

The Influence of Exposure to Depictions of Race and Crime in TV News on Viewer's Social Judgments

Dana Mastro, Maria Knight Lapinski, Maria A. Kopacz,
and Elizabeth Behm-Morawitz

This two-study experimental design utilizes a group-based priming framework to investigate the relationship between exposure to television news portrayals that intersect race with violent crime and viewers' real-world racial judgments. Results from Study 1 reveal that both the gender of the viewer and the race of the TV news suspect influence subsequent judgments, including attributions about the perpetrator and victim. Findings from Study 2 offer somewhat consistent results, additionally indicating that the race of the depicted suspect has a significant effect on attitudes toward Blacks in greater society, beyond the mediated context.

Research on stereotyping in the United States reveals persistent racial prejudice among Whites, particularly regarding the characterization of Blacks as violent and aggressive (St. John & Heald-Moore, 1996). These beliefs have been found to manifest in a heightened fear (among Whites) of victimization at the hands of racial minorities, specifically young, Black males. Both theory and empirical evidence indicate that media exposure contributes to the construction and perpetuation of these perceptions by disproportionately depicting racial/ethnic minorities as criminal suspects and Whites as victims in television news (Dixon, 2007; Dixon & Linz, 2000a, 2000b). Further, consuming these messages has been shown to provoke prejudicial responses among White viewers (Dixon, 2007, 2008; Dixon & Maddox, 2005). Given the social significance of these findings, it is important to consider

Dana Mastro (Ph.D., Michigan State University) is an Associate Professor and the Director of Graduate Studies in the Department of Communication at the University of Arizona. Her research interests include the influence of media exposure on issues of race/ethnicity and identity-based outcomes.

Maria Knight Lapinski (Ph.D., Michigan State University) is an Associate Dean for Research and Associate Professor in the College of Communication Arts and Sciences at Michigan State University. Her research interests include cultural differences in health and risk communication.

Maria A. Kopacz (Ph.D., University of Arizona) is an Assistant Professor in the Department of Communication Studies at West Chester University. Her research interests include intergroup communication in the context of new media technologies.

Elizabeth Behm-Morawitz (Ph.D., University of Arizona) is an Assistant Professor in the Department of Communication at the University of Missouri-Columbia. Her research interests include media effects, gender, race, sexuality, and video games.

how identities beyond race/ethnicity impact these outcomes. The present study takes a group-based priming approach to investigate the effects of exposure to news portrayals of race and crime on viewers' social judgments, racial attitudes, and allocations of consequences. In particular, the current experimental design examines the role that race and gender play in predicting discriminatory responses to depictions of news coverage intersecting race and sexual assault.

News Depictions of Black Americans

Analyses of television news consistently indicate that Black males are overrepresented as perpetrators and underrepresented as victims, compared to both their White male counterparts on TV as well as real-world Department of Justice arrest reports (Dixon & Linz, 2000a, 2000b). In these news stories, Black suspects are more likely than Whites to be portrayed as nameless, menacing, and in the grasp of the police (Entman, 1992, 1994). In fact, Blacks are nearly four times more likely to be represented as criminals than police officers on television news—a proportion inconsistent with U.S. Department of Labor statistics (Dixon, Azocar, & Casas, 2003). Alongside their overrepresentation as criminals in the news, Blacks also are underrepresented as victims compared with their on-air counterparts (Dixon & Linz, 2000b). Further, the text of crime-related news stories also has been found to vary depending on the race of the perpetrator. For example, Dixon and Linz's (2002) research reveals that statements containing prejudicial information about criminal suspects, such as prior arrests, were significantly more likely to be associated with Black (as opposed to White) defendants, particularly in cases involving White victims.

Exposure to biased messages has consequences. As Dixon's (2007) work illustrates, consuming the persistent overrepresentation of Black males in crime-related news stories strengthens the cognitive association between Blacks and criminality in the mind of consumers such that the connection (i.e., Blacks and crime) becomes chronically accessible for use in race-related evaluations. Notably, as the research on media priming illustrates, even a single exposure to these unfavorable characterizations can produce stereotype-based responses.

Media Priming

The preponderance of research examining the effects of exposure to media depictions of racial/ethnic stereotypes on viewers utilizes a priming framework. In this context, priming refers to the process through which information activated by exposure to media guides subsequent judgments (see Roskos-Ewoldsen, Roskos-Ewoldsen, & Dillman Carpentier, 2002, for overview). In other words, priming occurs when one encounters stimuli in the media which activate existing mental constructs which then (largely unconsciously) influence later evaluations of a target.

Results from priming investigations indicate that exposure to racial/ethnic stereotypes in the media can influence real-world racial evaluations in terms of outcomes such as misconceptions and stereotypes regarding racial/ethnic minorities (Johnson Adams, Hall, & Ashburn, 1997; Mastro, 2003; Peffley, Shields, & Williams, 1996) as well as unsympathetic policy preferences including support for affirmative action, presumptions of culpability, determinations of punishment, and judgments regarding repeat behavior (Gilliam & Iyengar, 2000; Mastro & Kopacz, 2006; Pan & Kosicki, 1996; Peffley et al., 1996). Moreover, research on media and judicial decision-making indicates that Whites are: (a) more likely to view a Black (as opposed to White) defendant as guilty, (b) increasingly apt to perceive a Black perpetrator as more memorable than a White perpetrator (Dixon & Maddox, 2005), and (c) more prone to misidentify or falsely acknowledge having seen a Black suspect even when none is depicted (Dixon, 2007, 2008; Gilliam & Iyengar, 2000; Oliver, 1999; Oliver & Fonash, 2002).

It is important to note, however, that the type of crime appears to play a role in predicting tendencies to misidentify the race of the perpetrator. Oliver and Fonash (2002) found that White consumers (irrespective of level of prejudice) were significantly more likely to erroneously identify seeing a Black suspect in newspaper stories when the article pertained to violent crime. On the other hand, when the story addressed nonviolent crime, misidentification of White suspects was higher (though not statistically significant). Similarly, Oliver (1999) found that immediately after exposure to a crime newscast, Whites were no more likely to incorrectly identify Blacks as criminal suspects than Whites. Further, same-race errors in the misidentification of Blacks were equivalent to that of Whites. Only after time elapsed (3 months), did racial misidentifications emerge. These findings suggest that factors beyond the activation of racial stereotypes contribute to responses to news stories intersecting race and crime. Although a number of individual, social, and institutional attributes are known to influence stereotype-based responses to media, the role that group memberships play in processing crime news is likely to be particularly consequential.

The Role of Group Membership in Responses to Media Content

The groups and categories to which one belongs (e.g., age, gender, race, political affiliation, etc.) contribute to one's self-concept and self-definition by furnishing the normative beliefs and behaviors associated with these groups (Billig & Tajfel, 1973; Hogg, Terry, & White, 1995). In effect, these provide a generally accepted sense of identity at any given time and place. When contextually relevant, they can be used in social comparison processes to maintain self-concept (Abrams & Hogg, 1990; Tajfel, 1969). Indeed, individuals are resourceful in accomplishing this—actively searching for beneficial attributes on which to make comparisons, including those found in media content (Harwood, 1999). Accordingly, when social

categories become salient through media primes the repertoire of characteristics and attitudes associated with that group(s) can trigger perceptions of outgroup members that are highly stereotyped, and intergroup behaviors that are competitive and discriminatory (Fryberg, 2003; Gorham, 2006; Hogg, 1992; Mastro, 2003). Typically, such intergroup behaviors are defined as "... interactions which are largely determined by group memberships ... and very little, if at all, by ... personal relations or individual characteristics" (Tajfel, 1979, p. 401). In other words, intergroup behavior has features that differentiate it from idiosyncratic behavior; including favoring the ingroup and derogating the outgroup, among other cognitive and behavioral responses (Brewer & Campbell, 1976). For example, research on intergroup responses to media reveals that exposure to mass media content can influence evaluations of: group vitality (Abrams & Giles, 2007); self-concept and esteem (Fryberg, 2003; Mastro, 2003); prototypicality ratings and social attraction (Mastro, Tamborini, & Hullett, 2005); as well as variations in language abstractness, reflective of more subtle (and often unconscious) discriminatory responses (Gorham, 2006).

Work in this area also demonstrates that news content associating race and crime influences evaluations of the moral character of the suspect (Johnson et al., 1997; Pan & Kosicki, 1996). Rooted in thinking on attribution biases (Pettigrew, 1979), these studies reveal that an individual's attributions tend to privilege the interests and needs of the ingroup (e.g., race, gender) over those of the outgroup such that unfavorable or unflattering behaviors are deemed dispositional (i.e., internal) when associated with an outgroup member and situational (i.e., external) when linked with an ingroup member. The reverse is true of positive or favorable behaviors. In terms of the media's role in this process, experimental research shows that alongside priming stereotype-consistent responses among White viewers, when racialized depictions of crime in the news are linked with Black males, dispositional attributions for the behavior are more likely to be made (e.g., character-based judgments), whereas situational explanations (e.g., context-based judgments) are offered when the defendant is a White male (Gilliam & Iyengar, 2000; Johnson et al., 1997).

When it comes to media depictions that intersect race with crimes such as sexual assault, the role of group membership becomes more complex. Although a variety of group memberships may come into play when attending to mass media, gender and race are among the most readily accessible categories available for use in intergroup contexts (Mackie, Hamilton, Susskind, & Rosselli, 1996). Accordingly, when both race and gender are salient features of media content, cross-categorization is likely to emerge (Fiske & Taylor, 1991). Cross-categorization is defined as crossing two discrete group memberships such that four groups result: "the double ingroup, the double outgroup, and two crossed-category groups" (Blake, 2002, p. 18). As these names suggest, a double ingroup applies to people who share ingroup status for both categories, whereas the reverse is the case for the double outgroup. Crossed-categories share an ingroup in one category but are outgroups on the other. In the context of the present study, a White female may see herself as a double outgroup member when exposed to a Black, male suspect in a news story about sexual

assault (sharing neither gender nor race with the depicted suspect). Accordingly, she would be expected to exhibit the least favorable response to the suspect. On the other hand, when exposed to a Black perpetrator, a White male would share one group membership (that of gender) but not the other (that of race). This crossed-category group has the potential to reduce intergroup bias, as the shared category encourages greater personalization and acceptance of the outgroup category (Blake, 2002; Urban & Miller, 1998).

Although gender is an inherent feature of all news stories that depict criminal suspects, the nature of sexual assault underscores the relevance of this group identity. As such, it is reasonable to suggest that in the bulk of typical crime news stories (e.g., homicide, robbery) gender may not be deemed salient.

Further, when real-world statistics on rape and sexual assault are considered, the multifaceted nature of the gender-race dynamic in this context is highlighted. These data indicate that the overwhelming majority of rape victims in the United States are White females (74%) (U.S. Department of Justice, 2002), and the preponderance of these crimes (88%) are intra-racial (Barrett & George, 2005). In other words, the majority of reported sexual assaults and rapes involve a White perpetrator and a White victim (Barrett & George, 2005). This presents a notable contrast to overarching media stereotypes linking Blacks with crime (and violent crime in particular).

The Present Study

To advance an understanding of the manner in which group memberships impact on responses to media content, the present study applies insights based on priming research alongside assumptions rooted in the intergroup literature in formulating the hypotheses. The criminal news story (of a sexual assault) was selected for its salience on college campuses, its particular relevance for female viewers, and its somewhat counterintuitive nature with regard to race and criminality. Thus, despite the fact that this news topic was expected to be highly relevant to both White male and White female college viewers, it is likely to be of unique significance for White, college women due to their increased potential for victimization (Bureau of Justice Statistics, 2002). Accordingly, both gender and race should serve as meaningful group memberships for viewers, and therefore constitute a rigorous test of the theoretical relationship of interest here.

Hypotheses

The following hypotheses are proposed.

H₁: The gender of the TV viewer (female, male) and the race of the suspect depicted on television news (Black, White, no race shown) will interact in predicting evaluations of: (a) judgments regarding the criminal culpability

of the suspect; (b) allocations of appropriate length of incarceration for the suspect; and (c) evaluations of the suspect's potential to repeat the behavior. In particular, it is expected that more unfavorable judgments will result from exposure to the Black suspect (followed by the no-race/control suspect, and then the White suspect), with women demonstrating more unsympathetic responses than men.

H₂: The gender of the TV viewer (female, male) and race of the suspect depicted on television news (Black, White, no race shown) will interact in evaluations of responsibility for the incident such that women will be more likely than men to allocate more responsibility for the incident to the suspect when exposed to the Black suspect (followed by the no-race/control suspect, and then the White suspect).

H₃: The gender of the TV viewer (female, male) and race of the suspect depicted on television news (Black, White, no race shown) will interact in evaluations of victim blame such that women will be more likely than men to allocate less responsibility for the incident to the victim when exposed to the Black suspect (followed by the no-race/control suspect, and then the White suspect).

The Design

Two studies were conducted in order to examine these hypothesized relationships. Study 1 investigated these associations using videotapes in controlled, small-group settings. Study 2 replicated Study 1, this time utilizing a larger sample and employing individual computer workstations with the video imbedded into the computerized instrument. This procedure allowed the inclusion of a race-based implicit attitude test (IAT) in Study 2, as highly sensitive response latency measures could now be acquired. In addition to the inclusion of the IAT in Study 2, a measure of situational responsibility also was incorporated.

Method: Study 1

A 2 × 3 between subjects factorial design was used to determine the relationship between viewer gender, exposure to TV news, and subsequent social judgments. Factors included two levels of gender (female, male), and three levels of race of the suspect (Black, White, no-race) depicted in a television news story about a sexual assault.

Participants

College students from a mid-sized, eastern university participated in this study on an anonymous and voluntary basis. Because the predictions were based on

White's reactions to news representations of race and criminality, only students who identified themselves as White, and who correctly recalled the news story in a manipulation check were included in the analyses. Thus, 100% of participants in each of the three TV news conditions (White, Black, control) correctly identified the race of the suspect (or lack thereof). As a result, the final sample for the experiment was 117. The majority of participants were female (63.2%) and the average age of the sample was 19.54 ($SD = 1.07$).

Procedure

Participants in Study 1 completed the experiment in small, mixed-gender groups. They were randomly assigned to one of three video conditions, containing a maximum of five students per grouping. Researchers informed the participants that the purpose of the study was to examine recall of news content, to assess attitudes about TV news, and to investigate the way people evaluate information obtained from television newscasts. The taped newscast was then played for each session. Immediately following the short TV news segment, a questionnaire was administered to evaluate social judgments. Once all students finished the survey, they were fully debriefed as to the nature of the study.

Pilot to Develop Stimulus Materials

The television newscasts were scripted by the researchers and produced by a local television affiliate to create three, 5-minute segments to be used as experimental stimuli. A White, female newscaster in her mid-30s, anchored the broadcast. Because an affiliate news station produced the news segments, the induction had all the appearances and production quality of a true newscast. These video segments varied only based on the race/ethnicity of the criminal suspect visually pictured in the broadcast. In all other respects, the videos were identical. The newscast contained three stories (which were counterbalanced). The story of interest was that of the rape. For authenticity (as well as to mask the intent of the study) two filler stories also were used. One story addressed production issues at a manufacturing company in a different state. The other story covered local freeway closures and highway construction.

The photographs (headshots) used in the videos were piloted to determine their suitability. The photographs corresponded on all features including size, background (none observable), and angle (straight). The male images were matched such that they were deemed equivalent in terms of facial hair (none), hair style, attractiveness, facial expression (both males exhibited slight but perceptible smiles), and size. The pictures were cropped so that no extraneous features were evident; only the face of the male was revealed. Forty-two students outside the experimental sample evaluated the race and age of the criminal suspects. All respondents identified the White, male suspect to be a White man and the Black, male suspect to be a Black

man. Paired sample *t* tests found these males not to differ significantly by age, $t(41) = 1.31, p = .20$. Both were identified to be of college age.

Independent Variables

News Broadcast. The three TV news conditions varied only in terms of the race of the criminal suspect visually pictured in the story about the rape. The race of the suspect was not verbalized in the newscast. In condition 1, a White, male suspect was shown; condition 2 depicted no criminal suspect (i.e., no picture was provided); and condition 3 pictured a Black, male suspect.

Gender. The gender of the participants was identified based on responses to a self-report item on the questionnaire (female or male).

Dependent Measures

Whenever possible, confirmatory factor analysis was conducted (including tests of internal consistency and parallelism) in the construction of scales. Alphas are reported below.

Guilt. To assess the extent to which the respondents perceived the perpetrator to be guilty, the following single, dichotomous item was used: "Based on the information provided, would you say the suspect is: *Guilty* (1) or *Not Guilty* (2)."

Prison Sentence. A single, open-ended question asking how long the man, if guilty, should spend in prison, was used to gauge participants' perceptions of an appropriate length of prison sentence.

Repeat Behavior. The item, "If guilty, I think the suspect would repeat this behavior" was used to assess likelihood of repeating the behavior. It was scored on a 5-point scale from *strongly disagree* (1) to *strongly agree* (5).

Suspect Responsibility ($\alpha = .89$). A 3-item measure was used to determine perceptions regarding the male suspect's responsibility for the incident. Responses were scored on a 5-point scale from *none at all* (1) to *all* (5). The items follow: "Based on the information provided, how much responsibility for the incident should be placed on the man?" "Based on the information provided, how much blame should be placed on the man?" and "Based on the information provided, how much accountability should be placed on the man?"

Victim Responsibility ($\alpha = .88$). In assessing the accountability of the female victim, the following 3-item measure was included: "Based on the information provided, how much responsibility should be placed on the woman?" "Based on the information provided, how much blame should be placed on the woman?" and "Based on the information provided, how much accountability should be placed on the woman?" Response options ranged from *none at all* (1) to *all* (5).

Analyses

Analysis of variance was used to test the hypothesized influence of viewer gender and television news exposure on subsequent evaluative judgments.¹ Given these analyses and the sample size for Study 1, the power to detect a medium effect size ($f = .25$) at $p = .05$, is approximately 0.70.

Results: Study 1

Hypotheses 1a, b, and c

A significant 2 (viewer gender) \times 3 (suspect race) interaction was revealed in the determination of suspect guilt (H_{1a}), $F(2, 104) = 3.70$, $p < .05$, $\eta_p^2 = .07$, indicating that compared with men, women allocated significantly more guilt to both the White suspect and the Black suspect on TV news. See Table 1 for descriptive statistics and results from simple effects tests. Although the predicted interaction did not emerge in the 2 \times 3 analysis of variance examining length of prison term (H_{1b}), when the interaction was assessed using complex interaction contrasts comparing the Black suspect condition with the combined White and no-race (control) condition, a viewer gender by suspect race interaction was revealed $F(1, 100) = 4.41$, $p < .05$, $\eta_p^2 = .05$, such that, counter to expectations, the longest prison sentence was assigned by men to the Black male suspect whereas the shortest sentence was assigned by women in the combined White/No Race condition (see Table 1). Complex interaction contrasts are comparisons "in which at least one level of the comparison results from averaging two or more conditions" (Keppel, 1991, p. 258). As such, they can be much more powerful than the omnibus F test as a specific interaction-based pattern of results is predicted, with only one degree of freedom (Keppel, 1991). In the case of the present study's analyses, because the Black suspect condition was anticipated to yield the most unfavorable responses from female respondents, comparing this condition with both the White and no-race suspect condition remains theoretically and practically meaningful. Accordingly, given that the predicted 2 \times 3 interaction failed to emerge in the omnibus analysis of variance, the complex interaction contrast was employed. That said, it is important to reiterate that research has yielded inconsistent results when it comes to the propensity for consumers to misidentify the race of non-depicted criminal suspects as Black

Table 1
ANOVA Descriptive Statistics for Study 1, Hypotheses 1a, b, and c

Guilt	<i>M</i>	<i>SD</i>	<i>N</i>
Female			
White condition	1.00 ^a	.00	19
No Race condition	1.08	.27	26
Black condition	1.00 ^b	.00	24
Male			
White condition	1.18 ^a	.40	17
No Race condition	1.00	.00	17
Black condition	1.15 ^b	.38	13
Length of Prison Sentence			
	<i>M</i>	<i>SD</i>	<i>N</i>
Female			
White/No Race condition	4.69 ^{cd}	4.27	35
Black condition	6.48 ^e	4.26	24
Male			
White/No Race condition	7.25 ^{cf}	4.98	26
Black condition	18.73 ^{def}	8.14	13
Repeat Behavior			
	<i>M</i>	<i>SD</i>	<i>N</i>
Female			
White condition	3.26	.87	19
No Race condition	3.07 ^g	.78	27
Black condition	3.30	.61	27
Male			
White condition	2.83 ^h	.83	12
No Race condition	3.61 ^{ghi}	.92	18
Black condition	2.92 ⁱ	.86	13

^{abcdefghi} Means with the same superscript differ significantly at $p < .05$.

(see Oliver & Fonash, 2002). Thus, it may be that in certain cases, such errors are altogether uncommon while under other circumstances they are widespread. Nonetheless, when considering the predictions offered in the present study, the contrasts utilized were deemed most consistent with existing theory and research.

A significant 2 (viewer gender) × 3 (suspect race) interaction was revealed in assessments of the suspect’s potential to repeat the behavior (H_{1c}), $F(2, 110) = 4.46$, $p < .01$, $\eta_p^2 = .08$, such that men (compared with women) reported a greater belief that un-pictured suspects would repeat the behavior. Table 1 contains descriptive statistics and simple effects.

Table 2
ANOVA Descriptive Statistics for Study 1, Hypotheses 2 (Suspect Responsibility)
and 3 (Victim Responsibility)

Suspect Responsibility	<i>M</i>	<i>SD</i>	<i>N</i>
Female			
White/No Race condition	4.18	.62	47
Black condition	4.47 ^a	.48	27
Male			
White/No Race condition	4.09	.52	30
Black condition	3.85 ^a	.96	13
Victim Responsibility	<i>M</i>	<i>SD</i>	<i>N</i>
Female			
White condition	2.17	1.03	20
No Race condition	2.12	.72	27
Black condition	2.01	.71	27
Total	2.09	.81	
Male			
White condition	2.64	.89	12
No Race condition	2.37	.68	18
Black condition	2.36	.94	13
Total	2.44	.82	

^aMeans with the same superscript differ significantly at $p < .01$.

Hypothesis 2

Although the 2×3 ANOVA assessing suspect responsibility was not significant, when the interaction was examined with complex interaction contrasts comparing the Black suspect condition with the combined White and no-race (control) condition, a viewer gender by suspect race interaction was revealed $F(1, 111) = 4.28, p < .05, \eta_p^2 = .04$, such that compared with men, women allocated significantly greater responsibility for the incident to the suspect in the Black perpetrator condition. Table 2 contains descriptive statistics and simple effects tests.

Hypothesis 3

The anticipated interaction examining victim blame failed to achieve significance in the 2×3 factorial ANOVA, $F(2, 111) = 0.17, p > .05, \eta_p^2 = .00$, as well as in tests utilizing the complex interaction contrasts. However, a main effect for sex was revealed, indicating that men were significantly more likely than women to place

responsibility for the incident on the victim, $F(1, 111) = 4.97, p = .05, \eta_p^2 = .04$ (see Table 2 for descriptive statistics).

Method: Study 2

To replicate and expand on findings uncovered in Study 1, Study 2 mirrored Study 1 in design and implementation with two important exceptions. First, in Study 2, the TV news segment was imbedded into an electronic version of the instrument so that participants could view the clip and take part in the study at individual computer stations in a lab. This improved on Study 1 by minimizing interactions with administrators and allowing for isolation from other participants. Thus, the computerized procedure was expected to eliminate the influence that the group-based exposure may have imposed and facilitate counterbalancing of the video and instrument.

The second deviation from Study 1 was the inclusion of two additional outcome measures. Specifically, in Study 2, a measure of situational responsibility for the incident was included (rather than suspect and victim responsibility), as was an implicit racial attitude test (IAT) based on response latencies (Greenwald, Nosek, & Banaji, 2003). The addition of these measures was designed to: (a) provide further insights into the attribution-based outcomes revealed in Study 1, and (b) identify potential effects of news exposure on broader race-based outcomes, that is, beyond the mediated targets. It is important to note that in order to appropriately assess implicit racial attitudes, a no-video control condition was added for use only when examining IAT responses (that is, for testing H_3 alone).

Accordingly, although H_1 remains consistent with the predictions posed in Study 1, H_2 and H_3 were revised for Study 2 to reflect the modifications detailed above. The revised hypotheses follow:

- H_2 : Gender of the TV viewer and race of the suspect depicted on television news will interact in evaluations of situational responsibility for the crime such that women (as opposed to men) will allocate less responsibility for the incident to the situation itself when exposed to the Black suspect.
- H_3 : Gender of the TV viewer and race of the suspect depicted on television news will interact in evaluations of implicit attitudes towards Blacks in society such that more unfavorable judgments will result from exposure to the Black suspect, with women demonstrating more unsympathetic responses than men.

Participants

A total of 188 White, college students took part in Study 2 on a voluntary and anonymous basis. The majority of participants were female (64.4%), and their mean age was 19.16 ($SD = 4.86$).

Procedure

After informed consent was obtained, participants were randomly assigned to one of the TV news conditions (or to the no video condition). Students privately viewed the video on a computer monitor at individual work stations, using headphones. When the video concluded, the questionnaire automatically appeared on the monitor with instructions. In the no-video condition, the session began with the questionnaire. After completing the study, students were debriefed.

Independent Variables

The three *television news* conditions used in Study 1, in addition to a no-video control (for use in H₃), were used in Study 2. Participant's *gender* was determined based on responses to a self-report item.

Dependent Measures

Along with the measures of *guilt*, *prison sentence*, and *repeat behavior* used in Study 1, assessments of situational responsibility for the incident and implicit attitudes toward Blacks in society were included in Study 2.

Situational Responsibility ($\alpha = .81$). Having established gender differences in allocations of suspect and victim responsibility in Study 1, a measure of situational responsibility was used in Study 2 to gauge external attributions for the incident. This 3-item scale included questions such as: "How much responsibility can be placed on the situation?" and was scored on a 5-point scale from *none at all* (1) to *all* (5), with higher numbers indicating greater situational blame.

Implicit Attitudes toward Blacks. Attitudes toward Blacks were measured using Greenwald's Black-White racial implicit association test (IAT) program. The race IAT is a computer-based program that measures the relative strength of association between a target race (Black and White standardized faces) and an evaluative concept (good and bad words) using millisecond sensitive response latencies in a series of timed tests, pairing faces and words. The assumption is that the stronger the association between the target and the evaluative concept, the faster they can be paired together in computer trials. Therefore, more rapid pairings are considered to be an indication of implicit or automatic attitudes toward that group. Thus, a quicker association between "good" and "White" versus "good" and "Black" is interpreted as a bias favoring Whites. Analyses of IAT data followed the improved scoring algorithm identified by Greenwald et al. (2003). The final IAT score (D) is similar in character to the conventional effect size measure (d) (see Greenwald et al., 2003 for computation). In the present study, higher numbers indicate more unfavorable attitudes toward Blacks (i.e., preferential attitudes toward Whites).

Despite the potential value of the IAT in circumventing problems typical to research on stereotyping (e.g., social desirability in responses), the reliability and validity of these types of tests have been the subject of much debate (see Greenwald, Nosek, & Sriram, 2006). The disputed issues are wide-ranging but include: (a) skepticism regarding what the test is actually measuring (attitudes, familiarity, knowledge, etc.), (b) concerns regarding the metric, (c) interpretation of the unit, and (d) problems with test-retest reliability. Alternatively, proponents of the test argue that it is a better predictor than explicit measures and even some behavioral outcomes.

Analyses

Analysis of variance was used to test the influence of viewer gender and race of the suspect depicted on television news, on subsequent judgments. Hypotheses 1 and 2 were examined using 2×3 factorial analysis of variance. In tests of implicit attitudes toward Blacks in society (H_3), a 2×4 analysis of variance was employed (including the no-video condition). Given the sample size and analyses for Study 2, the power to detect a medium effect size ($f = .25$) at $p = .05$, is .88.

Results: Study 2

Hypotheses 1a, b, and c

In examining suspect guilt (H_{1a}), the predicted 2 (viewer gender) \times 3 (suspect race) interaction was not revealed, $F(2, 125) = .004$, $p > .05$. Complex contrasts also failed to reach significance. However, a significant main effect for condition emerged such that less guilt was placed on the White suspect than either the Black suspect or the non-pictured suspect, $F(2, 125) = 3.15$, $p < .05$, $\eta_p^2 = .05$ (see Table 3). With regard to allocations of prison sentence (H_{1b}), a 2×3 interaction was revealed, $F(2, 125) = 3.67$, $p < .05$, $\eta_p^2 = .06$, demonstrating that men allocated significantly longer prison sentences than women to the non-pictured suspect, and shorter sentences than women to the White suspect (see Table 3). A 2 (viewer gender) \times 3 (suspect race) interaction was found for judgments regarding the propensity for the suspect to repeat the behavior (H_{1c}), $F(2, 125) = 2.98$, $p = .05$, $\eta_p^2 = .05$, such that male viewers were significantly less inclined than female viewers to identify the White suspect as likely to repeat the behavior (see Table 3).

Hypothesis 2

The predicted gender by suspect race interaction in evaluations of situational responsibility for the incident did not emerge in the 2×3 ANOVA. However,

Table 3
ANOVA Descriptive Statistics for Study 2, Hypotheses 1a, b, and c

Guilt	<i>M</i>	<i>SD</i>	<i>N</i>
Female			
White condition	1.08	.27	26
No Race condition	1.00	.00	28
Black condition	1.00	.00	30
Male			
White condition	1.07	.27	14
No Race condition	1.00	.00	14
Black condition	1.00	.00	19
Total			
White condition	1.08 ^{ab}	.27	40
No Race condition	1.00 ^a	.00	42
Black condition	1.00 ^b	.00	49
Length of Prison Sentence			
	<i>M</i>	<i>SD</i>	<i>N</i>
Female			
White condition	5.77	5.98	26
No Race condition	6.68 ^c	7.20	28
Black condition	7.00	5.93	30
Male			
White condition	2.36 ^d	2.87	14
No Race condition	10.57 ^{cde}	6.69	14
Black condition	5.68 ^e	5.27	19
Repeat Behavior			
	<i>M</i>	<i>SD</i>	<i>N</i>
Female			
White condition	3.50 ^f	1.01	26
No Race condition	3.46	1.07	28
Black condition	3.31	1.12	30
Male			
White condition	2.98 ^{fgh}	1.10	14
No Race condition	3.79 ^g	.89	14
Black condition	3.71 ^h	1.14	19

^{abdhij}Means with the same superscript differ significantly at $p < .05$.

^{eg}Means with the same superscript differ significantly at $p < .01$.

Table 4
ANOVA Descriptive Statistics for Study 2, Hypothesis 2
(Situational Responsibility)

Situational Responsibility	<i>M</i>	<i>SD</i>	<i>N</i>
Female			
White/No Race condition	1.94 ^a	1.00	54
Black condition	1.97 ^b	1.07	30
Male			
White/No Race condition	2.71 ^{abc}	.94	28
Black condition	2.00 ^c	1.15	19

^{ab}Means with the same superscript differ significantly at $p < .01$.

^cMeans with the same superscript differ significantly at $p < .05$.

when the interaction was assessed using complex interaction contrasts comparing the Black condition with the combined White/No Race condition, a viewer gender by suspect race interaction approached significance, $F(1, 125) = 3.69, p = .057, \eta_p^2 = .03$, such that compared with all other conditions, men reported greater situational blame in the White/No Race condition (see Table 4). Although the results from the test of the complex interaction contrast slightly exceed the traditional threshold of significance at $p < .05$, findings from the previously reported power analysis suggest that there may be insufficient power to detect significant effects at this level. Increasing alpha aids in addressing this concern but simultaneously enhances the risk of falsely identifying differences. Thus, while these findings merit attention they should not be overstated.

Hypothesis 3

H₃ posited that the gender of the viewer and the race of the suspect depicted on the news would interact in predicting implicit attitudes toward Blacks in society. A no-video control condition was additionally included to provide baseline racial attitudes in these analyses. The hypothesized interaction did not emerge from the 2×4 ANOVA examining response latencies using the IAT. However, a main effect for condition was revealed, $F(3, 194) = 4.38, p < .01, \eta_p^2 = .06$, such that the least favorable attitudes toward Blacks in society were found after exposure to the TV news story featuring the Black suspect, and the most favorable attitudes toward Blacks were revealed after exposure to the TV news story featuring the White suspect (see Table 5).

Table 5
ANOVA Descriptive Statistics for Study 2, Hypothesis 3 (Implicit Racial Attitudes)

Race IAT	<i>M(D*)</i>	<i>SD</i>	<i>N</i>
Female			
White condition	.53	.33	36
No Race condition	.62	.21	27
Black Condition	.71	.34	38
No Video condition	.61	.27	34
Male			
White condition	.60	.34	15
No Race condition	.72	.22	15
Black condition	.84	.34	22
No Video condition	.62	.34	15
Total			
White condition	.55 ^a	.32	51
No Race condition	.65	.22	42
Black condition	.76 ^a	.35	60
No Video condition	.62	.29	49

*See Greenwald et al. (2003) for *D* calculations.

^aMeans with the same superscript differ significantly at $p < .01$.

Discussion

The goal of the present two-study design was to apply insights from priming and intergroup research to better understand the influence of exposure to TV news portrayals of race and crime, specifically, rape, on viewers' subsequent judgments. It was expected that viewer's real-world group memberships would influence responses to racialized depictions of sexual assault in the news. Specifically, it was anticipated that White women would offer the most unfavorable evaluations in response to a Black, male perpetrator due to the double-outgroup status of this target. Alternatively, White males were predicted to provide more generous responses based on the shared group membership as male. Only mixed support was offered for these assertions.

Given the particular relevance of the crime for females, it should come as no surprise that female viewers enacted both race and gender based identities when making judgments about the suspect—in terms of determinations of guilt as well as with regard to responsibility for the incident. However, these results emerged only in Study 1. Whereas more women than men in Study 1 allocated more guilt to Black and White perpetrators, gender did not influence assessments of guilt in Study 2. Here the suspect's race alone predicted determinations of guilt, with Black and no

race suspects deemed guilty more so than Whites. Further, while women in Study 1 assigned greater responsibility to the suspect in the Black condition, illustrative of correspondence bias, a parallel result was not yielded in evaluations of situational responsibility in Study 2.

The present data cautiously suggest that White male viewers grant more generous evaluations to White male suspects depicted on the news and, at times, less favorable evaluations to outgroup/other suspects. Thus, for White male consumers, it appears that exposure to ingroup (both race and gender) media models as perpetrators evokes more sympathetic interpretations and tempered judgments of the same-race/gender suspect. For example, in Study 2 men (compared to women) placed more blame for the rape on the situation itself when exposed to the White/no race suspect; reflecting a double ingroup bias. However this pattern did not translate to other outcomes. Moreover, in cases such as allocation of prison sentence (in Study 1 but not Study 2), responses seemed to reflect racially discriminatory judgments, rather than self-protective reactions. Thus, it appears that the potential threat associated with shared gender, but distinct race, affords an opportunity for the self-protection of male identity by way of differentiation based on race; but that this bias is not consistently utilized. By additionally including female suspects in further tests of these relationships, greater clarity would be provided into the role that gender-identity plays in this process.

Limitations and Suggestions for Future Research

When taken together, these results provide some support for claims that media primes and group identity interact in predicting responses to media content. However, limitations in design and inconsistencies within and across studies leave unresolved questions regarding the nature of this relationship.

First, the present investigation may be constrained by failing to include measures of racial prejudice, level of racial and gender identification, and overall television news consumption. Although inconsistent, studies have found that Whites who hold negative stereotypes about Blacks evaluate Blacks more unfavorably than do those who hold more positive beliefs (Dixon, 2007; Peffley et al., 1996). Moreover, research in the domains of social identity theory and self-categorization theory indicate that as ingroup identification increases so too does the desire to protect the status of that group (Verkuyten & Brug, 2004). As such, the degree of group salience is likely to substantially influence mediated, intergroup responses such that individuals who are highly group identified should perceive greater discrepancies between their ingroup and relevant outgroup members, and judge those outgroup members accordingly.

Second, existing research indicates that overall news consumption may influence racial evaluations (Dixon, 2007, 2008). Specifically, heavy consumers of news report more negative evaluations of Blacks than do lighter users. However, without a measure of news viewing in the current study, differences based on overall exposure

could not be uncovered. Because racial prejudice, racial ingroup identification, and TV consumption were not measured, more pronounced effects existing only among highly prejudiced and/or racially identified individuals (at elevated rates of media use) cannot be identified. Including each of these constructs in future designs would greatly enhance research in this area.

Finally, the present study may have been limited by the fact that several constructs were assessed with only a single item. Although estimations of prison sentence are appropriately measured with one item, it is likely that evaluations of constructs such as "repeat behavior" could have been better conceptualized with multiple items. This would have enhanced the precision of the measure and allowed for tests of reliability. Further, the use of multiple items would reduce concerns related to errors in reporting, misinterpretations on the part of participants, and oversimplification of the issue.

Note

¹Although logistic regression would have been the preferred statistical test for use with the dichotomous outcome measure of guilt, an attempt to run this model was unsuccessful due to empty/small cells. Under such circumstances the logistic regression model will either continue to iterate and not provide a solution at all and/or will cause the estimation procedure to fail, leading to computation errors such as missing info, skyrocketing odds ratios, and the like. This was the case for the present study. Given this, the authors selected ANOVA due to the fact that empirical tests using Monte Carlo simulations (e.g., Lunney, 1970, 2005) have revealed that ANOVA is robust to the violations associated with use of a dichotomous outcome (e.g., normality). Thus, although this procedure is certainly less than ideal, because of the special nature of dichotomous variables such as this one, it is not seen as an altogether unacceptable practice given that meaningful inferences can still be drawn from the results (Leech, Barrett, & Morgan, 2004).

References

- Abrams, J., & Giles, H. (2007). Ethnic identity gratifications selection and avoidance by African Americans: A group vitality and social identity perspective. *Media Psychology, 9*, 115–134.
- Abrams, D., & Hogg, M. (1990). An introduction to the social identity approach. In D. Abrams & M. Hogg (Eds.), *Social identity theory: Constructive and critical advances* (pp. 1–9). Hertfordshire, UK: Harvester Wheatsheaf.
- Barrett, K., & George, W. (2005). *Race, culture, psychology, & law*. Thousand Oaks, CA: Sage.
- Billig, M., & Tajfel, H. (1973). Social categorization and similarity in intergroup behavior. *European Journal of Social Psychology, 3*, 27–52.
- Blake, L. (2002). Jury decisions in hate crime cases: Exploring the role of extra-legal factors. *Dissertation Abstracts International*.
- Brewer, M., & Campbell, D. (1976). *Ethnocentrism and intergroup attitudes: East African evidence*. Beverly Hills, CA: Sage.
- Bureau of Justice Statistics. (2002). *Criminal Victimization in the United States, 2000 Statistical Tables*. U.S. Department of Justice, Office of Justice Programs, Bureau of Statistics.
- Dixon, T. (2007). Black criminals and White officers: The effects of racially misrepresenting law breakers and law defenders on television news. *Media Psychology, 10*, 270–291.

- Dixon, T. (2008). Crime news and racialized beliefs: Understanding the relationship between local news viewing and perceptions of African Americans and crime. *Journal of Communication, 58*, 106–125.
- Dixon, T., Azocar, C., & Casas, M. (2003). The portrayal of race and crime on television network news. *Journal of Broadcasting & Electronic Media, 47*, 498–523.
- Dixon, T., & Linz, D. (2000a). Overrepresentation and underrepresentation of African Americans and Latinos as lawbreakers on television news. *Journal of Communication, 50*, 131–154.
- Dixon, T., & Linz, D. (2000b). Race and the misrepresentation of victimization on local television news. *Communication Research, 27*, 547–573.
- Dixon, T., & Linz, D. (2002). Television news, prejudicial pretrial publicity, and the depiction of race. *Journal of Broadcasting & Electronic Media, 46*, 112–136.
- Dixon, T., & Maddox, K. (2005). Skin tone, crime news, and social reality judgments: Priming the stereotype of the dark and dangerous Black criminal. *Journal of Applied Social Psychology, 35*, 1555–1570.
- Entman, R. (1992). Blacks in the news: Television, modern racism, and cultural change. *Journalism Quarterly, 69*, 341–361.
- Entman, R. (1994). Representation and reality in the portrayal of Blacks on network television news. *Journalism Quarterly, 71*, 509–520.
- Fiske, S., & Taylor, S. (1991). *Social cognition*. New York, NY: McGraw-Hill.
- Fryberg, S. (2003). Really? You don't look like an American Indian: Social representations and social group identities. *Dissertation Abstracts International*.
- Gilliam, F., & Iyengar, S. (2000). Prime suspects: The influence of local television news on the viewing public. *American Journal of Political Science, 44*, 560–573.
- Gorham, B. (2006). News media's relationship with stereotyping: The linguistic intergroup bias in response to crime news. *Journal of Communication, 56*, 289–308.
- Greenwald, A., Nosek, B., & Banaji, M. (2003). Understanding and using the Implicit Association Test: I. An improved algorithm. *Journal of Personality and Social Psychology, 85*, 197–216.
- Greenwald, A., Nosek, B., & Sriram, N. (2006). Consequential validity of the Implicit Association Test: Comment on Blanton and Jaccard. *American Psychologist, 61*, 56–61.
- Harwood, J. (1999). Age identification, social identity gratifications, and television viewing. *Journal of Broadcasting and Electronic Media, 43*, 123–136.
- Hogg, M. (1992). *The social psychology of group cohesiveness: From attraction to social identity*. Washington Square, NY: New York University Press.
- Hogg, M., Terry, D., & White, K. (1995). A tale of two theories: A critical comparison of identity theory with social identity theory. *Social Psychology Quarterly, 58*, 255–269.
- Johnson, J., Adams, M., Hall, W., & Ashburn, L. (1997). Race, media, and violence: Differential racial effects of exposure to violent news stories. *Basic and Applied Social Psychology, 19*, 81–90.
- Keppel, G. (1991). *Design and analysis: A researchers handbook* (4th ed.). Englewood Cliffs, New Jersey: Prentice Hall.
- Leech, N., Barrett, K., & Morgan, G. (2004). *SPSS for intermediate statistics: Use and interpretation* (2nd ed.). Routledge.
- Lunney, G. (1970, 2005). Using analysis of variance with a dichotomous dependent variable: An empirical study. *Journal of Educational Measurement, 7*, 263–269.
- Mackie, D., Hamilton, D., Susskind, J., & Rosselli, F. (1996). Social psychological foundations of stereotype formation. In C. Macrae, C. Stangor, & M. Hewstone (Eds.), *Stereotypes and stereotyping* (pp. 41–78). New York, NY: Guilford.
- Mastro, D. (2003). A social identity approach to understanding the impact of television messages. *Communication Monographs, 70*, 98–113.
- Mastro, D., & Kopacz, M. (2006). Media representations of race, prototypicality, and policy reasoning: An application of self-categorization theory. *Journal of Broadcasting & Electronic Media, 50*, 305–322.

- Mastro, D., Tamborini, R., & Hullett, C. (2005). Linking media to prototype activation and subsequent celebrity attraction: An application of self-categorization theory. *Communication Research, 32*, 323–348.
- Oliver, M. B. (1999). Caucasian viewers' memory of Black and White criminal suspects in the news. *Journal of Communication, 49*, 46–60.
- Oliver, M. B., & Fonash, D. (2002). Race and crime in the news: White's identification and misidentification of violent and nonviolent criminal suspects. *Media Psychology, 4*, 137–156.
- Pan, Z., & Kosicki, G. (1996). Assessing news media influences on the formation of Whites' racial policy preferences. *Communication Research, 23*, 417–178.
- Peffley, M., Shields, T., & Williams, B. (1996). The intersection of race and crime in television news stories: An experimental study. *Political Communication, 13*, 309–327.
- Pettigrew, T. F. (1979). The ultimate attribution error: Extending Allport's cognitive analysis of prejudice. *Personality and Social Psychology Bulletin, 5*, 461–476.
- Roskos-Ewoldsen, D., Roskos-Ewoldsen, B., Dillman Carpentier, F. (2002). Media priming: A synthesis. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 97–120). Mahwah, NJ: Lawrence Erlbaum Associates.
- St. John, C., & Heald-Moore, T. (1996). Racial prejudice and fear of criminal victimization by strangers in public settings. *Sociological Inquiry, 66*, 267–284.
- Tajfel, H. (1969). Social and cultural factors in perception. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology*. Reading, Mass: Addison-Wesley.
- Tajfel, H. (1979). Human intergroup conflict: Useful and less useful forms of analysis. In M. von Cranach, K. Foppa, W. Lepenies, & D. Ploog (Eds.), *Human ethology: Claims and limits of a new discipline* (pp. 369–422). Cambridge, UK: Cambridge University Press.
- Urban, L., & Miller, N. (1998). A theoretical analysis of crossed categorization effects: A meta-analysis. *Journal of Personality and Social Psychology, 74*, 894–908.
- U.S. Department of Justice (2002). *Hispanic victims of violent crime, 1993–2000*. Washington DC: U.S. Department of Justice, Bureau of Justice Statistics Special Report.
- Verkuyten, M., & Brug, P. (2004). Multiculturalism and group status: The role of ethnic identification, group essentialism and protestant ethic. *European Journal of Social Psychology, 34*, 647–661.

Copyright of Journal of Broadcasting & Electronic Media is the property of Broadcast Education Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.