains for members of a single group target about which perceivers have a great deal of information (which would be isomorphic to the majority group in traditional illusory correlation studies) and other domains about which perceivers have relatively little information (isomorphic to the minority group in illusory correlation studies). For example, the White coal miners in the Pocahontas Coal Field may have known more about their Black coworkers'

behaviors at work in the mines (a more frequently encountered domain) than above ground (a less frequently encountered domain). If Black coal miners had engaged in the same ratio of desirable to undesirable behaviors (with desirable behaviors occurring more frequently) in both domains, it is possible that perceivers formed an illusory correlation between the infrequently encountered domain (Black miners above ground) and the infrequently encountered behavior (undesirable actions). As a result, a social cognitive process may have contributed to the formation of the negative stereotypes about, and prejudicial behaviors toward, Blacks in the town that were described by Minard and others. Such a process would result in White miners showing relatively positive attitudes and behaviors toward Black coworkers below the ground but showing relatively negative attitudes and behaviors toward Black coworkers above ground.

What is suggested and tested in the current work is that context-dependent attitudes about a single social target may result from illusory correlations when, in fact, equivalent evaluative information exists about the target in multiple social domains. We conducted two experiments to test the conditions under which such context-dependent attitudes would be exhibited. In Experiment 1, we examined whether perceivers would form context-dependent attitudes about a social group as a result of within-group illusory correlations. Different instructions sets were used to induce either memory-based judgments (which should produce context-dependent attitudes) or on-line judgments (which should not result in context-dependent attitudes). In Experiment 2, we examined how context-dependent attitudes may result for individual, as well as group, social targets.

Although our primary interest was in examining whether evaluative biases between different within-target domains would form, we were also interested in collecting measures that would permit us to assess the social information processing (on-line vs. memory-based judgments) involved in forming these context-dependent attitudes. When perceivers form on-line judgments, they process social information in a more integrative fashion, resulting in more associative linkages in memory (which improve overall recall of social information). Also, because they adopt the goal of forming strong impressions of social targets, perceivers tend to rely on early information in forming their evaluations, resulting in primacy effects in recall. Last, because they attempt to form an integrative impression of the social target as they acquire information, their target judgments tend to be unrelated to their subsequent recall of target-specific behaviors. In contrast, perceivers who form memory-based judgments tend to recall less information (because fewer associative links are formed in memory), to recall information that was recently presented (because recent items are more accessible when one does not try to form an initial impression of the social target), and to demonstrate a positive correspondence between memory and judgment (because their judgment of the social target is based on the information that is available at the time of judgment). Also, as noted above, illusory correlations typically result from memory-based, rather than on-line, judgments (McConnell et al., 1994b, 1997).

In sum, we conducted two experiments to explore the formation of context-dependent attitudes for group (Experiment 1) as well as individual (Experiment 2) social targets. If context-dependent attitudes are produced by the formation of within-

target illusory correlations, differential attitudes for evaluatively equivalent domains of a social target's behaviors should be observed when memory-based judgments occur. Further, free recall should reveal different social-information-processing patterns to provide an account for why these context-dependent attitudes result.

### Experiment 1: Context-Dependent Attitudes of Group Targets

The first experiment explored whether perceivers would form context-dependent attitudes for group targets as a result of within-group illusory correlations. Participants encountered behaviors that were performed by target group members in either a home or work setting. Although participants learned about group members in both context domains (i.e., home and work), more information was presented about one domain (the frequent domain) than the other (the infrequent domain). Frequent domain assignment (home vs. work) was counterbalanced, and the ratio of desirable to undesirable behaviors was identical in both domains.

In addition to manipulating which domain (work vs. home) was presented more frequently, we manipulated instruction set to influence participants' processing goals. Half of the participants were told that they would be reading some statements about behaviors that were performed by group members and that their task in the experiment was simply to read each statement carefully (the read-set condition). Because these read-set instructions did not provide explicit processing goals, participants should not have formed impressions of the target group in an on-line fashion (McConnell et al., 1994b). As a result, these participants should have demonstrated context-dependent attitudes about group members based on the formation of illusory correlation (i.e., reported more favorable attitudes about group members in the frequently encountered domain than in the infrequently encountered domain) and should have revealed process data consistent with memory-based judgments. Past research has found that memory-based judgments are indicated by relatively poor recall of information, better recall of recent events (i.e., recency in recall), and positive correlations between target memory and judgment (Hastie & Park, 1986; Lichtenstein & Srull, 1987; McConnell et al., 1994b, 1997).

Impression-set instructions were provided to the remaining participants. They were told that their task in the experiment was to read information about the target group and to form strong impressions of group members in both their home and work domains. These explicit instructions focused participants on forming strong impressions, which should have led to on-line judgments, an absence of illusory correlation, and no context-dependent attitudes. Evidence of on-line judgments would include relatively good recall of information, primacy in recall, and the absence of memory-judgment correlations. Thus, the instruction-set manipulation was designed to induce either memory-based (read-set) or on-line (impression-set) judgments, which should have resulted in context-dependent attitudes in the former, but not in the latter, case.

## Method

### Participants and Design

At Indiana University, 76 undergraduates enrolled in introductory psychology courses participated in exchange for research credit. They were randomly assigned in a 2 (instruction set: imp vs. read)  $\times$  2 (frequent domain: work vs. home) between-subjects factorial.

### Stimuli

A series of work and home behavioral statements were developed to be moderately desirable or moderately undesirable in nature. Examples of work-related behaviors included "started a recycling effort at work" (desirable) and "broke the photocopier at work and didn't report it for repairs" (undesirable). Examples of home-related behaviors included "takes the family dog on walks around the neighborhood" (desirable) and "let trash spill onto the kitchen floor rather than taking the garbage out" (undesirable). Each behavioral statement was rated for desirability by pretest participants (none of whom took part in the current study) on a 10-point scale to ensure that behaviors were consistently viewed as desirable or undesirable, as anticipated.

Two stimulus sets, each with 36 behavioral statements, were constructed to provide a counterbalancing manipulation of frequent domain (work vs. home). For each stimulus set, there were twice as many behaviors associated with the frequent domain (24 total) than the infrequent domain (12 total). Within each domain, there were twice as many desirable behaviors as undesirable behaviors. Thus, in the work frequent domain condition, there were 24 work-related behaviors (16 desirable, 8 undesirable) and 12 home-related behaviors (8 desirable, 4 undesirable). Accordingly, in the home frequent domain condition, there were 24 home-related behaviors (16 desirable, 8 undesirable) and 12 work-related behaviors (8 desirable, 4 undesirable). In addition to ensuring that each domain (frequent vs. infrequent) had the same ratio of desirable to undesirable behaviors, we selected statements (using the pretest ratings of behavioral desirability) such that the mean desirability of both the desirable and the undesirable behaviors in the two domains were equivalent (e.g., the mean desirability of the undesirable work behaviors was the same as the mean desirability of the undesirable home behaviors). No first names were associated with the behaviors, and each sentence began with "A member of this group . . ."

### Procedure

Participants were initially told that the current experiment was exploring how people process and retain information. After completing consent forms, they were led to individual rooms and completed the remainder of the experiments at individual computer workstations. All participants were told that a series of behaviors would be presented on the computer monitor that were performed by different members of a real-world group. Participants in the read-set condition were told that their goal in the experiment was to simply read each statement carefully. Participants in the impression-set condition were told that they would read information about group members at home and at work and that their goal in the experiment was to try to form strong impressions about group members at work and at home. The 36 statements were presented in a randomly determined order on the monitor at a pace of one statement every 8 s. After the statements were presented, participants completed a 4-min filler task (a series of math problems) to eliminate short-term memory effects.

**Free recall.** After completing the interpolated task, participants were directed to recall as many of the statements as they could and to write the statements on a sheet of paper. They were told that their recall did not have to be verbatim but that they should list as much of the statement as they could remember. They were given 10 min to recall the behaviors.

**Frequency estimates.** Following the free recall period, participants were told that they had read 24 statements about the group members' behaviors in the frequent domain (either home or work, depending on condition) and were asked to estimate how many of these 24 behaviors were undesirable in nature. Next, they were told that they had read 12 statements about the group members' behaviors in the infrequent domain (either work or home, depending on condition) and were asked to estimate how many of those 12 behaviors were undesirable in nature.

**Likability estimates.** Finally, participants were asked to evaluate how desirable the group members' behaviors were in each domain (home and work) on a 10-point scale, ranging from 1 (*extremely undesirable*) to 10 (*extremely desirable*).<sup>2</sup>

## Results

### Context-Dependent Attitude Measures

The primary focus of Experiment 1 was whether context-dependent attitudes about a single social group would result under conditions in which memory-based judgments should occur. Evidence of these context-dependent evaluations would be exhibited in the likability ratings and frequency estimates. Specifically, such attitudes would be revealed if participants made less positive evaluations of the group members' behaviors in the infrequent (relative to the frequent) domain and reported the performance of relatively more undesirable behaviors in the infrequent (relative to the frequent) domain. We predicted that context-dependent attitudes would be observed in the read-set condition but not the impression-set condition. Thus, an interaction between instruction set and target domain was predicted. Also, we expected that the frequent domain counterbalancing manipulation would not qualify these effects.

**Likability ratings.** The liking ratings were examined in a 2 (instruction set: imp vs. read)  $\times$  2 (frequent domain: work vs. home)  $\times$  2 (target domain: frequent vs. infrequent) mixed-design analysis of variance (ANOVA), where the last variable was within subjects. Two effects were observed, and their means are reported in Table 1. First, there was a main effect of target domain,  $F(1, 72) = 6.68, p < .02$ , revealing that participants held differential attitudes about the target group, with more favorable evaluations of the group in the frequent domain than in the infrequent domain.

More important, this effect was qualified by an interaction with instruction set,  $F(1, 72) = 5.67, p < .02$ . As Table 1 illustrates, the evaluative preference for the frequent domain over the infrequent domain (i.e., context-dependent attitudes) existed in the read-set condition (where memory-based judgments were expected) but not in the impression-set condition. The frequent domain counterbalancing manipulation did not produce any main or interactive effects ( $F_s < 1$ ). Supplemental paired *t* tests revealed that the preference for the frequent domain over the infrequent domain was significant in the read-set condition,  $t(37) = 2.85, p < .01$ , but not in the impression-set condition, ( $t < 1$ ). Thus, regardless of which domain was frequently presented, participants demonstrated a strong within-group eval-

<sup>2</sup> In the current study, free recall was collected before the evaluative judgments. Past researchers (e.g., Hamilton et al., 1985) have found that order of collection (recall preceding judgment vs. judgment preceding recall) has no effect on the dependent measures.

Table 1  
Means for Context-Dependent Attitude and Free Recall  
Measures in Experiment 1

Variable	Instruction set		M
	Impression set	Read set	
Liking ratings			
Frequent domain			
M	6.84	7.11	6.97
SD	(1.46)	(1.37)	(1.41)
Infrequent domain			
M	6.79	5.82	6.30
SD	(1.80)	(2.12)	(2.01)
Frequency estimate			
Frequent domain			
M	0.40	0.35	0.38
SD	(0.20)	(0.20)	(0.20)
Infrequent domain			
M	0.38	0.47	0.43
SD	(0.25)	(0.17)	(0.22)
Amount of recall			
M	13.55	13.79	13.67
SD	(6.71)	(4.48)	(5.67)
Recall serial position			
First 12 items			
M	0.42	0.36	0.39
SD	(0.21)	(0.15)	(0.18)
Last 12 items			
M	0.34	0.40	0.37
SD	(0.21)	(0.17)	(0.19)

uative preference for the frequently presented domain, but only when adopting information-processing goals that should lead to memory-based judgments (i.e., read set). Thus, those who formed memory-based judgments about the group revealed context-dependent attitudes as a result of within-group illusory correlation formation.

**Frequency estimates.** The proportion of undesirable behaviors estimated for each domain was computed. These proportions were submitted to an instruction set (impression vs. read) by frequent domain (work vs. home) by target domain (estimate for frequent vs. infrequent domain, a repeated measure) mixed-design ANOVA. Table 1 reveals a nonsignificant trend for target domain,  $F(1, 72) = 2.92, p < .10$ , toward estimating that relatively more undesirable behaviors were performed by group members in the infrequent domain than in the frequent domain. More important, we observed the predicted interaction between target domain and instruction set,  $F(1, 72) = 4.07, p < .05$ , indicating that participants formed context-dependent attitudes in the read-set condition (i.e., estimated that group members performed more undesirable behaviors in the infrequent domain than in the frequent domain) but not in the impression-set condition. Again, the frequent domain counterbalancing manipulation had no effect on these outcomes ( $F_s < 1$ ). Paired  $t$  tests revealed that the difference in frequency estimate proportions for the frequent and infrequent domains was significant in the read-set condition,  $t(37) = 2.48, p < .02$ , but not in the impression-set condition ( $t < 1$ ). Thus, regardless of which domain was frequently encountered, participants reported that group members performed relatively more undesirable behaviors in the infrequently encountered domain, but only when adopting infor-

mation processing goals that should produce memory-based judgments (i.e., read set).

### Process Measures

Although the primary goal of Experiment 1 was to explore the formation of context-dependent attitudes based on within-group illusory correlations, we conducted a second group of analyses on free recall data to examine the extent to which these measures were consistent with memory-based or on-line judgments. We expected that memory-based judgments would be observed in the read-set condition (where context-dependent attitudes were formed, as predicted) and that on-line judgments would be indicated in the impression-set condition (where context-dependent attitudes were absent, as predicted).

Free recall was assessed by three trained judges who were unaware of each participant's experimental condition. They used a "gist" criterion in assessing whether each recorded statement was accurately recalled. Two judges served as primary judges and demonstrated good interjudge reliability (92% agreement). In cases of disagreement, the third judge served as the tiebreaker.

**Overall recall.** We expected that participants would recall less information about the target group when given instructions that encouraged memory-based judgments (i.e., read set) than when instructions encouraged on-line judgments (i.e., impression set). The total number of statements recalled by each participant was submitted to an instruction set (impression vs. read) by frequent domain (work vs. home) ANOVA. An unexpected main effect of frequent domain was observed,  $F(1, 72) = 4.43, p < .04$ , revealing that participants recalled more statements in the work-frequent condition ( $M = 15.00$ ) than in the home-frequent condition ( $M = 12.34$ ). Moreover, this main effect was qualified by a marginal interaction with instruction set,  $F(1, 72) = 3.14, p < .09$ , suggesting that the main effect of frequent domain existed in the impression-set condition (for work-frequent,  $M = 16.00$ ; for home-frequent,  $M = 11.11$ ) but not in the read-set condition (for work-frequent,  $M = 14.00$ ; for home-frequent,  $M = 13.58$ ). The predicted main effect of instruction set did not obtain, and the reason for the unanticipated effects is unclear.

**Recall serial position.** Using a second process measure, we examined whether participants' memory for group behaviors was better for early statements (suggestive of on-line judgments) or late statements (suggestive of memory-based judgments). It was expected that participants would recall relatively more early information when instructions encouraged on-line judgments (i.e., impression-set condition) than when they encouraged memory-based judgments (i.e., read-set condition). To assess serial position effects in recall, we computed the proportion of statements recalled from the first third of the presentation and from the last third of the presentation. An instruction set (impression vs. read) by frequent domain (work vs. home) by presentation position (recall for first 12 items vs. last 12 items, a repeated measure) mixed-design ANOVA was conducted on these proportions. Consistent with the findings for free recall, there was a main effect of frequent domain,  $F(1, 72) = 4.34, p < .05$ , revealing that participants recalled a greater proportion of the statements when the work domain was presented more frequently ( $M = .42$ ) than when the home domain was presented

more frequently ( $M = .36$ ). More important, and as predicted, there was a significant interaction (displayed in Table 1) between presentation position and instruction set,  $F(1, 72) = 7.01, p < .01$ , revealing that participants recalled more early statements (relative to late statements) in the impression-set condition than in the read-set condition. This effect was not qualified by an interaction with the frequent domain manipulation ( $F < 1$ ). Paired  $t$  tests revealed significantly better recall for the first 12 statements (relative to the last 12 statements) in the impression-set condition,  $t(37) = 2.34, p < .03$ . In the read-set condition, the difference between recall of the first 12 statements and last 12 statements did not reliably differ,  $t(37) = 1.34, ns$ . In accordance with predictions, participants showed greater primacy in recall in the conditions in which on-line judgments were expected and context-dependent attitudes were not observed (i.e., the impression-set condition).

*Memory-judgment correlations.* Following the procedures of McConnell et al. (1994b, 1997), we correlated the content of free recall to participants' likability ratings for both the frequent and infrequent domains. All of the behaviors recalled by each participant were used to create an index based on pretest desirability norms for each behavioral sentence. Separate indexes were computed for recall about each domain. We computed each index by summing the pretest ratings for the items that each participant recalled and dividing by the number of statements recalled for that domain. Next, each domain index was correlated to the likability rating for the same domain. We expected that positive correlations between the recall-based indexes and the likability ratings would be exhibited only in the conditions in which memory-based judgments were made (i.e., read-set condition).

Zero-order correlations were computed between the recall-based index and likability rating for both the frequent and infrequent domains. In the impression-set condition, as expected because of the on-line nature of judgments, participants did not show significant memory-judgment correlations for either the frequent domain ( $r = .23, ns$ ) or the infrequent domain ( $r = .20, ns$ ). In the read-set condition, there was no significant memory-judgment correlation observed in the frequent domain ( $r = .13, ns$ ), but there was a significant memory-judgment correlation in the infrequent domain ( $r = .34, p < .04$ ). Thus, a significant memory-judgment correlation was observed only when context-dependent attitudes formed, but only for the infrequent domain.

### Discussion

We proposed that people form context-dependent attitudes about a social group as a result of within-group illusory correlations. When social judgments are rendered in a memory-based fashion, unwarranted relations are perceived between distinctive behaviors and distinctive domains of group members' activities. The results of Experiment 1 provided strong support for this hypothesis. Participants showed an evaluative preference (both in terms of likability ratings and frequency estimates) for group members' behaviors in the frequently encountered domains only when memory-based judgments were invoked. Thus, these data reveal that one can form context-dependent attitudes based on illusory correlations within a single target group, leading to

differential evaluations of group members' behaviors in different domains as a result of an information-processing bias. These biased evaluations lead to different perceptions, judgments, and behaviors toward group members depending on the context in which they are encountered.

Not only did Experiment 1 demonstrate the formation of context-dependent attitudes for groups, but it also examined free recall for evidence of on-line and memory-based judgments. Unlike the unequivocal support found in the evaluative measures, these process data provided mixed support for the predictions. As expected, participants showed less primacy in recall in the conditions where context-dependent attitudes were exhibited (consistent with memory-based judgments) than in the cases where context-dependent attitudes were absent. However, findings regarding amount of recall depended only on whether the work or home domain was presented more frequently. Perhaps the work behaviors were more salient because of their infrequency in the everyday lives of the participant population, which resulted in better recall when the work domain was the frequent domain. Finally, relatively weak support was observed in the memory-judgment correlation data. As expected, there were no significant memory-judgment correlations observed for either the frequent or the infrequent domain in the impression-set condition. In the read-set condition, the anticipated significant memory-judgment correlation was observed for the infrequent domain but was not found for the frequent domain. It should be noted that memory-judgment correlations were not appreciably stronger in the read-set condition than in the impression-set condition. The difficulty in obtaining strong memory-judgment correlations in any experimental condition has been noted in previous work (e.g., Hamilton, Dugan, & Trolier, 1985; Hastie & Park, 1986; McConnell et al., 1994b, 1997). It is possible that some degree of spontaneous trait extraction (Uleman, 1987; Winter & Uleman, 1984) occurs after some threshold amount of information is exceeded (more likely to occur for the frequently encountered domain), though extensive integration and elaboration of this information does not take place. As a result, significant memory-judgment correlations may occur only for an infrequently encountered domain.

In summary, Experiment 1 demonstrated that social perceivers can form context-dependent attitudes about a single group target. Perceivers demonstrated domain-specific evaluations of group members' behaviors in situations in which memory-based, but not on-line, judgments were induced. Thus, when memory-based judgments were rendered, within-group illusory correlations led perceivers to hold differential attitudes about objectively equivalent domains of group member behavior. Despite the apparent success of Experiment 1, however, a few concerns should be noted. First, there appeared to be overall differences in amount of recall based on whether the home or work domain was presented frequently. Although this manipulation did not affect the other measures (e.g., likability ratings, primacy indexes), it would be helpful to examine the formation of context-dependent attitudes under conditions in which the salience of behavioral domains is held constant across participants. Thus, participants in Experiment 2 were presented only with home frequent domain stimuli.

Second, although the instruction sets (impression vs. read) were designed to induce either on-line or memory-based judg-

ments (respectively), it is possible that the impression-set condition influenced participants not only by manipulating their processing goal (i.e., form a strong impression) but also by providing them with advance warning of the two dimensions to be evaluated (work vs. home). This information about the domains to be encountered, of course, was unavailable to the read-set condition participants. As a result, advance knowledge about the domains to be encountered may have produced the on-line judgments observed. To address this concern, we omitted reference to the two context domains in the instruction sets in Experiment 2.

Experiment 2 also considered the formation of context-dependent attitudes with individual, as well as group, social targets. If memory-based judgments are responsible for the context-dependent attitudes revealed in Experiment 1, then one should observe context-dependent attitudes for *individual* (as well as group) targets when participants form memory-based judgments about them. Although perceivers typically form on-line judgments of individuals, processing goals that inhibit impression formation can produce memory-based judgments of individuals (McConnell et al., 1994b). Thus, when perceivers are prevented from forming strong impressions of a social target, memory-based judgments result regardless of whether the target is an individual or a group.

To examine the possibility of context-dependent attitudes for individual targets, in Experiment 2 we manipulated two between-subjects factors. First, the type of target was manipulated: individual versus group. Second, instruction sets were used to provide either nondirecting, on-line-directing, or on-line-inhibiting processing goals. When participants are given instruction sets that inhibit on-line judgments, context-dependent attitudes based on within-target illusory correlations should be exhibited regardless of whether the target is an individual or a group. Conversely, when participants are given instruction sets that strongly encourage on-line judgments, context-dependent attitudes should not occur regardless of whether the target is an individual or a group. Finally, when participants are given instructions that do not induce any strong processing goals, context-dependent attitudes based on within-target illusory correlations should be exhibited for group targets (for which memory-based judgments are the default) but not for individual targets (for which on-line judgments are the default).

### Experiment 2: Context-Dependent Attitudes of Individual and Group Targets

Experiment 2 examined the possibility that context-dependent attitudes could occur for individual, as well as group, social targets. Instruction sets that have been effective in manipulating social information processing goals were borrowed from previous research (Experiment 1; McConnell et al., 1994b). All participants were told that they would encounter a social target (either an individual or a group) and that they were to read statements performed by the social target. One third of the participants received no further instructions (read-set condition). These participants should have shown the strongest differences between group and individual targets (with context-dependent attitudes and memory-based judgments for groups, but no context-dependent attitudes and on-line judgments for individuals).

Another third of the participants (impression-set condition) were told to form strong impressions of the target (individual or group). In this condition, no context-dependent attitudes or on-line judgments were anticipated, regardless of the target type encountered. Lastly, the remaining participants (comprehension-set condition) were given instructions that should have inhibited the formation of on-line judgments. They were told to examine each statement in terms of its comprehensibility for a fourth-grade child. As a result, participants should have focused on each statement's grammar rather than its evaluative implications for the social target. Thus, at the time of judgment, participants given comprehension-set instructions should have been forced to form their evaluation on the basis of the information available at the time of judgment, resulting in memory-based judgments and the formation of context-dependent attitudes regardless of the target type encountered.

### Method

#### Participants and Design

At Penn State University, 138 undergraduates enrolled in introductory psychology courses participated in exchange for extra credit in their courses. They were randomly assigned in a 3 (instruction set: impression, read, or comprehension)  $\times$  2 (target type: individual vs. group) between-subjects factorial.

#### Stimuli

The 36 behavioral sentences used in the home frequent domain condition (16 desirable home context, 8 undesirable home context, 8 desirable work context, and 4 undesirable work context) of Experiment 1 were used in Experiment 2 to maintain equivalent behavioral salience across conditions. In the individual target condition, the phrase "This person" preceded each behavioral statement. In the group target condition, the phrase "A member of this group" preceded each behavioral statement.

#### Procedure

All participants were told that the current experiment was exploring how people process and retain information. As in Experiment 1, they participated in individual rooms at individual computer workstations. Participants were told that a series of behaviors, which were presented on the computer monitor, were performed by different members of a real-world group (group target condition) or by an individual in the real world (individual target condition). Those in the read-set condition were told nothing else before reading the statements. Participants in the impression-set condition, however, were told that their goal in the experiment was to form strong impressions of the target as they encountered the information. Unlike in Experiment 1, participants were given no information about the domains (home vs. work) to be encountered. Participants in the comprehension-set condition were told that their goal in the experiment was to read each statement and consider whether a fourth-grade child could comprehend its meaning (purportedly the statements were to be used in future experiments with children).

Each of the 36 statements was presented on the monitor at a pace of one statement every 8 s. After the statements were presented, participants completed a 4-min filler task (solving math problems) to eliminate short-term memory effects. Afterward, they completed the same free recall, frequency estimate, and likability rating tasks that were used in Experiment 1 (except that participants in the individual target conditions were told to base their judgments on the target person rather than the target group).

## Results

### Overview of Analyses

Two measures of context-dependent attitudes (likability estimates and frequency estimates) and two indicators of social information processing (amount of free recall and recall serial position) were examined. We predicted that evidence of context-dependent attitudes and memory-based judgments would be exhibited in the comprehension-set conditions regardless of target type and in the read-set condition only for group targets (where the memory-based default for group targets should be exhibited). In contrast, we expected that on-line judgments, and thus no context-dependent attitudes, would be observed in the impression-set conditions regardless of target type and in the read-set condition only for individual targets (where the on-line default for individual targets should be exhibited). We assessed each of these measures with ANOVAs followed by specific planned contrasts comparing the three conditions expected to demonstrate context-dependent attitudes and memory-based judgments with the three conditions expected to reveal no context-dependent attitudes and on-line judgments.

Although our hypotheses predicted that the effect of target type (stronger context-dependent attitudes and memory-based judgments for group targets than individual targets) would vary as a function of instruction set, the nature of this prediction (differences between target types in one condition but similarities between target types in the other two conditions) severely limited the ability of observing a significant ordinal interaction. Rosenthal and Rosnow (1985; Rosnow & Rosenthal, 1989) have argued that the appropriate way to test such specific a priori predictions is by planned contrasts rather than by two-way ANOVAs interactions. Because our model makes specific and a priori predictions, we followed the strategy used in previous work (e.g., McConnell et al., 1997) and used planned comparisons as the principal test of our hypotheses. In addition to these between-subjects analyses, memory-judgment correlations were assessed as an indicator of memory-based and on-line judgments.

### Context-Dependent Attitude Measures

**Likability ratings.** The evaluative ratings were submitted to a 3 (instruction set: impression, read, or comprehension)  $\times$  2 (target type: group vs. individual)  $\times$  2 (target domain: frequent vs. infrequent, a repeated measure) mixed-design ANOVA. As Table 2 reports, a main effect of target domain was found,  $F(1, 132) = 38.73, p < .001$ , revealing that participants rated the target's behaviors in the frequent domain as more desirable than in the infrequent domain. Thus, in general, participants demonstrated context-dependent attitudes. However, this main effect was qualified by an interaction with instruction set,  $F(2, 132) = 4.13, p < .02$ . As Table 2 illustrates, the strongest context-dependent attitudes were observed in two of the group target conditions (read set and comprehension set) and in one of the individual target conditions (comprehension set). These findings are consistent with the predicted pattern of results.

To test the specific a priori prediction, a planned comparison was conducted comparing the three conditions expected to produce context-dependent attitudes (comprehension-group, com-

prehension-individual, and read-group) with the three conditions expected not to reveal context-dependent attitudes (impression-individual, impression-group, and read-individual). This contrast analysis examined liking judgments in a condition by target domain (frequent vs. infrequent, a repeated measure) mixed-design. The critical prediction is the interaction between the condition contrast and the target domain. In other words, the relative evaluation between majority and minority domains should have varied as a function of the conditions only where context-dependent attitudes were expected. Indeed, this planned contrast interaction was significant,  $F(1, 132) = 16.05, p < .001$ . As Table 2 reveals, context-dependent attitudes (i.e., relative preference for the majority domain over the minority domain) were exhibited most strongly in the predicted conditions (i.e. comprehension-group, comprehension-individual, and read-group). Paired *t* tests (comparing evaluations for the majority and minority domains) found that participants in those conditions showed significant differences in attitudes as a function of context domain,  $t(68) = 8.88, p < .001$ , whereas participants in the other conditions (i.e., impression-individual, impression-group, and read-individual) did not,  $t(68) = 1.38, n.s.$  Thus, participants demonstrated a significant evaluative bias (i.e., context-dependent attitudes based on within-target illusory correlation formation) in the conditions that encouraged memory-based judgments but not in the conditions where on-line judgments should have occurred.

**Frequency estimates.** The proportion of undesirable behaviors estimated for the target domains was examined in an instruction set (impression, read, or comprehension) by target type (group vs. individual) by target domain (proportion for the frequent vs. infrequent domain, a repeated measure) mixed-design ANOVA. As Table 2 illustrates, a main effect of target domain was observed,  $F(1, 132) = 18.75, p < .001$ , revealing that participants generally revealed context-dependent attitudes (i.e., reporting relatively more undesirable behaviors in the minority domain than in the majority domain). No other effects in the omnibus ANOVA were significant.

Although Table 2 reveals that the pattern of means for frequency estimate proportions were in the anticipated directions (i.e., the three largest differences between frequent and infrequent domains were in the cells predicted to reveal context-dependent attitudes), the Condition  $\times$  Target Domain mixed-design planned contrast interaction did not obtain significance,  $F(1, 132) = 1.05, n.s.$  The reason why the interaction did not emerge is unclear.

### Process Measures

In addition to exploring the formation of context-dependent attitudes, analyses were conducted to examine whether memory-based or on-line judgments were exhibited. Free recall was evaluated in the same fashion as in Experiment 1, and interjudge agreement between the two primary judges was good (90%).

**Overall recall.** The total number of statements recalled by each participant was submitted to an instruction set (impression, read, or comprehension) by target type (individual vs. group) ANOVA. Recall was expected to be poorer in the conditions in which context-dependent attitudes were exhibited (i.e., comprehension-group, comprehension-individual, and read-group).



Table 2  
Means for Context-Dependent Attitude and Free Recall Measures in Experiment 2

Variable	Group targets			Individual targets			M
	Imp	Read	Comp	Imp	Read	Comp	
Liking ratings							
Frequent domain							
M	5.87	7.30	7.22	6.65	6.00	7.48	6.74
SD	(1.57)	(0.97)	(1.00)	(1.73)	(2.04)	(1.08)	(1.57)
Infrequent domain							
M	5.52	5.35	5.65	6.13	5.70	6.00	5.73
SD	(2.39)	(1.64)	(1.34)	(1.87)	(1.96)	(1.65)	(1.82)
Frequency estimate							
Frequent domain							
M	0.45	0.34	0.36	0.38	0.45	0.37	0.39
SD	(0.16)	(0.14)	(0.20)	(0.16)	(0.21)	(0.19)	(0.18)
Infrequent domain							
M	0.50	0.44	0.46	0.43	0.51	0.44	0.46
SD	(0.20)	(0.17)	(0.14)	(0.15)	(0.17)	(0.18)	(0.17)
Amount of recall							
M	12.96	11.78	10.04	12.96	14.04	10.35	12.02
SD	(4.53)	(4.41)	(4.97)	(4.53)	(4.12)	(4.17)	(4.61)
Recall serial position							
First 12 items							
M	0.33	0.27	0.27	0.38	0.40	0.23	0.32
SD	(0.16)	(0.16)	(0.18)	(0.19)	(0.22)	(0.15)	(0.18)
Last 12 items							
M	0.41	0.35	0.30	0.34	0.37	0.34	0.35
SD	(0.18)	(0.17)	(0.18)	(0.18)	(0.13)	(0.17)	(0.17)

Note. Imp = impression-set instructions; Read = read-set instructions; Comp = comprehension-set instructions.

A main effect of instruction set was observed,  $F(2, 132) = 5.78$ ,  $p < .01$ , demonstrating that participants recalled more statements in the impression-set ( $M = 12.96$ ) and read-set ( $M = 12.91$ ) conditions than in the comprehension-set condition ( $M = 10.20$ ). No other effects were significant.

To test our specific a priori prediction, we conducted a planned contrast comparing the conditions expected to reveal poorer recall (comprehension-group, comprehension-individual, and read-group) with the conditions expected to show better recall (impression-individual, impression-group, and read-individual). As Table 2 reports, the contrast, as expected, found that participants in the former conditions showed poorer recall (indicative of memory-based judgments) than participants in the latter conditions (indicative of on-line judgments),  $F(1, 136) = 11.66$ ,  $p < .001$ .

**Recall serial position.** The proportion of statements recalled from the first third and last third of the stimulus presentation was computed and examined in an Instruction Set (impression, read, or comprehension)  $\times$  Target Type (individual vs. group)  $\times$  Presentation Position (first 12 items vs. last 12 items, a repeated measure) mixed-design ANOVA. Three effects were significant. First, there was a main effect of instruction set,  $F(2, 132) = 4.22$ ,  $p < .02$ , indicating that participants recalled more statements in the impression-set ( $M = 0.37$ ) and read-set ( $M = 0.35$ ) conditions than in the comprehension-set condition ( $M = 0.29$ ). This main effect is consistent with the overall recall findings. There was also a main effect of recall position,  $F(1, 132) = 4.07$ ,  $p < .05$ , showing that participants recalled more behaviors from the last 12 presentation positions ( $M = 0.35$ )

than from the first 12 presentation positions ( $M = 0.32$ ). These effects, however, were qualified by the three-way interaction,  $F(2, 132) = 3.75$ ,  $p < .03$ , which is reported in Table 2. As Table 2 reveals, the strongest recency effects (i.e., relatively better recall for the last 12 items than the first 12 items) occurred with group targets, except in the comprehension-set condition, where both target types revealed evidence of recency effects in recall.

To further test whether this three-way interaction was consistent with the a priori predictions, we conducted a mixed-design planned contrast comparing the conditions expected to display memory-based judgments (comprehension-group, comprehension-individual, and read-group) with those in which on-line judgments were expected (impression-individual, impression-group, and read-individual) with respect to recall serial position (first 12 items vs. last 12 items, a repeated measure). The expected interaction between these two variables (condition and recall position) was marginally significant,  $F(5, 132) = 2.25$ ,  $p < .06$ . Inspection of Table 2 reveals that, overall, good support for the predictions was obtained. Paired  $t$ -tests revealed that the participants who formed context-dependent attitudes showed significantly better recall for the last 12 items than for the first 12 items,  $t(68) = -3.09$ ,  $p < .01$ . There were no significant differences in recall serial position for participants in the conditions expected to reveal on-line judgments ( $t < 1$ ). Therefore, the conditions designed to elicit memory-based judgments (which produced context-dependent attitudes based on within-target illusory correlations) also resulted in significant recency effects in recall.

*Memory-judgment correlations.* As in Experiment 1, indexes of liking based on information recalled by participants for each domain were computed and correlated to their liking ratings for each domain. We expected that positive correlations would be observed only in conditions in which participants formed memory-based judgments. Despite these predictions, none of the zero-order correlations achieved significance ( $r_s < .17$ ).

### Discussion

Experiment 2 extended the notion of forming context-dependent attitudes to individual, as well as group, social targets. Thus, the production of unwarranted differential evaluations within a single individual target can occur in situations in which memory-based judgments are produced. The results of Experiment 2 revealed that this can occur as a function of either the type of social target the perceiver encounters (i.e., individual vs. group) or the perceiver's information-processing goals for understanding the target (replicating Experiment 1).

These results indicate that context-dependent attitudes can occur for different types of social targets when memory-based judgments are induced. Although this process may not be the impression formation default for individual targets (as revealed by the read-individual condition), it is clear that context-dependent attitudes for individual targets will result when social perceivers do not attempt, on-line, to form an integrative impression of the person (e.g., the comprehension-individual condition). These findings are consistent with previous work (e.g., McConnell et al., 1994b, 1997) that shows that differential attitudes produced by illusory correlations are determined not by the type of target encountered but rather by whether or not perceivers actively attempt to integrate target-relevant information into a coherent impression as that information is received.

Although strong differences in context-dependent attitudes were observed between individual and group targets when participants were given nondirective instructions (i.e., the read-set condition), context-dependent attitudes were observed when participants were given processing goals that interfered with their ability to form strong impressions (i.e., the comprehension-set condition) regardless of target type. Moreover, when participants were given the goal of forming strong impressions (i.e., the impression-set condition), context-dependent attitudes were absent regardless of the type of target encountered. These outcomes were observed in biased likability ratings, which replicated and extended Experiment 1. Although it is unclear why the frequency estimate biases did not achieve significance (as they did in Experiment 1), the pattern of means was consistent with expectations.

In terms of process data, we observed support for the on-line versus memory-based distinction in amount of recall and primacy-recency effects in recall. When memory-based (as opposed to on-line) judgments were anticipated, participants remembered less information and showed recency effects in their recall, as expected. Despite the strong support for the predictions from these two indicators, significant memory-judgment correlations (a third indicator of type of social information processing) were not observed in cases in which they were expected. As previously noted, it is difficult to totally eliminate

some amount of integrative processing and thus difficult to obtain significant memory-judgment correlations.

### General Discussion

The main goals of this work were to determine whether people can form different attitudes toward the very same object as that object is embedded in different contexts and to specify a possible mechanism for how such differential impressions of a constant social target in different contexts might develop. The notion that attitudes, judgments, or behaviors toward a single object can vary with context is not a new one. For example, social judgment theory is primarily concerned with differences in the judgment of an object depending on the context in which that object is placed (Sherif & Hovland, 1961). Assimilation and contrast effects as a function of context have been observed for objects as diverse as weights (Helson, 1947), reports of religious beliefs (Salancik & Conway, 1975), the importance of recycling (Sherman, Ahlm, Berman, & Lynn, 1978), and the happiness (Wedell & Parducci, 1988) and height (Biernat, Manis, & Nelson, 1991) of social targets. Thus, the very same object can be rated as heavier or lighter, taller or shorter, happier or sadder, and more or less important, depending on the surrounding context.

However, the current context-dependent attitudes explanation is different from the process proposed to account for assimilation and contrast context effects. First, that process is often depicted as not involving actual differences in underlying perceptions of the target object but rather as being based on response scale usage and changes in perspective of the response scale that is used (Upshaw, 1978; see also, Tourangeau & Rasinski, 1988). Even when actual changes in perception are posited by this account (Biernat et al., 1991), the process involved is a comparative one in which the current meaning of an object is determined by a comparison with available other contextual stimuli. This kind of comparison process is done at the time of exposure to the target object and its context and thus does not involve the development of different internalized attitudes toward the same object in different contexts, as the context-dependent attitudes account does.

In addition to such context effects, we have seen in Minard's (1952) account of his findings how differential norms in different situations can lead to different, and seemingly inconsistent, behaviors toward group members as a function of context. According to this account, although the underlying attitude toward the target object may be constant, behaviors will differ due to norms and situational pressures.

The current experiments considered an additional process, by which different judgments of and behaviors toward an object can develop as a function of context. This process is quite different from Minard's (1952) norm-based explanation and depends on the development of different internalized attitudes toward the same object in different contexts. The role of these two factors, situational norms and internalized attitudes, in guiding behavior is consistent with Ajzen and Fishbein's (1973, 1980) theory of reasoned action. Their model states that behavioral intentions (and thus, behaviors) are primarily a function of normative beliefs and attitudes toward the behavioral act. Minard's explanation of his data recognizes the influence of one of these fac-

tors, normative beliefs, whereas the current experiments focused on the other main determinant of behavior, attitudes toward the behavioral act. In addition, we demonstrated how different internalized attitudes toward the same object can develop in different contexts and, consequently, how judgments of and behaviors toward that object will vary with context.

The operation of context-dependent attitudes produced by within-target illusory correlations is not meant to replace or invalidate the other processes (e.g., norm formation, assimilation and contrast effects) by which differential judgments of and behaviors toward the same social target might develop. Rather, we are suggesting an additional mechanism by which we might understand how seemingly inconsistent attitudes and behaviors toward a single social target might develop.

In the current work, we explored how within-target illusory correlations may produce such context-dependent attitudes. Differential exposure to the same object in different contexts combined with an inability to engage in integrative processing of information about the object as it is received can lead to the development of different internalized attitudes to the same object as the surrounding context in which one is exposed to that object changes. Contextual cues will determine which representation or categorization of the object is activated and, thus, which attitude (and associated behaviors and judgments) will be engaged.

Past work has indeed demonstrated the validity of the illusory correlation process in accounting for the development of differential impressions of social targets (e.g., McConnell et al., 1994b, 1997). However, these past studies have always involved the differential impressions of two or more different social targets and have focused on perceived differences between different social groups or different individuals. The current study, in contrast, is the first to investigate the illusory correlation process as it might operate in the differential perception of a single social target as a function of different contexts in which that target is perceived. If perceivers hold different attitudes about a single social target in different contexts, then seeming inconsistencies, such as those observed by Minard (1952), will result. Although past work (e.g., LaPiere, 1934; Minard, 1952) has documented such discrepancies in attitudes and behavior toward social targets, the current work provides one possible explanation for how these differential attitudes are formed, even in situations in which objectively one should hold equivalent attitudes toward the same social target in different contexts. If the appropriate conditions for illusory correlation development existed for Minard's White coal miners, differential exposure to their Black coworkers above and below the mine and a lack of opportunity for integrative processing during social interaction, then the more positive attitudes and behaviors toward the Black miners below the ground may have been influenced by context-dependent attitudes as well as situational norms.

The present conceptualization and the findings of the two experiments provide another way to make sense of attitude-behavior inconsistencies (for a critique, see Wicker, 1969) such as those described by Minard and to maintain the concept of attitude as an important predictor of behavior (Kelman, 1974). To return to Minard's (1952) example, the present results suggest that the White coal miners may have actually had different internalized attitudes toward their Black coworkers in the two

different contexts, above the ground and in the mines. That is, the same Black social targets elicited very different evaluative response depending on the social context in which these targets were placed. Each attitude was then quite consistent with the judgments and behaviors toward the Black coworkers that were formed and demonstrated in the two social settings.

This notion that attitudes toward an object vary according to context fits nicely with Fazio's (1990) view that attitude objects are categorized in multiple ways. The categorization of any object (the first stage in Fazio's process model) determines which attitude will be activated and thus which behaviors are to be expected. We suggest that different contexts can evoke different target-relevant attitudes, resulting in context-specific patterns of behavior. Indeed, recent work by Smith et al. (1996) supports the prediction that different categorizations of the same object can lead to very different attitudinal responses. The current findings are consistent with this two-stage model of categorization followed by subsequent attitude activation. Further, our results indicate one likely process by which different attitudes become associated with different categorizations of an object depending on the context.

In sum, these findings suggest that people may perceive evaluative differences within a social entity when, in actuality, no such differences exist. Although context effects and social norms may be responsible for the expression of different attitudes toward single social targets, the present work provides a mechanism by which different context-dependent attitudes are truly formed. Rather than demonstrating attitude-behavior inconsistency, the current findings reveal that behaviors in different contexts may be driven by different, and corresponding, context-dependent attitudes. Although additional work will be required to more fully explore these possibilities, the current research represents one step toward an understanding of these processes.

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