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The Impact of a Passing Reference to Race on Perceptions of Out-group Differentiation: 'If You've Seen One ...'

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Although a considerable amount of attention has been given to the cognitive origins, and the resulting consequences, of out-group variability effects, little research has examined the extent to which perceptions of variability are influenced by social interactions. In the current study, participants heard about a person who was assaulted by either a Black or a White assailant. They then completed a group differentiation measure. As expected, participants in the Black assailant condition perceived Blacks in a less differentiated manner than participants in either the control or the White assailant conditions.

KEYWORDS intergroup relations, out-group variability, race

A CONSIDERABLE amount of research has examined out-group homogeneity effects in intergroup relations. Much of this research has focused on whether or not out-group homogeneity effects occur (Goethals, Allison, & Frost, 1979; Linville, 1982; Linville & Jones, 1980; Park & Rothbart, 1982; Quattrone & Jones, 1980); on whether the effects are specific to perceptions of out-groups or extend to perceptions of in-groups as well (Bartsch & Judd, 1993; Brown & Wootton-Millward, 1993; Linville, Salovey, & Fischer, 1986; Lorenzi-Cioldi, 1993; Mullen & Hu, 1989; Simon, 1992); and on the cognitive and affective processes underlying out-group homogeneity effects (Carpenter, 1993; Judd & Park, 1988; Kashima & Kashima, 1993; Linville & Fischer, 1993;

Mackie, Sherman, & Worth, 1993; Park & Hastie, 1987; Park & Judd, 1990). In general, researchers have found that in-groups are perceived as more heterogeneous than out-groups (Kraus, Ryan, Judd, Hastie, & Park, 1993; Linville et al., 1986; however, see Judd, Park, Ryan, Brauer, & Kraus, 1995). While considerable attention has been given to establishing

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the validity of group homogeneity effects and the cognitive underpinnings of the phenomenon, very little has been paid to how events within the social milieu influence perceptions of group homogeneity, or, in the case of the current study, group differentiation (see Rothgerber, 1997; Rothgerber & Worchel, 1997; Simon, Pantaleo, & Mummendey, 1995). Although it is generally believed that perceptions of in-groups and out-groups are malleable and can be influenced by positive or negative experiences, it is unclear exactly how dynamic the process is. For instance, might hearing a story, in which there was a passing reference to the out-group status of the antagonist, alter the perceived homogeneity of the out-group? In this article, I consider the effects of such an apparently fleeting occurrence on people's judgments of group differentiation.

In the most recent reviews of the group homogeneity literature, little attention has been given to social factors which might influence the perception of group homogeneity (Linville, et al., 1986; Messick & Mackie, 1989; Ostrom & Sedikides, 1992). In part, this lack of attention is due to the fact that hardly any research has examined the malleability of group variability judgments. The research which has been conducted has focused on whether perceived variability is affected by changes over time (Brown & Wootton-Millward, 1993; Linville et al., 1986), perceived out-group threat (Rothgerber, 1997), and intergroup contact (Islam & Hewstone, 1993; Linville, Fischer, & Salovey, 1989; Simon et al., 1995). For instance, Islam and Hewstone (1993) found that frequency of contact with the out-group was positively related to perceived out-group variability, whereas the reported quality of contact was unrelated to perceived variability.

While direct intergroup contact plays a significant role in the development and maintenance of intergroup perceptions, it is also essential to recognize that much of the contact people have with out-group members is indirect. In other words, contact often entails simply hearing about or observing the actions of out-group members rather than actual interactions with out-group members (Brigham,

1993; Jackman & Crane, 1986; Massey & Denton, 1993). It has been argued that people's knowledge of out-groups is primarily determined by indirect contact (Linville, 1998; Linville & Fischer, 1993; Mackie, Hamilton, Susskind, & Rosselli, 1996). Both Newcomb (1947) and Allport (1954) suggested that one of the major ways in which people develop positive and negative feelings about other groups or individuals is through indirect contact (i.e. communicating with friends and acquaintances about their experiences). Newcomb (1947) postulated that a considerable amount of the hostility directed toward a stigmatized group was a result of interactions in which members of the stigmatized group were not actually involved (also, see Hardin & Higgins, 1996; Resnick, 1991). In part, this hostility may be due to the fact that indirect, or secondhand, information often conveys the most extreme aspects of a group stereotype and generally portrays the out-group in a homogeneous manner (Linville, 1998).

One way that indirect information may influence group-level perceptions is by making salient a specific exemplar that can be used in group-level judgments. It has been argued that people develop their knowledge of social categories through encountering category exemplars, and that increased contact with category members increases or decreases differentiation as a function of the exemplars' typicality to the group (Rothbart & Lewis, 1988; Smith, 1990). The exemplars that represent a category may consist of either specific individuals or prototypes of the category. According to exemplar-based models of category representation, group perceptions (Smith & Zárate, 1990, 1992) and, more specifically, group variability judgments (Linville et al., 1986, 1989) are based on the retrieval of specific category members, sets of category members, or previous experiences which are stored in long-term memory and can be used to make social judgments.

A number of researchers have found evidence supporting an exemplar-based model of category judgment (Andersen & Cole, 1990; Gilovich, 1981; Smith & Zárate, 1990). Rosenfield, Greenberg, Folger, and Borys

(1975) showed that people who were panhandled by a Black confederate were less likely than others, who were either petitioned by a Black person for a worthy cause or panhandled by a White confederate, to voluntarily assist in projects coordinated by Blacks. Others have shown that the more typical the exemplar is to the group the more likely it will be that the exemplar's action will be seen as representative of the group (Rothbart & Lewis, 1988; Rothbart, Sriram, & Davis-Stütt, 1996).

Park and Hastie (1987) found that exemplars are more likely to influence group-based judgments when the judgments are memory-based (also see Mackie et al., 1993). If this is indeed the case, hearing about the negative actions of a Black person should result in Whites differentiating less among Blacks because they will retrieve either the target or the relevant prototype (e.g. friendly, educated, etc.) when making judgments about Blacks in general.

In fact, there is some evidence suggesting that the ability to differentiate among out-group members is affected by the negative actions of a single out-group member (Rosenfield et al., 1975). Henderson-King and Nisbett (1996) found that participants who observed a Black confederate behave in a hostile manner were less likely to sit next to a subsequently encountered Black person than were those who observed a Black confederate behaving in either a positive or neutral manner.

Although a similar process may occur with an in-group, this is less likely because the perceiver can use the self as a referent when making group-based judgments (Park & Judd, 1990); in-groups are generally perceived as consisting of a much larger array of subgroups than are out-groups (Park, Ryan, & Judd, 1992); and it may be more likely that the target will be seen as an atypical member of the in-group. It has also been shown that information pertaining to in-groups is processed on the subordinate category level, whereas out-group information is more often processed on a superordinate category level (Park & Rothbart, 1982). Further, previous research has shown that the negative behavior of an in-group member is often attributed to situational rather than dispositional fac-

tors (Duncan, 1976). Finally, researchers examining individual-to-group generalization have shown that observing the behavior of a single individual is more likely to result in generalization to the group if the target person is an out-group, rather than an in-group, member (Henderson-King & Nisbett, 1996; Nisbett, Krantz, Jepson, & Kunda, 1983; Quattrone & Jones, 1980). Quattrone and Jones (1980) suggested that generalization is less likely to occur with an in-group because people perceive their in-groups in a heterogeneous fashion and, therefore, perceive deviant individuals as atypical of the larger group. Thus, the negative actions of an in-group member should have little influence on people's ability to differentiate among members of the in-group. In fact, if they were to have any impact one might expect that the behavior would result in greater differentiation (see Simon et al., 1995).

Yet, there are also circumstances that may lead to both the in-group and the out-group being perceived homogeneously. Simon et al. (1995, Study 4) have shown that members of a stigmatized group will perceive the in-group in a more homogeneous manner after thinking about how members of the group have been treated. Similarly, Rothgerber (1997) found that, when their in-group was under threat, people perceived both the in-group and the out-group homogeneously. It should be noted, however, that these studies focused on group-rather than individual-level actions. Thus, the increase in homogeneity can be seen as an indication of a sense of common fate and a readiness to take action against a common foe. In contrast, the current study examined the effect that individual-level actions have on group-level perceptions.

Overview

Participants in the study overheard one end of a conversation in which a confederate informed a friend that a mutual acquaintance had been assaulted by either a Black or a White male, or had tripped and fallen down a flight of stairs. After hearing the conversation, participants completed a questionnaire in which Linville et

al.'s (1986) probability of differentiation measure was embedded. The participants, all of whom were White, assessed how differentiated Blacks and Whites were on the traits of 'hostile' and 'educated'. When assessing specific traits, the degree to which the target's behavior influences group differentiation judgments should be partially dependent on whether the behavior makes salient the corresponding stereotype-relevant traits. A considerable amount of research has shown that behaviors which are consistent with a perceiver's preexisting beliefs serve to strengthen the relationship between the behavior and the trait and, therefore, increases the likelihood of its usage (Wyer & Carlston, 1994; Wyer & Martin, 1986). In general, traits that are unrelated to a target's behavior should not be affected by the behavior.¹

It was expected that participants in the Black assailant condition would be more likely than participants in either the control condition or the White assailant condition to perceive Blacks in a less differentiated manner on the stereotype-relevant trait of hostile. It was also expected that those in the Black assailant condition would exhibit the out-group homogeneity effect by viewing Whites in a more differentiated manner than Blacks.

Method

Participants and design

Participants were 103 (73 female and 30 male) White undergraduate students who participated in the study as partial fulfillment of a course requirement. A 3(Condition: Black Assailant vs. White Assailant vs. Control) $\times$ 2(Order: White-Black vs. Black-White) $\times$ 2(Racial Group: Black vs. White) mixed factors design was used, with the first two factors being between-groups and the third factor being within-subjects. Participants were randomly assigned to condition.

Materials and procedure

Participants completed the sessions either individually or in pairs. On arriving for the session, they sat on a bench that was situated outside of the laboratory area and across from a set of

escalators. After all of the participants had arrived, the experimenter told them that she/he was waiting for a few more people, and that the session would begin in a few minutes. The experimenter then signaled to a hidden confederate who went down a stairwell and up a flight of escalators toward the waiting participants. While on the escalator, the confederate began talking into a cellular phone. After sitting approximately 5 feet away from the participants, the confederate began telling the fictitious phone partner about a mutual female friend who had been assaulted and robbed. The extent of the friend's injuries included a cut requiring stitches below her right eye and a swollen lip. In discussing the incident, the confederate noted that all the victim could tell was that the assailant was White (or Black) and looked like he might have been a student. In the control condition, the confederate said that the friend had sustained the same injuries as a result of slipping and falling down a flight of stairs.

The experimenter listened to the conversation from a position around a corner from where the participants sat. This allowed us to determine whether the conversation was loud enough for the participants to hear, since the participants were closer to the confederate than was the experimenter.

Following the phone conversation, the experimenter waited approximately one minute before coming out and asking the confederate if he/she was present for the experiment. After it was determined that the confederate was waiting for a different experiment, the experimenter brought the actual participants to the laboratory. Participants were informed that the study involved the completion of a questionnaire examining people's feelings and beliefs about various issues and groups in American society. In completing the questionnaire, participants assessed how differentiated Black Americans and White Americans were on the attributes of hostile and educated. For each group, participants were asked to distribute 100 members of the group across five levels of each attribute. Thus, participants were asked to estimate the percentage of Blacks who were 'not at

all hostile', 'a little hostile', 'quite hostile', 'very hostile', and 'extremely hostile'. Consistent with Linville et al. (1986), probability of differentiation scores were calculated by squaring the perceived proportion of category members at each attribute level, summing these values, and then subtracting the summed score from 1. Thus, probability of differentiation scores could range from 0 (meaning that there was a 0% chance that a perceiver could differentiate between two randomly chosen members of a group) to .80 (meaning that there was an 80% chance that a perceiver could differentiate between two randomly chosen group members). In order to obtain a central tendency score, the mean of the distribution was calculated by multiplying the proportion for 'not at all' by 1, for 'a little' by 2, for 'very' by 3, for 'quite' by 4, and for 'extremely' by 5 and then summing these scores. The order in which participants rated Black Americans and White Americans was counterbalanced. After completing the questionnaire, the participants were debriefed.

Results

Preliminary analyses did not reveal any significant main effects or interactions involving gender; therefore, this variable was not included in the following analyses. Also, participants' probability of differentiation scores for Whites and Blacks were highly correlated ($r_{\text{Black assailant}} = .50$, $r_{\text{White assailant}} = .57$, $r_{\text{Control}} = .71$, all $ps < .01$). Such findings suggested that participants were using their first set of ratings (whether for Whites or Blacks) as an anchor for their ratings of the second group. Therefore, as Ostrom and Sedikides (1992) suggest, a between-groups approach, rather than a within-groups approach, was used to conduct the following analyses.²

Central tendency

Hostile A 3(Condition: Black assailant vs. White assailant vs. Control) $\times$ 2(Racial Group: Black vs. White) analysis of variance (ANOVA) was used to examine participants' central tendency scores for hostile. The analysis revealed

only a marginally significant main effect for racial group ($F(1, 97) = 3.83$, $p = .06$), with participants perceiving Blacks to be more hostile ($M = 2.79$) than Whites ($M = 2.60$).

Educated The 3(Condition) $\times$ 2(Racial Group) ANOVA using educated as the dependent variable revealed only a main effect for racial group ($F(1, 97) = 4.79$, $p < .05$). Participants perceived Blacks as significantly less educated ($M = 2.88$) than Whites ($M = 3.06$).

Probability of differentiation

Hostile In order to examine whether participants perceived Blacks in a less differentiated manner than Whites, a 2(Racial Group: White vs. Black) $\times$ 3(Condition: Black assailant vs. White assailant vs. Control) analysis of covariance (ANCOVA) was conducted, using the differentiation score for hostile of those who rated Whites first and those who rated Blacks first, while covarying out the central tendency score. This analysis resulted in a significant Racial Group $\times$ Condition interaction ($F(2, 96) = 3.24$, $p < .05$). As can be seen in Table 1, simple effects analyses revealed a significant simple main effect for those evaluating Blacks ($F(2, 96) = 5.55$, $p < .01$). As expected, participants in the Black assailant condition perceived Blacks in a less differentiated manner than did those in either the White assailant condition ($F(1, 96) = 3.97$, $p < .05$), or the control condition ($F(1, 96) = 3.97$, $p < .05$). In comparison, there was no significant difference across condition for those evaluating Whites ($F(2, 96) = 2.22$, ns).

Furthermore, as expected, in the Black assailant condition participants perceived Blacks in a less differentiated manner than Whites ($F(1, 96) = 4.44$, $p < .05$). In comparison, differentiation values did not vary significantly as a function of the group being rated in either the White assailant condition or the control condition.

Educated A 2 $\times$ 3 ANCOVA was also conducted using the differentiation scores for the trait of educated as the dependent variable. Results

Table 1. Hostile differentiation values as a function of condition and racial group

Racial group	Condition		
	Black assailant	White assailant	Control
Whites			
Hostile	.70 (<i>n</i> = 23)	.68 (<i>n</i> = 18)	.64 (<i>n</i> = 16)
Blacks			
Hostile	.63 (<i>n</i> = 14)	.70 (<i>n</i> = 15)	.70 (<i>n</i> = 15)

Note. Higher values indicate greater perceived differentiation.

indicated a significant Racial Group X Condition interaction ($F(2, 96) = 4.22, p < .025$). As can be seen in Table 2, simple effects analyses revealed that for those evaluating Whites, there was a significant effect for condition ($F(2, 96) = 6.00, p < .01$). Those in the White assailant condition perceived Whites in a less differentiated manner than participants in the Black assailant and control conditions ($F(1, 96) = 4.94, p < .05$). When Blacks were evaluated there was no significant effect for condition. Simple effects analyses also revealed that for those in the Black assailant condition, Blacks were perceived in a less differentiated manner than Whites ($F(1, 96) = 4.00, p < .05$). In comparison, differentiation values did not differ as a function of racial group in either the White assailant or control conditions.

Discussion

The primary purpose of the present research was to examine whether perceptions of out-

group differentiation are influenced by the sort of indirect contact that is typical of contemporary American life. Specifically, this research considered whether an incidental reference to the race of a person who committed a negative act would influence perceptions of group differentiation. The results indicate that second-hand information pertaining to the negative actions of a Black individual resulted in participants perceiving Blacks in a less differentiated manner on the primed, stereotype-related, trait of hostile. In contrast, identical comments involving Whites seemed only to have a minor effect on perceptions of Whites as educated. It was also found that participants in the Black assailant condition perceived Blacks in a less differentiated manner than Whites. This latter finding is in line with much of the previous research examining homogeneity effects in intergroup relations.

It has been suggested that the out-group homogeneity effect is one of the primary reasons why the actions of a single out-group

Table 2. Educated differentiation values as a function of assailant and racial group

Racial group	Condition		
	Black assailant	White assailant	Control
Whites			
Educated	.74 (<i>n</i> = 23)	.69 (<i>n</i> = 18)	.73 (<i>n</i> = 16)
Blacks			
Educated	.69 (<i>n</i> = 14)	.73 (<i>n</i> = 15)	.72 (<i>n</i> = 15)

Note. Higher values indicate greater perceived differentiation.

member can influence group-level perceptions (Henderson-King & Nisbett, 1996; Nisbett et al., 1983; Quattrone & Jones, 1980). The current work reveals one way in which such perceptions may be shaped. They show that the perception of out-group homogeneity is malleable and can be influenced by indirect experiences with out-group members. The findings also suggest that the likelihood of differentiating amongst out-group members will be reduced when group labels are used to describe the stereotype-related actions of a single out-group member. Consequently, one might then expect that indirect (Henderson-King, 1994; Henderson-King, & Nisbett, 1996) or direct (Lewicki, 1985; Rosenfield et al., 1975) negative experiences with an out-group member will result in the avoidance of subsequently encountered out-group members, since the behavior results in a decreased ability of the perceiver to differentiate among out-group members.

It may also be, however, that such descriptions and labeling, when involving counter-stereotypic traits, might actually increase perceived group differentiation. Such a possibility is certainly in line with the basic principles of category subtyping (Rothbart & Lewis, 1988; Weber & Crocker, 1983). Yet, it is also the case that while the labeling of a target as an out-group member may result in greater differentiation it may also, at least initially, reinforce existing stereotypes (Kunda & Oleson, 1995). For example, the labeling of a doctor as 'Black' communicates the uniqueness of the instance and, therefore, may prime the stereotype of the larger group as uneducated or unmotivated.

The results are also in line with research showing that people use the readily available characteristics of a target as a means of making social categorizations (Stangor, Lynch, Duan, & Glass, 1992; Taylor, Fiske, Etcoff, & Ruderman, 1978), and that information about the in-group is processed on the individual level, while out-group information is processed on the group level (Ostrom, Carpenter, Sedikides, & Li, 1993). Previous research has shown that category determination is partially influenced by factors such as a target's uniqueness, the acces-

sibility of the features, and the importance of a particular feature to the perceiver. Given such findings, we might have expected that hearing about a White person's hostile actions would have influenced differentiation values for Whites, since the incongruence between the assailant's race and the action might have made race more salient. Yet, in the White assailant condition, hearing about the behavior failed to either increase or decrease differentiation scores for hostile, nor did it increase the variance of the scores within the condition.³ It may be, however, that because the action of the White assailant is counter-stereotypic the assailant was categorized in terms of his role (i.e. criminal) rather than race (Kunda & Oleson, 1995; Rothbart & John, 1985). In contrast, since the Black assailant's behavior is consistent with the group stereotype, not only does it serve to confirm the stereotype, but it simultaneously increases the likelihood that race will be a particularly salient feature for the perceiver.

While participants perceived Whites as a group to be less hostile and more educated than Blacks as a group, there were no between-group differences in the differentiation scores. Such findings are most likely a result of the particular traits employed in the study. In the USA, White Americans are generally seen as highly educated and not very hostile, whereas the reverse tends to be true for Black Americans. Had we used less stereotype-related traits (e.g. anxious, depressed), we may have found between-group differences in differentiation scores for Blacks and Whites.

Both Linville et al. (1989) and Ostrom and Sedikides (1992) expressed concern regarding the use of within-subjects designs in assessing group homogeneity. It was suggested that the use of within-subjects designs when rating different groups might be problematic because it could lead participants to compare their ratings of one group with those of the other and consequently result in similar ratings. The current study found evidence to support just such a concern with participants tending to adjust their ratings of Blacks to their ratings of Whites (or vice versa). Thus the current study provides

further evidence that between-subjects designs, rather than within-subjects designs, may be more appropriate when assessments of racial/ethnic groups are being made in out-group homogeneity studies.

A considerable amount of research has pointed to the importance of social learning in the development and maintenance of stereotypes (Allport, 1954; Patchen, Davidson, Hofmann, & Brown, 1977; Rosenfield & Stephan, 1981). Much of the past work has suggested that parents, peers, and the media are important contributors to people's perceptions of groups; however, most of the work has taken either a qualitative or correlational approach to examining these relationships. The current study is an important contribution to this existing body of work for two reasons. First, on a methodological level, it presents one way to examine the impact that indirect contact has on group perceptions from a quantitative rather than a qualitative perspective. Second, it shows that exposure to secondhand information about an individual out-group member leads to the painting of a more simplistic portrait of the group, as has been proposed by Newcomb (1947) and others (Linville, 1998; Linville & Fischer, 1993; Mackie et al., 1996).

Finally, the current findings give some indication of how powerful the casual usage of categorical descriptors can be in modifying beliefs about out-groups. Future research should consider the longevity and cumulative effects of indirect contact. Although the occasional use of such descriptors may only have fleeting effects on social perceptions, the cumulative effects of such experiences could lead to significant alterations in beliefs about social groups. This may be particularly true in environments where there are few out-group members, or where direct contact with the out-group is minimal but indirect contact is relatively frequent. Future research should not only continue to explore the social factors which influence the ability to differentiate among group members, but should also examine the attitudinal consequences of these cognitive processes.

Notes

1. However, it is certainly the case that group-level evaluations on an unrelated trait may be influenced when the unrelated trait is associated with a trait related to the observed behavior (Wyer & Carlston, 1994), or when a target's behavior results in a halo effect (Herr, 1986).
2. For the trait 'hostile' analysis of the full design revealed a significant Condition $\times$ Racial Group interaction ($F(2, 96) = 3.09, p = .05$). Simple effects analyses revealed that participants in the Black and White Assailant conditions perceived Whites in a more differentiated manner ($M = .68$ and $M = .69$, respectively) than those in the control condition ($M = .65$); $F(2, 96) = 6.14, p < .01$. In comparison, differentiation scores for Blacks did not vary across condition ($M_{\text{Black assailant}} = .68, M_{\text{White assailant}} = .69, M_{\text{Control}} = .70$).
For the trait 'educated' analysis of the complete design resulted in a significant Condition $\times$ Version interaction, ($F(2, 96) = 3.46, p < .05$). Simple effect analyses revealed that in the Black Assailant condition participants who rated Whites before Blacks perceived both groups in a more differentiated manner ($M = .74$) than participants who rated Blacks first ($M = .69$) ($F(1, 96) = 3.00, p < .10$). In the White Assailant and the control conditions there was no difference in differentiation scores as a function of version.
3. The latter effect would occur if the White assailant's action led some participants to perceive Whites in a less differentiated manner while leading others to perceive greater differentiation.

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