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AUTHOR Armstrong, G. Blake; Neuendorf, Kimberly A.
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ABSTRACT

A study assessed the relationship between media exposure, interracial contact, and four categories of race-related beliefs among three samples of white midwestern university students between 1980 and 1986 (196 were in the first sample; smaller numbers were in the second and third samples). Contrary to the "uniform messages" assumption of cultivation theory, different types of media content were related differently to perceptions concerning race. Television news exposure was associated with beliefs that Blacks had relatively lower socio-economic outcomes, with more negative character attributions, and with harsher evaluations of welfare recipients. TV drama exposure was associated with beliefs that Black Americans had a relatively higher socio-economic standing. Exposure to TV Blacks specifically was associated with relatively more positive character attributions. (Seven tables of data are included, and 73 references are attached.) (Author/SR)

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TV Entertainment, News, and Racial Perceptions
of College Students

G. Blake Armstrong, Ph.D.

Department of Communication Arts
University of Wisconsin--Madison
Madison, WI 53706
(608) 263-3977

Kimberly A. Neuendorf, Ph.D.

Department of Communication
Cleveland State University
Cleveland, OH 44115
(216) 687-3994

Top-three paper presented to the Communication Theory and
Methodology Division of the Association for Education in
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Kimberly A.
Neuendorf

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ABSTRACT

TV Entertainment, News, and Racial Perceptions of College Students

The relationship between media exposure, interracial contact, and four categories of race-related beliefs was assessed among three samples of white midwestern university students between 1980 and 1986. Contrary to the "uniform messages" assumption of cultivation theory, different types of media content were related differently to perceptions concerning race. TV news exposure was associated with beliefs that blacks had relatively lower socio-economic outcomes, with more negative character attributions, and with harsher evaluations of welfare recipients. TV drama exposure was associated with beliefs that black Americans had a relatively higher socio-economic standing. Exposure to TV blacks specifically was associated with relatively more positive character attributions.

TV Entertainment, News, and Racial Perceptions of College Students

Recently, the United States has experienced an upsurge in concern over manifestations of racial conflict and disharmony. Highly publicized incidents on the campuses of such prestigious institutions as the University of Michigan, Columbia University, the University of Massachusetts, and the University of Wisconsin, have demonstrated that problems of racism are more than mere vestiges of times past, and that such attitudes are not maintained exclusively among the uneducated or the lower classes.

It is natural under the circumstances to look for causes of the recent resurgence in overt manifestations of racism. Many plausible contributing factors have been cited, such as the barely-concealed hostility of national political leaders toward minority aspirations, white fear of black crime, the relative deterioration of black economic position in the 1980's, and white reactions to increased militancy of blacks (e.g., Camper, 1988). Much of the information received by citizens concerning such issues must be conveyed through news media, print and electronic. Yet, as with other social and political issues, how the public interprets and reacts to news about racially-salient circumstances and events depends in large part upon a broad store of relevant beliefs and schema that members of the population have acquired over the course of their lives (Graber, 1986). The substantial research evidence that has accrued indicating that information from fictional as well as news media content influences beliefs about social reality (Hawkins & Pingree, 1982), thus becomes relevant.

There are strong indications that relevant broadcast media content makes a significant impact in the formation and reinforcement of audience beliefs about racial characteristics and behaviors (Greenberg & Atkin, 1982). However, the bulk of extant research on such effects has proceeded from the standpoint of social stereotyping and social role learning (Greenberg, 1986). In other words, the

major concern has been with narrow typing of members of different racial groups in terms of individual personality, role, or character traits. While such an orientation has been implicit in much of the general history of the social measurement of racism (Karlins, Coffman, & Walters, 1969), following this tradition may cause researchers to overlook a variety of possibly important media influences. Personality stereotypes are not the only types of social perceptions affecting the potential for interracial conflict.

Indeed, exclusive attention to overt manifestations of attitudinal racism tends to distract attention from other essential aspects of racial conflict, particularly the role of continuing competition between ethnic groups over scarce material and social structural resources. In determining the potential for overt social conflict, perceptions about the nature of the distribution of inputs and material outcomes, changes in such relations, and the equity of this arrangement, are vitally important (Gurr, 1970; Oberschall, 1973). Conflict over relative power and privilege is an essential feature of inter-ethnic relations, so much so that support for maintaining or changing such relations often appears relatively impervious to changes in more overt racial stereotyping (Jackman and Crane, 1986; Jackman & Muha, 1984). Recent research on inter-ethnic conflict affirms the importance of beliefs about "rational" material factors (Kluegel & Smith, 1982; McClendon, 1985).

The foregoing discussion suggests that, if the full impact of communication media on inter-ethnic conflict is to be addressed, then media exposure should be assessed as it relates not only to personality or character trait attributions (stereotypes), but also to beliefs about the relative social and economic outcomes experienced by different groups, and about factors that could be used to justify perceived inequalities.

Two assumptions are commonly made in research on media impacts on social perceptions of this type. First, most researchers examining social reality effects follow a cumulative effects model of the impact of media content on social perceptions. Particularly with respect to the impacts of television, it has been argued that long-term accumulation of many pieces of information or mediated experience gradually help to shape beliefs about social reality (Gerbner, Gross, Morgan, & Signorielli, 1986; Hawkins & Pingree, 1982; Hawkins, Pingree, & Adler, 1987). This assumption is congruent with an "information-integration" model of social cognition and attitude change (Anderson, 1974; Himmelfarb, 1974; Kaplowitz, Fink, Armstrong, & Bauer, 1986; Kaplowitz, Fink, & Bauer, 1983). Present attitudes or beliefs are seen to be a function (a weighted sum) of all messages received over time about an attitude object (cf., Swindel & Miller, 1986).¹ This assumption receives indirect support from psychological studies of categorization and prototype formation (Hayes-Roth & Hayes-Roth, 1977; Posner & Keele, 1968).

Scholars studying social reality effects from a "cultivation theory" perspective have also made a second assumption: That mass media content represents an internally consistent, essentially homogeneous, picture of social reality; and therefore, that patterns of exposure to specific media or types of media content are relatively unimportant. Rather, social perceptions are thought to depend primarily on overall volume of media exposure (e.g., Gerbner, Gross, Morgan & Signorielli, 1980; Signorielli, 1985). This "uniform content/unselective viewing" assumption has inspired much greater criticism than the cumulative effects assumption discussed previously (Hawkins & Pingree, 1981).

Media social reality and social stereotyping studies involving racial minorities have focused predominantly on television and newspaper content and audience dispositions concerning Afro-Americans. The results we report here involve white college students' beliefs about white and black Americans, and the

relationship of these beliefs to interpersonal and mediated communication patterns. We examined communication factors as they related to beliefs about relative socio-economic outcomes of blacks and whites; their relative contributions; and the relative favorability of personality and character traits ("stereotypes") attributed to whites and blacks. In one part of the study, we also looked at the contribution of communication factors to beliefs about individual or social responsibility for personal economic failure (welfare status and unemployment) -- issues with strong racial connotations.

Media Effects

The most common broad type of content addressed in media social reality research is television drama. Numerous content analytic studies have demonstrated decade-by-decade changes in portrayal of blacks in network TV drama, since the early "Amos and Andy" years of overt stereotyping. The 1960's were the era of the clean-cut black sidekick, often involved as an agent of authority (police or spy), and with no easily discernible cultural uniqueness, while the 1970's was the decade of the prime-time black situation comedy, in which the bulk of black characters appeared in a relatively few shows, and roles became in some respects re-stereotyped (Banks, 1975; Baptista-Fernandez & Greenberg, 1980; U.S. Commission on Civil Rights, 1979). The 1970's vintage image has remained important, due to the popularity of this program sub-genre in syndication, and its importance in the early viewing experiences of the present college-aged population. Thus far, programming in the 1980's has featured models of successful black professionals, a return to images of blacks as agents of authority, and upscale versions of the black sitcom genre. Application of the theme of a successful black middle class has extended to the increased number of black characters shown in integrated settings (Gandy & Matabane, 1988).

What impacts would exposure to such content be expected to produce, if the dominant model of media social reality effects is correct? First, the general upper-middle class behavioral and economic bias on TV drama (Greenberg, Simmons, Hogan, & Atkin, 1980), which has extended -- especially in recent years -- to portrayals of blacks as well as whites, may have an impact on beliefs about the absolute and relative economic standing of black Americans. The direction of the impact should be such that greater exposure is associated with beliefs that blacks are relatively better off; that is, that average black and white socio-economic outcomes are more similar (cf., Matabane, 1988). A second line of reasoning also supports this expectation: It has been argued that merely by providing mediated contact with the "backstage" lives of members of other social groups, television drama de-emphasizes group differences. Viewers thereby gain at least the illusion of greater similarity between themselves and typical members of other groups (Meyrowitz, 1985).

Several other impacts of TV drama on social perceptions about race are also suggested by incidental learning models and available content. First, the focus of television drama on individual action as both cause and solution to problems (Selnow, 1986), and the consistent avoidance of portrayals of serious discrimination (Gandy & Matabane, 1988; Volgy & Schwartz, 1980), ought to lend greater credence to individualistic explanations for material life outcomes.

Of course, the most direct impact of exposure to TV portrayals of blacks, from a social learning perspective, should be on white viewers' perceptions of black personality and character traits. In this respect, the generally positive character portrayals of blacks on TV (Baptista-Fernandez & Greenberg, 1980; Weigel, Loomis, & Soja, 1980), to the extent that they are not discounted, would be expected to exert a positive influence on white viewer perceptions of black

Americans as individuals (especially since, for many whites, television may offer the sole opportunity for close-up and relatively favorable exposure to blacks).

- H(1): The greater the exposure to television drama, the less the perceived difference, in favor of whites, between black and white socioeconomic outcomes.
- H(2): The greater the exposure to television drama, the greater the perceived influence of "individual" as opposed to "social system" factors in accounting for social inequality.
- H(3): The greater the exposure of white viewers to TV drama featuring black characters, the more relatively positive their attributions about blacks' personality and character traits.

Although there is considerable information about race available from TV drama, news content can be equally or more salient with respect to some types of race-related perceptions. The two "genres" convey very different types of information. News is more likely to explicitly address material issues of racial conflict, as well as the serious and ugly incidents avoided in TV drama. News may also contain information directly relating to the broader social, economic, and political context in which race relations are played out.

Unlike TV drama, in which socio-economic information is usually mere background to action, news often explicitly deals with such factors as subject or foreground information. While TV drama avoids divisive issues such as relations between race and crime, discrimination, affirmative action, or busing, news often must draw explicit attention to such areas of conflict. If TV drama avoids casting blacks as violent criminals, the emphasis in TV news, particularly local news, on sensational, emotionally stimulating, and easily visualizable stories involving crime, social conflict, or human interest themes (Atwater, 1984; Dominick, Wurtzel, & Lometti, 1975; Graber, 1986; Miller, & Reese, 1982; Ryu, 1982) makes the communication of such images inevitable. Moreover, there is evidence that, even when racial identifications of criminals and victims are not

explicitly provided in the news content itself, news viewers often project racial information onto crime news (Graber, 1986).

The concentration of black images in TV news on the poor, criminal, or militant, and the general underrepresentation of blacks as authorities or experts in news coverage, and as newscasters (U.S. Commission on Civil Rights, 1980) may have impacts on several types of beliefs. Portrayal of blacks in predominantly lower-status contexts may reinforce beliefs in a large economic gap between black and whites. Underrepresentation of blacks, particularly in speaking roles and as experts, may contribute, through the heuristic of availability (Kahneman, Slovic, & Tversky, 1982) and reverse status-conferral, to beliefs in the paucity of black social contributions. Finally, the association of blacks with stories concerning protest, poverty, crime, and unemployment may contribute to stereotypes of blacks as violent, lazy, unintelligent, or undermotivated. It was expected, then, that the impact of TV news exposure on racial images would be much less benign than the impact of TV drama.

H(4): The greater the TV news exposure, the greater the perceived difference, in favor of whites, between black and white socioeconomic outcomes.

H(5): The greater the TV news exposure, the greater the perceived difference, in favor of whites, between the socio-economic contributions of blacks and those of whites.

H(6): The greater whites' TV news exposure, the more relatively negative their attributions about blacks' personality and character traits.

Thus far, we have focused our attention on differences between entertainment and news content within a specific medium: television. However, a significant question that arises when considering the likely impact of racially salient news involves the role of print versus electronic media. Different impacts of newspaper and television news could arise from three main sources. First is the factor of overt textual content, which has two aspects: the amount and depth of available

information; and the focus of content on different aspects of race-related news. Second is the question of inherent media biases toward personal/emotional or factual/analytical modes of communication. Third is the factor of differences in audience processing of news from television and print channels. Of course, the dominant content and mode of presentation necessarily affect the information-processing of the reader or viewer.

Television news is faced with extreme limitations on the time available to convey information through verbal text. At least partly as a result of such limitations, television news tends to be less descriptive than newspaper coverage of the same events, and more interpretive, organizing coverage around simple, easily comprehended, central themes (Altheide, 1976; Patterson, 1980). Although newspaper coverage (and noncoverage) of race-related issues, like that of TV news, comes under regular criticism, there is evidence of a substantial volume of non-stereotypic newspaper content, including copy relating to the underlying causes of black problems (Martindale, 1984).

It has been argued that print as a medium is inherently better suited for exposition and for communication of abstract and factual information than television (Meyrowitz, 1985). Medium-specific factors such as rapid pacing and visual distraction limit cognitive processing of televised content (Gunter, 1987; Miyo, 1983; Wright, 1981). Viewers typically show poor recall of TV news and information (Findahl & Hoijer, 1981), and there is evidence that learning of factual or abstract information from printed news is both empirically greater and cognitively easier than from televised news (Graber, 1986; Patterson, 1980; Tan & Vaughn, 1976).

For these reasons, newspapers were expected to better communicate information about the social structural roots of economic inequality, thereby overcoming the normal tendency of receivers to focus on personal rather than

situational factors in making attributions about behaviors and outcomes (Jackman & Senter, 1983; Jones & Nisbett, 1971). Conversely the personalizing and emotionally involving nature of television as a medium, as well as the medium's tendency to elicit and reinforce highly overlearned social schema (Graber, 1986), should encourage viewers to regard the problems they view more in terms of individual successes or failings. It was hypothesized that:

H(7): The greater the newspaper exposure, the greater the perceived influence of social system, as opposed to individual, factors in accounting for social and economic inequality.

H(8): The greater the TV news exposure, the greater the perceived influence of individual, as opposed to social system, factors in accounting for social and economic inequality.

A final type of television content may also have impacts on beliefs about race and race relations. Given the highly visible role of black athletes and extensive coverage of sporting events on television, one should consider the possible impact of exposure to television sports on perceptions about race. Although blacks have a more important, or even dominant, role in sports than in other visible domains of national life, the effects of TV sports viewing on beliefs about blacks may not be wholly positive. One consideration would be evidence of bias in the commentary of sports announcers (Rainville & McCormick, 1977). Moreover, the success of blacks in the world of physical competition is not necessarily inconsistent with traditional white stereotypes of blacks as high in physical prowess, but low in intellectual stature. Beyond this, the more general value system implicit in sports content is highly conservative, and viewing has been associated with authoritarianism (Prisuta, 1979). For these reasons, heavier sports exposure was expected to be associated with relatively more negative images of blacks' character and personality traits:

H(9): The greater whites' exposure to television sports, the more relatively negative their attributions about blacks' personality and character traits.

Interracial Contact

Of course, media are not the only influences on whites' beliefs about race and race relations. One important factor, in addition to interpersonal and family communication about blacks, is the level of direct interracial contact experienced. In general, increases in informal contact with members of other groups tend to promote beliefs that the common interests of the groups are greater than their opposing interests (Oberschall, 1973). However, it has been argued such impacts require increased interpersonal contact at a fairly intimate level, equal status contact, and/or cooperative interaction focusing on a common goal (Amir, 1969; Cook, 1972; Stephan & Rosenfield, 1978; however, see Jackman & Crane, 1980). Thus, interracial contact at a more than superficial level was expected to lead to more positive beliefs about black personality and character traits, relative to those of whites.

Direct interpersonal contact also creates a stronger likelihood that information will be received countering common justifications for inequality (at least to the degree these are based upon some amount of factual distortion). In particular, the ability to ascribe inequality solely to individual factors, while ignoring social discrimination, was expected to be less among whites more exposed to blacks in an interpersonal context.

H(10): The greater whites' interpersonal contact with blacks, the more relatively positive their attributions about blacks' personality and character traits.

H(11): The greater whites' interpersonal contact with blacks, the greater the perceived influence of social system, as opposed to individual, factors in accounting for socio-economic inequality.

There is also another way in which interracial contact may be important: as a contingent factor in media impacts. Social learning models explicitly recognize that the availability of other direct sources of social role information may attenuate the influence of media sources (Greenberg 1982; Greenberg & Atkin,

1982). Similarly, information-integration attitude models posit that resistance to attitude change is a function of the amount of information on which a prior attitude is based (Kaplowitz, et al., 1983; Swindel & Miller, 1986). Thus, we should expect to see the strongest media impacts on race-related beliefs among those students whose non-mediated experience with other races is most limited: In other words, those from schools and neighborhoods with few or no minorities.

H(12): The hypothesized relationships between media exposure and beliefs about race will be stronger for respondents from essentially all-white schools and communities.

Finally, causal relations among the set of criterion variables must be considered. Social equity theories (Walster, Walster, & Berscheid, 1978) argue that inequitable material or social relations are discomforting both to the advantaged and to the disadvantaged. The former in particular are motivated to legitimize any inequality in terms of unequal inputs, unequal worth, or some other psychologically satisfying rationalization. Thus, belief in the existence of major inequalities between the outcomes of whites and blacks should be associated with attempts at justification. Inequalities in material outcomes may be justified in terms of unequal black and white inputs, through negative stereotyping of blacks, and through ascribing differences in outcomes mainly to differences in individual worth (Alves & Rossi, 1978; Gurin, Miller & Gurin, 1980). In other words, beliefs in larger racial differences in socio-economic inputs, negative stereotyping of blacks, and an orientation toward individualistic explanations for socio-economic inequalities, may each be motivated in part by the perception of larger racial differences in material outcomes.

H(13): The greater the perceived difference (in favor of whites) between black and white socio-economic outcomes, the greater the perceived difference (in favor of whites) between the contributions of whites and the contributions of blacks.

- H(14): The greater the perceived difference (in favor of whites) between black and white socio-economic outcomes, the greater the perceived influence of individual differences in producing social inequality.
- H(15): The greater the perceived difference (in favor of whites) between black and white socio-economic outcomes, the more relatively negative their attributions about blacks' personality and character traits.

Methods

Information about media exposure, interracial contact, and race-related beliefs was obtained from 3 samples of white college students obtained between 1980 and 1986. In the first wave (1980-81), a questionnaire assessing habitual media behavior, interracial contact, demographics, and beliefs relevant to race relations was administered door-to-door to a systematic sample of 196 white college freshmen living in dormitories at a Big-Ten university. In the second wave (1985), similar information was solicited from a smaller sample of freshmen and sophomores enrolled in large introductory communication courses at the same Big-Ten university. In Wave 3 (1986), information was obtained from students enrolled in introductory communication and sociology classes in the same location, and also from communication students at an urban state university in the industrial midwest. The data collected in 1980-81 involved beliefs about whites and blacks only, while information about multiple ethnic groups was obtained from the later samples. However, for comparability, only the data concerning whites and blacks will be addressed here.

Dependent Variables

In the initial wave of the study, four conceptual endogenous variables were measured. Perceived Relative Outcomes was operationalized in terms of respondent perceptions of three types of socio-economic outcomes: average yearly incomes of white and black families; percentages of each group who were middle class or

higher; and the average years of schooling completed by blacks and whites. The dependent measure for each of these items was the difference between average black and white outcomes, adjusted for differences in overall magnitude estimates.² In Waves 2 and 3, relative incomes, percent middle class, and education were also used as indicators. However, relative education was operationalized in these data sets as the percentage of each group receiving a college education. Within each wave, factors score coefficients (based on a single-factor confirmatory factor analysis) were used to construct composite relative outcomes measures.

To measure the Perceived Relative Contributions of blacks and whites, Wave 1 respondents were asked to estimate, on a 0 to 100 scale, the value of goods and services produced by the average member of each group. The variable of interest was the difference between estimated white contributions and estimated black contributions (white productivity minus black productivity).³ In the 1985-86 samples, a direct magnitude estimation measure was substituted, with the amount produced by the average white American set equal to 100 and used as a "yardstick" by which subjects were asked to evaluate the relative value of goods and services produced by members of other ethnic groups.

To assess the relative favorability of personality and character traits ascribed to whites and blacks (Stereotype Favorability), respondents in the 1980-81 survey were asked to estimate the percentage of members of each racial group described by each of six common traits ("intelligent," "honest," "hard-working," "cruel," "ambitious," and "rude") derived from the Katz and Braly stereotype checklist (Katz & Braly, 1933). These adjectives were chosen to each exhibit a strong positive or negative valence, and to tap substantively different attributes. Findings from Jones and Ashmore's (1973) multidimensional scaling of stereotype attributes were used to avoid polar opposites and essentially synonymous terms. Mean favorableness scores for stereotype checklist adjectives

(from Karlins, Coffman, and Walters, 1969) were used in calculating overall favorability scores for each individual. Percentage estimates for each adjective were multiplied by the appropriate favorability score, and then the scores were summed across adjectives. The dependent measure was the black composite favorability score subtracted from the white composite favorability score.

A similar approach was used in Waves 2 and 3. In Wave 2 (1985), the stereotyping index was reasonably comparable, being based on estimates of the percentages of each group who are very intelligent, hard-working, honest, ambitious, and polite. In Wave 3 (1986), however, only estimates concerning the adjectives "intelligent" and "hard-working" were available for constructing a stereotyping index (as a result, special caution should be taken in comparing findings on relative stereotyping from Wave 3 to those from Waves 1 and 2).

In the 1980-81 survey only, respondents were asked to estimate the extent to which individual differences, rather than social system factors, were responsible for (1) being unemployed, and (2) being on welfare (Individual Responsibility). Respondents were asked to estimate the percentage of unemployed people who were jobless through no fault of their own (not individually responsible), and the percentage for whom it was their own fault that they were unemployed (individually responsible). Then, they were asked to estimate the percentage of welfare recipients who were "truly needy" (not individually responsible) and the percentage who "just don't want to work" (individually responsible).

Independent Variables

Five exogenous variables were assessed: newspaper exposure, TV news exposure, TV sports exposure, exposure to TV drama, and interracial contact.

In the first wave, respondents were asked to report, on the average, how many days out of the week they read at least some part of a daily newspaper during their last year in high school,⁴ and to estimate the number of minutes per day

they spent reading the newspaper. In Waves 2 and 3, present exposure was measured in the same manner. In each wave, the overall Newspaper Exposure score was the product of these two estimates. The resulting variable was highly skewed among each sample; to adjust for this, a transformation using the natural logarithm of the raw newspaper score was used in statistical procedures (Kruskal, 1968).⁵

Wave 1 respondents also estimated the number of hours they spent, on the average, viewing fictional TV drama on a typical weekday, Saturday, and Sunday during their last year in high school, while respondents in Waves 2 and 3 made these estimates for their present behavior. In each case, a total hours-per-week measure of TV Drama Exposure was constructed. The mean estimated hours-per-week spent viewing was 20.2 in Wave 1, 17.8 in Wave 2, and 19.5 in Wave 3. In Wave 1 only, respondents were also asked the number of television programs they regularly watched that had a black star or co-star (TV Blacks). The mean response was 2.0.

TV Sports Exposure was estimated in the same manner as exposure to TV drama, yielding a mean hours-per-week estimate of 8.0 in Wave 1, 3.8 in Wave 2, and 4.5 in Wave 3. In each case, this measure was (not surprisingly) highly positively skewed, so a transformation using the natural logarithm of the raw sports viewing score was used to normalize it.

To assess TV News Exposure, respondents were asked to report how many days per week on the average they watched five different types of news programs: network evening news; network public affairs programs like "60 Minutes" and "20/20"; local evening news; late news; and early morning news. Network news viewing was operationalized as the sum of regular evening network news programs and network public affairs programs viewed per week. Local news viewing was operationalized as the sum of local evening news and late news programs viewed per week. An overall broadcast news exposure index was constructed from four of the

measures: network evening news; local evening news; late news; and early morning news.

Consistent with typical findings (Comstock, et al., 1978), all television exposure measures were positively correlated. Exposure to TV drama was related inversely to socioeconomic status, and males were heavier viewers of TV sports and TV news.

Interracial contact was measured at 2 different levels: physical integration, and interpersonal contact. These were operationalized somewhat differently in the different waves.

In the first wave (1980-81), Integration was based on respondents' estimates of the percentage of blacks living in their immediate home neighborhood, and the percentage of blacks attending their high school. In this sample, there were large numbers of respondents coming from schools and neighborhoods with trivial numbers of blacks. Therefore, respondents were classified according to whether they lived or went to school in surroundings which could meaningfully be considered "integrated". Respondents were given a score of "1" on school integration if they attended a school that was 10% or more black, and were given a "1" on neighborhood integration if their neighborhood was at least 7% black (the smaller number reflecting the greater degree of residential segregation). Otherwise, they received a score of "0". School and neighborhood integration scores were added, so that each respondent had an overall integration score of either 0, 1, or 2. (where 0 represented experiencing neither an integrated neighborhood or school; 1 represented having gone to an integrated school or lived in an integrated neighborhood, but not both; and 2 representing having lived in an integrated neighborhood and gone to an integrated school; cf., Jackman & Crane, 1986).

In Waves 2 and 3, only the measure of high school integration was obtained, and somewhat higher percentages of respondents had come from schools with non-trivial numbers of blacks. For Waves 2 and 3, the Integration measure was taken as a natural logarithmic transform of the percentage of blacks attending the respondent's high school.

In Wave 1, two types of measures were used to assess interpersonal contact with blacks (Interpersonal Contact). First, respondents reported the number of blacks included in their ten closest same sex and opposite sex friends, and the racial composition of their five closest friends of either sex. The number of black friends was totaled. Second, respondents estimated the number of times per month they engaged in seven specific types of interracial interactions: going to interracial social events, eating at the same table, going to someone's home, having someone visit ones own home, and discussing intimate personal matters. The total number of times per month a respondent engaged in these interracial activities was calculated. Both the friends measure and the activities measure were skewed, and natural logarithmic transformations were applied. The two scores were then summed to create a single measure of close interpersonal contact with blacks.

In Waves 2 and 3, four questions assessed whites' interpersonal contact with blacks. Respondents were asked to report how many members of racial/ethnic groups other than their own they presently knew well enough to call up on the phone and talk to about school work, and how many they knew well enough to call up and talk to about more than just school work. The total number mentioned in the two categories was calculated. Respondents were also asked to report how many of their 5 closest same-sex and 5 closest opposite sex friends were members of each ethnic group. These answers were also summed.

Control Variables

Respondent gender and socioeconomic status were used as control variables. In the 1980-81 survey, four SES measures were used. Respondents were asked to place their families in one of eight income categories, to indicate the number of years of schooling each parent had completed, and to report each parents' occupation (if employed). Occupations were assigned numerical values using NORC prestige scores. The rating of the parent with the highest occupational prestige score was used as the measure of occupational prestige. In Waves 2 and 3, SES was assessed in terms of parental income and educational levels only. In each wave, SES measures were entered into a confirmatory factor analysis, which verified the adequacy of a single-factor solution. Factor score coefficients were used to construct composite measures of socioeconomic status.

Analysis

Two procedures were used to analyze the relationships between communication variables and racial perceptions, and to test related hypotheses: Zero-order correlation analysis, and multiple regression with simultaneous inclusion. Separate regressions were conducted for each dependent measure. For the Relative Outcomes measure, three sets of predictors were included: demographic controls (respondent gender, SES); interracial contact (integration, interpersonal contact); and media exposure (newspaper, local and network tv news, tv sports, tv drama). For the remaining three sets of dependent measures (Relative Contributions, Stereotype Favorability, and Individual Responsibility), the Relative Outcomes variable was added as an endogenous predictor.

Contributions of particular sets of predictors were determined by examining the increment contributed to R^2 by each set when it was entered last in the regression equation, and testing the F associated with each incremental R^2 (Monge, 1980), using the SPSS "Test" subroutine. Thus, in addition to estimates of the

contributions of individual variables, the significance of the subset of interracial contact measures alone, the subset of media exposure measures alone, and the subset of broadcast news variables were assessed.⁶

To test Hypothesis 12, that media impacts on beliefs about race would be stronger when opportunities for direct interracial contact were not available, a separate set of correlation and regression analyses were conducted in Wave 1 with the subset of respondents classified as coming from unintegrated schools and unintegrated neighborhoods (N of cases = 105).⁷ Thus, the specific pattern of media contributions was examined for the full sample and the separately for the "unintegrated" subsample.

Results

Measures representing four sets of conceptual dependent variables were examined. The first set involved the Perceived Relative Outcomes of blacks and whites (Tables 1,2). Significant positive zero-order correlations were obtained in the 1980-81 and 1985 samples between measures of TV news exposure and Perceived Relative Outcomes, indicating that heavier TV news viewers tended to perceive greater differences (in favor of whites) between white and black socioeconomic outcomes. In the first wave, national and local news exposure correlated at the same level with Relative Outcomes, with both relationships being slightly stronger for the subsample of respondents from non-integrated backgrounds. In Wave 2 (1985), the relationship was only significant for local news exposure.

Table 1 About Here

When the set of control and communication variables was assessed simultaneously in a regression analysis, interpersonal and media communication measures failed, in the 1980-81 survey, to predict Perceived Relative Outcomes among the full sample (Table 2). However, when the subsample of respondents from non-integrated backgrounds was separately examined, the overall equation became highly significant, and the proportion of variance accounted for by the set of media exposure variables increased substantially.

Table 2 About Here

Two media variables appeared to make a difference. The TV news exposure measures, as a block, contributed a significant increment of variance to the overall prediction of Relative Outcomes. Controlling for other factors, TV news viewing, particularly of network news, predicted beliefs that blacks were relatively worse off.⁸ TV Drama Exposure predicted beliefs that blacks were relatively better off in terms of socioeconomic standing.

In the 1985 sample (Wave 2), TV news viewing was again associated with a belief in relatively greater socio-economic differences between blacks and whites, with local news viewing contributing more strongly. The only individually significant predictor in Wave 2 was the respondent's number of black friends; the greater the number of black friends, the more relatively well off blacks were perceived to be.

In the 1986 sample (Wave 3), interracial contact again made a difference; in this case, the number of people from other racial/ethnic groups known well enough to call on the telephone was the individually significant predictor. Contrary to Wave 1 and Wave 2 findings, TV news viewing in Wave 3 did not predict beliefs about relative outcomes. However, exposure to TV drama was a strong predictor of beliefs that blacks and whites had more similar socio-economic outcomes. Newspaper exposure was correlated with beliefs in larger white/black differences in outcomes, but with the reduction in sample size from 76 in the correlational analysis to 66 in the regression analysis (due to missing values on other variables) the significance of this relationship was worsened to borderline status ($p = .055$).⁹

Perceived Relative Contributions

In Wave 1, only one significant zero-order correlation between a communication variable and the Perceived Relative Contributions of blacks and whites was found among the full sample (Table 3). TV News Exposure was related to ascribing relatively lower productivity to blacks, a relationship that appeared to be due to the influence of network news exposure specifically. This was the only significant correlation of TV news with Relative Contributions, although correlation coefficients of similar sizes were also obtained for national news exposure among the Wave 1 non-integrated subsample, and in Wave 3. Smaller sample sizes in these cases, however, meant that in the latter cases the hypothesis that these relationships were due to sampling error could not be rejected.

Overall, Perceived Relative Outcomes had the strongest and most robust zero-order correlation with Relative Contributions, appearing as highly significant in both Wave 1 and Wave 3. Consistent with equity theory, perceiving larger differences between white and black outcomes was associated with ascribing to blacks relatively weaker economic contributions.

Table 3 About Here

Among Wave 1 respondents from non-integrated backgrounds, two additional media variables exhibited correlations with Relative Contributions at probability levels between .05 and .10. Among the subsample, heavier readers of newspapers and heavier viewers of television programs featuring black stars or co-stars credited blacks with making relatively greater social contributions. Each of these relationships became significant at the .05 level under controls in the regression analysis (indicating that their relationships with perceived contributions were being suppressed by correlations with other variables).

In the regression analyses (Table 4) ... Outcomes emerged once again as the strongest and most consistent predictors of perceived Relative Contributions. Those who perceived greater disparity between the socioeconomic outcomes of blacks and whites also reported perceiving greater differences between black and white contributions.¹⁰

Table 4 About Here

The only significant communication effects were found among the non-integrated subsample in Wave 1. Among Wave 1 respondents from non-integrated backgrounds, newspaper exposure and exposure to TV Blacks each predicted beliefs in relatively higher black contributions.

Stereotype favorability

The variables that correlated most robustly with relative (white - black) Stereotype Favorability were integration and interpersonal contact. Both simple integration and interpersonal contact with blacks were associated with relatively more positive personality/character attributions about black Americans. Contrary to some versions of the contact hypothesis, contact at an interpersonal level did not correlate with stereotype favorability consistently more strongly than did physical integration.

The only individually significant correlation with a mass communication variable in Wave 1 was the relationship between viewing TV programs featuring blacks and more relatively positive attributions about blacks. In Wave 2 only, exposure to both local and national news were associated with attributing relatively more unfavorable character traits to black Americans.

Table 5 About Here

In Waves 2 and 3, perceived relative outcomes was significantly correlated, in a direction consistent with equity theory predictions, with relative stereotype favorability. Among respondents obtained in 1985 and 1986, the belief that socio-economic outcomes of blacks and whites were more unequal was associated with ascribing relatively more negative character attributions to blacks.

In Wave 1 (1980-81), the regression equation predicting relative (white - black) Stereotype Favorability among the full sample was highly significant (Table 6), with interpersonal and media communication variables each contributing significant variance. Interpersonal Contact was strongly associated with relatively more positive character attributions about blacks. TV Sports Exposure

and Network News Exposure were related to expressing relatively more negative views of blacks, while exposure to TV Blacks was associated with relatively more favorable views.

Table 6 About Here

A similar pattern of results was obtained for the non-integrated sub-sample in Wave 1. The relative contributions of Network TV News and Black TV were somewhat larger, while the contribution of TV Sports was reduced. The increment to R^2 contributed by media variables as a whole and by TV news in particular both increased slightly, compared to the Wave 1 full sample. However, the drop in degrees of freedom lowered significance levels.

In Waves 2 and 3 the impacts of perceived relative outcomes on stereotype favorability found in the correlational analysis were reduced to nonsignificance under controls. In Wave 2, the strength of the relationship between interpersonal communication variables and stereotyping also fell to nonsignificance in the regression analysis; however in Wave 3, an integrated background did predict relatively more positive attitudes toward blacks. In Wave 3 alone, newspaper exposure predicted relatively more negative images of black Americans.

Individual responsibility

The same set of analyses was applied with the measures of perceived Individual Responsibility for welfare status and unemployment. These data were only collected among the 1980-81 sample.

Table 7 About Here

In the full sample, negative correlations between Individual Responsibility for Unemployment and measures of TV Sports viewing, Newspaper Exposure, Integration, and Interpersonal Contact were found (Table 7). TV News Viewing, particularly viewing of network news, was positively related to Individual Responsibility for Welfare. Individual Responsibility for Welfare was negatively related to Integration and Interpersonal Contact.

When the subsample of respondents from non-integrated environments was examined separately, the correlations between TV News Exposure and Individual Responsibility for Welfare; TV Sports Exposure and Individual Responsibility for Unemployment; and Newspaper Exposure and Individual Responsibility for Unemployment were all reduced to nonsignificance.

Regressions were conducted for both of the Individual Responsibility measures (Table 8). Among the full Wave 1 sample, the set of interracial contact measures contributed a significant increment of variance to perceived individual responsibility for welfare. Consistent with the correlational results, physical integration actually demonstrated a somewhat stronger influence. Greater direct interracial contact meant more of a tendency to ascribe welfare status to factors outside individual control.

Table 8 About Here

Among mass communication variables, exposure to TV news predicted the opposite: Heavier viewers had a stronger tendency to blame the welfare client for his or her own predicament. Although neither Network nor Local News individually produced a significant regression coefficient, the two TV news variables together contributed a significant increment of explained variance to the equation.¹¹ The stronger relationship was obtained for network news exposure. Among the sub-sample of respondents from non-integrated backgrounds, network news viewing was related even more strongly to attributions of individual responsibility for welfare.

Interracial contact significantly predicted a belief in greater individual responsibility for unemployment in the full sample. In this case, coefficients for physical integration and interpersonal contact were of similar magnitude. Media variables did not significantly predict attitudes toward unemployment, although a marginal relationship for national news exposure did emerge among the sub-sample from non-integrated backgrounds.

Curiously, the gender of the respondent turned out to be a significant predictor of attitudes toward the unemployed or those on welfare. Females, especially among the non-integrated sub-sample, were more likely to attribute unemployment or welfare status to individual failings.

Discussion

In this study, college students' exposure to six types of media content were examined, along with two levels of direct exposure to blacks, with respect to four major types of race-related beliefs. Attention was given not only to possible impacts on character or personality stereotypes, but on the Perceived Relative Outcomes (social and economic) of blacks and whites; their Perceived Relative Contributions; and the degree to which unemployment and welfare status were

explained in terms of Individual Responsibility. Relationships were examined among a systematic sample of Big Ten university freshmen in 1980-81, and smaller convenience samples in 1985 and 1986.

Both interpersonal and media variables were significant predictors of race-related beliefs and attitudes. Consistent with expectations, but contrary cultivation theory's "uniform messages" assumption, different types of media content showed dramatically different patterns of association with race-related beliefs. At least with respect to the beliefs measured in this survey, the assumption that the various genres and sub-genres of media content are functionally equivalent (or complementary) in their effects on social perceptions was not supported.

Exposure to TV Drama was expected to predict perceptions that black and white socioeconomic outcomes were more similar. This hypothesis was supported among the 1980-81 sample, but only among respondents from non-integrated backgrounds. The relationship appeared to be robust. Although no significant relationship was obtained in the 1985 (Wave 2) sample, the obtained coefficient was of close to the same magnitude as that for the full sample of 1980-81 respondents. In Wave 3 (1986), the relationship between TV drama exposure and perceptions of relatively more favorable black socio-economic outcomes was quite strong and significant. The stronger relationships may have been due to the more affluent images of black Americans contained in 1980's TV drama.

There was no evidence, however, that TV drama exposure was associated, as hypothesized, with attributions of individual responsibility for welfare status or unemployment.

In addition, as expected, greater exposure to black characters in TV drama (TV Blacks) was found to be associated with relatively more complementary beliefs about black personality or character traits (Stereotype Favorability).

Unfortunately, measures of Black-TV exposure were only obtained among the 1980-81 sample, so the robustness of this finding cannot be determined from present data.

Among the non-integrated subgroup, Black TV exposure was also related to beliefs that blacks made relatively greater economic contributions (Relative Contributions).

We expected to find an association between TV News Exposure and beliefs in greater socio-economic inequality between blacks and whites. This expectation was supported, at least among the subsample of Wave 1 respondents from non-integrated backgrounds. Results from the 1985 and 1986 samples suggest that this finding is also robust.

We also expected to find that TV News Exposure predicted relatively more negative stereotyping of black personality and character traits. Regression results from Wave 1 were consistent with this prediction, both among the full sample and among the sub-sample of respondents from non-integrated backgrounds. Contrary to what might have been expected, given the degree of criticism leveled at local TV news for sensational coverage of crime and the like, it was national network news exposure that predicted these negative attitudes.

The relationship between TV news exposure and negative stereotyping was not strongly replicated in Waves 2 and 3, however. In the Wave 2 (1985) sample, highly significant zero-order correlations between news viewing and stereotyping were reduced to nonsignificance by controls in the regression analysis. There was no significant relationship found in either the correlational or regression analysis for Wave 3. However, it should be kept in mind that the stereotyping index used in Wave 3 involved substantially fewer traits than the indices used in Waves 1 and 2, so the results for this variable were not strictly comparable.

An hypothesized relationship between TV News and Individual Responsibility attributions regarding welfare was supported; evidence with respect to individual

responsibility for unemployment was not strong enough to reject the null. As with the stereotyping measure, the strongest relationship involved network news exposure, rather than local news.

The data generally failed to support predicted relationships between news viewing and beliefs about black socio-economic contributions. Also failing to receive support was the hypothesis that newspaper exposure would lead to a greater awareness of social system constraints on individual achievement, and thus would be negatively related to Individual Responsibility. An unhypothesized relationship was found in Wave 1 among the non-integrated subsample between Newspaper Exposure and beliefs that blacks made relatively greater economic contributions; however, this result was not replicated in Waves 2 and 3.

Finally, TV Sports Exposure was expected to be associated with relatively more negative character and personality stereotypes of blacks. This was supported in Wave 1 regressions for both the full sample and the subsample of respondents from non-integrated backgrounds. Significant results were not obtained among the 1985 and 1986 samples, although among the latter group, this may have been due to the low power imposed by a small sample size.

Predictions were also made about the impact of direct interracial contact on white students' beliefs about race. Consistent with contact hypotheses, such personal contact did indeed contribute significantly to several race-related beliefs. Interracial contact was a strong predictor of more positive perceived black personality and character traits (Stereotype Favorability), and was also associated with beliefs in more equal relative outcomes in the 1985 and 1986 samples, and with less tendency to attribute welfare status or unemployment to individual failings.¹² However, in contrast to conventional wisdom (but consistent with Jackman & Crane, 1986), close interpersonal contact was not always a stronger predictor than simple integration.

Based both on social learning theory and information integration models, it³⁰ was expected that stronger media impacts on race-related beliefs would take place among students who had fewer alternative sources of information; i.e., students from non-integrated backgrounds. This was tested among the larger and more representative Wave 1 sample. As expected, the strength of relationships between media variables and beliefs tended to be stronger among the non-integrated subsample than among all respondents. The fact that this occurred in spite of a substantial decrease in sample size, and consequently in statistical power, is impressive. The difference was greatest with respect to Perceived Relative Outcomes and Perceived Relative Contributions.

One set of hypotheses, derived from equity theory and related research, suggested that beliefs in greater social and economic inequality between blacks and whites should result in attempts to justify such inequality in terms of relatively lower black contributions, assertions that outcomes are the result of individual qualities rather than social constraints, and negative stereotyping. Equity predictions were supported, but strongly only for the variable most directly related, in a conceptual sense, to unequal Relative Outcomes: Relative Contributions. Some indication that relative outcomes might be related to stereotype favorability among the 1985 and 1986 samples also emerged. On the other hand, Relative Outcomes was unrelated to attributions of individual responsibility for unemployment or welfare.

The results reported here indicate that media exposure patterns are indeed related to college students' beliefs about race, not only with respect to personality stereotypes, but also in terms of beliefs about social and economic outcomes and contributions, particularly among students who have had few opportunities for direct contact with members of other racial groups. Media

exposure patterns also are related to (evidently) race-related beliefs about welfare and unemployment.

From a theoretical standpoint, it is important to note that not all media were associated in the same way with race-related beliefs. Contrary to the "uniform messages" assumption of cultivation theory, exposure to different types of media and content were found to be related differently to perceptions concerning race. TV News Exposure, particularly exposure to national network news programs, seemed to be consistently related to a more harsh and negative picture of black America, both in terms of beliefs about the relative socio-economic standing of blacks, and their character traits. TV news exposure was also associated with harsher evaluations of welfare recipients. On the other hand, TV drama exposure was associated in two of the three samples with beliefs that blacks are socio-economically relatively better off.

The finding that exposure to TV drama was related to perceptions of a relatively smaller socio-economic gap between black and white Americans are consistent a second assertion related to the cultivation model: that TV drama exposure, overall, cultivates a relatively more homogeneous, middle-class, picture of the world. It also parallels, with a midwestern white audience, a relationship previously found among a sample of black respondents from the Washington DC area (Matabane, 1988). Thus, we have an interesting conceptual replication among a much different population.

Interestingly, the relationship between TV drama exposure and belief in relatively more favorable black socio-economic outcomes appeared even in our 1980-81 sample, well before the upper-middle class transformation of 1980's vintage black characters.

Beyond general TV drama viewing, exposure specifically to TV blacks would appear to have been, if anything, a relatively benign influence, associated with

more positive stereotypes, and beliefs in relatively greater black economic contributions.

The results suggest that the concern often expressed about racially stereotypical content in television drama, and its alleged negative impacts, may be more appropriately addressed to TV news. However, concerns that rosy television entertainment portrayals of black life may lead to viewers to have unrealistic beliefs in more equal racial outcomes should receive further support from these findings.

References

- Altheide, D.L. (1976). Creating reality: How TV news distorts events. Beverly Hills: Sage.
- Alves, W.M., & Rossi, P.H. (1978). Who should get what?: Fairness judgments of the distribution of earnings. American Journal of Sociology, 84(3), 541-564.
- Amir, Y. (1969). Contact hypothesis in ethnic relations. Psychological Bulletin, 71, 319-342.
- Anderson, N.H. (1974). Cognitive algebra: Integration theory applied to social attribution. In L. Berkowitz (Ed.), Advances In experimental social psychology (Vol. 7). New York: Academic Press.
- Atkin, C.K., Greenberg, B.S., & McDermott, S. (1983). Television and race role socialization. Journalism Quarterly, 60, 407-414.
- Atwater, T. (1984). Product differentiation in local TV news. Journalism Quarterly, 61(4), 757-762.
- Baptista-Fernandez, P. & Greenberg, B.S. (1980). The content, characteristics, and communication behaviors of blacks on television. In B.S. Greenberg (Ed.), Life on television. Norwood, NJ: Ablex.
- Banks, C.A. (1975). A content analysis of the treatment of black Americans on television. (ERIC Document Reproduction Service No. ED 115 576).
- Berkowitz, L., & Rogers, K.H. (1986). A priming effect analysis of media influences. In J. Bryant and D. Zillman (Eds.), Perspectives on media effects (pp.57-82). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Berman, D.R., & Stookey, J.A. (1980). Adolescents, television, and support for government. Public Opinion Quarterly, 44, 330-340.
- Camper, D. (1988). When racism goes to college: An ugly trend demands a response. The New York Times, June 10, pg. 24, "The Editorial Notebook."
- Clark, H.H. & Haviland, S. Comprehension and the given-new contract. In R.O. Freedle (Ed.), Discourse Processes: Advances in Research and Theory, Vol. 1: Discourse Production and Comprehension. Norwood, NJ: Ablex, 1977.
- Comstock, G., Chaffee, S., Katzman, H., McCombs, M., & Roberts, D. (1978). Television and human behavior. New York: Columbia University Press.
- Cook, S.W. (1972). Motives in a conceptual analysis of attitude related behavior. In J. Brigham and T. Weissbach (Eds.), Racial attitudes in America: Analysis and findings of social psychology. New York: Harper & Row.
- Dominick, J.R., Wurtzel, A., & Lometti, G. (1975). Television journalism versus show business: A content analysis of eyewitness news. Journalism Quarterly, 59, 213-218.

- Findahl, O. & Hoijer, B. (1981). Studies of news from the perspective of human comprehension. In G.C. Wilhoit & H. deBock (Eds.), Mass Communication Review Yearbook 2. Beverly Hills: Sage.
- Fox, W.S., & Philliber, W.W. (1978). Television viewing and the perception of affluence. The Sociological Quarterly, 19, 103-112.
- Gandy, O.H., & Matabane, P.W. (1988). Television and its influence among African-Americans and Hispanics. Paper presented to the Minorities and Communication Division, Panel on Images of Minorities, at the annual convention of the Association for Education in Journalism and Mass Communication, Portland, OR, July.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1986). Living with television: The dynamics of the cultivation process. In J. Bryant & D. Zillman (Eds.), Perspectives on media effects (pp. 17-40). Hillsdale, NJ: Lawrence Erlbaum.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1980). The "mainstreaming" of America: Violence profile no. 11. Journal of Communication, 30(3), 10-29.
- Graber, D.A. (1986). Processing the news: How people tame the information tide (2nd ed.). New York: Longman.
- Greenberg, B.S. (1986) Minorities and the mass media. In J. Bryant & D. Zillman (Eds.), Perspectives on media effects (pp. 165-188). Hillsdale, NJ: Lawrence Erlbaum.
- Greenberg, B.S. (1982). Television and role socialization: An overview. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), Television and behavior: Ten years of scientific progress and implications for the eighties (Vol. II: Technical Reviews; pp. 179-190). Washington DC: NIMH.
- Greenberg, B.S. & Atkin, C.K. (1982). Learning about minorities from television. In G.L. Berry and C. Mitchell-Kernan (Eds.), Television and the socialization of the minority child. New York: Academic Press.
- Greenberg, B.S. & Heater, C. (1982). Television and social stereotypes. Prevention in Human Services, 2(1/2), 37-51.
- Greenberg, B.S. & Neuendorf, K.A. (1980). Black family interactions on television. In B.S. Greenberg (Ed.), Life on television. Norwood, NJ: Ablex.
- Greenberg, B.S., Simmons, K.W., Hogan, L., & Atkin, C.K. (1980). The demography of fictional TV characters. In B.S. Greenberg (Ed.), Life on television. Norwood, NJ: Ablex.
- Gurin, P., Miller, A.H., & Gurin, G. (1980). Stratum identification and consciousness. Social Psychology Quarterly, 43(1), 30-47.
- Gurr, T.R. (1970). Why men rebel. Princeton, NJ: Princeton University Press.

- Hawkins, R.P., & Pingree, S. (1982). Television's influence on social reality. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), Television and behavior: Ten years of scientific progress and implications for the eighties (Vol. II: Technical Reviews; pp. 224-247). Washington DC: NIMH.
- Hawkins, R.P., & Pingree, S. (1981). Uniform messages and habitual viewing: Unnecessary assumptions in social reality effects. Human Communication Research, 7(4), 291-301.\$\$
- Hawkins, R.P., Pingree, S., & Adler, I. (1987) Searching for cognitive processes in the cultivation effect: Adult and adolescent samples in the United States and Australia. Human Communication Research, 13(4), 553-577.\$\$
- Hayes-Roth, B. & Hayes-Roth, F. (1977). Concept learning and the recognition and classification of exemplars. Journal of Verbal Learning and Verbal Behavior, 16, 321-338.
- Himmelfarb, S. (1974). "Resistance" to persuasion induced by information integration. In S. Himmelfarb & A.H. Eagley (Eds.), Readings in attitude change. New York: John Wiley.
- Hornby, P.A. (1974). Surface structure and presupposition. Journal of Verbal Learning and Verbal Behavior, 15, 287-299.
- Iyengar, D.R. & Kinder, S. (1987). News that matters: Television and public opinion. Chicago: University of Chicago Press.
- Jackman, M.R. & Crane, M. (1986). "Some of my best friends are black...": Interracial friendship and whites' racial attitudes. Public Opinion Quarterly, 50(4), 459-486.
- Jackman, M.R. & Muha, M.J. (1984). Education and intergroup attitudes: Moral enlightenment, superficial democratic commitment, or ideological refinement? American Sociological Review, 49, 751-769.
- Jackman, M.R. & Senter, M.S. (1983). Different, therefore unequal: Beliefs about trait differences between groups of unequal status. In D.J. Treiman & R.V. Robinson (Eds.), Research in social stratification and mobility (Vol. 2). Greenwich, CT: JAI Press.
- Jones, R.A. & Ashmore, R.D. (1973). The structure of intergroup perception: Categories and dimensions in views of ethnic groups and adjectives used in stereotype research. Journal of Personality and Social Psychology, 25(3), 428-438.
- Kahneman, D., Slovic, P., & Tversky, A. (Eds.), (1982). Judgment under uncertainty: Heuristics and biases. New York: Cambridge University Press.
- Kaplowitz, S.A., Fink, E.L, Armstrong, G.B., & Bauer, C.L. (1986). Message discrepancy and the persistence of attitude change: Implications of an information integration model. Journal of Experimental Social Psychology, 22, 507-530.

- Kaplowitz, S.A., Fink, E.L., & Bauer, C.L. (1983). A dynamic model of the effect of discrepant information on unidimensional attitude change. Behavioral Science, 28, 233-250.
- Karlins, M., Coffman, T.L., & Walters, G. (1969). On the fading of social stereotypes: Studies in three generations of college students. Journal of Personality and Social Psychology, 13, 1-16.
- Katz, D. & Braly, K.W. (1933). Racial stereotypes of one hundred college students. Journal of Abnormal and Social Psychology, 28, 280-290.
- Kluegel, J.R. & Smith, E.R. (1982). Whites' beliefs about blacks' opportunity. American Sociological Review, 47, 518-532.
- Kruskal, J.B. Special problems of statistical analysis: Transformations of data. In D.L. Sills (Ed.), International encyclopedia of the social sciences (Vol. 15). New York: Macmillan, 1968.
- Iyengar, S. & Kinder, D.R. (1987). News that matters: Television and American opinion. Chicago: University of Chicago Press.
- Mandler, J.M. & Ritchey, G.H. (1977). Long-term memory for pictures. Journal of Experimental Psychology: Human Learning and Memory, 3, 386-396.
- Martindale, C. (1985). Coverage of black Americans in five newspapers since 1950. Journalism Quarterly, 62(2), 321-328.
- Matabane, P.W. (1988). Television and the black audience: Cultivating moderate perspectives. Journal of Communication, 38(4), 21-31.
- McClendon, M.J. (1985). Racism, rational choice, and white opposition to racial change: A case study of busing. Public Opinion Quarterly, 49, 214-233.
- Meyrowitz, J. (1985). No sense of place: The impact of electronic media on social behavior. New York: Oxford University Press.
- Miller, M. & Reese, S. (1982). Media dependency as interaction: Effects of exposure and reliance on political activity and efficacy. Communication Research, 2, 227-248.
- Miyo, Y. (1983). The knowledge-gap hypothesis and media dependency. In R. Bostrom (Ed.), Communication Yearbook 7. Beverly Hills: Sage.
- Monge, P.R. (1980). Multivariate multiple regression in communication research. In Monge, P.R. & Cappella, J. (Eds.), Multivariate techniques in communication research. New York: Academic Press.
- Mosteller, F., & Tukey, J.W. (1977). Data analysis and regression: A second course in statistics. Reading, MA: Addison-Wesley.
- Oberschall, A. (1973). Social conflict and social movements. Englewood Cliffs, NJ: Prentice-Hall.

- Patterson, T.E. (1980). The mass media election: How Americans choose their President. New York: Praeger.
- Posner, M.I., & Keele, S.W. (1968). On the genesis of abstract ideas. Journal of Experimental Psychology, 77, 353-363.
- Prisuta, R.H. (1979). Televised sports and political values. Journal of Communication, 21(1), 94-102.
- Rainville, R.E., & McCormick, E. (1977). Extent of covert racial prejudice in pro football announcers' speech. Journalism Quarterly, 54, 20-26.
- Ryu, J.S. (1982). Public affairs and sensationalism in local TV news programs. Journalism Quarterly, 59(1), 74-78, 137.
- Selnow, G.W. (1986). Solving problems on prime-time television. Journal of Communication, 36(2), 63-72.
- Sheley, J.F. & Ashkins, C.D. (1981). Crime, crime news, and crime views. Public Opinion Quarterly, 45, 492-506.
- Signorielli, N. (1986). Selective television viewing: A limited possibility. Journal of Communication, 36(3), 64-76.
- Stephan, W.G., & Rosenfield, D. (1978). Effects of desegregation on racial attitudes. Journal of Personality and Social Psychology, 36, 795-804.
- Swindel, S.H. & Miller, M.M. (1986). Mass media and political decision-making: Application of the accumulated information model to the 1980 Presidential election. In M.L. McLaughlin (Ed.), Communication Yearbook 9 (pp. 642-657). Beverly Hills: Sage.
- Tan, A., & Vaughn, P. (1976). Mass media exposure, public affairs knowledge, and black militancy. Journalism Quarterly, 53, 271-279.
- U.S. Commission on Civil Rights. (1979). Window dressing on the set: An update. U.S. Department of Health, Education, and Welfare, National Institute of Education. [ERIC Document ED166336].
- Volgy, T.J., & Schwarz, J.E. (1980). TV entertainment programming and sociopolitical attitudes. Journalism Quarterly, 57(1), 150-155.
- Walster, E., Walster, G.W., & Berscheid, E. (1978). Equity: Theory and research. Boston: Allyn & Bacon.
- Weigel, R.H., Loomis, J.E., & Soja, M.J. (1980). Race relations on prime time television. Journal of Personality and Social Psychology, 39(5), 884-893.

1. Of course, information can be discounted to a degree based upon beliefs about its reliability, the credibility of its source, its representativeness, and so on. However, it would be naive to assume that discounting necessarily occurs merely because information is received through some particular mass media channel, or that discounting which takes place at point of encoding necessarily persists.

2. For example, the income difference score was equal to: $(\text{white income} - \text{black income}) / (\text{white income} + \text{black income})$.

3. Interestingly, mean Wave 1 estimates of the ratio of white to black average incomes and of white to black average productivity were both 1.45, although these measures used different types of scales and appeared in different parts of the questionnaire. The estimated income ratio represented a slight underestimation of actual population statistics appearing in Statistical Abstract of the United States.

4. The cumulative effects perspective required a measure of habitual viewing, which in this case was problematic, since the transition from home to college life carries with it potential for the interruption of lifetime media exposure patterns. For this reason, Wave 1 respondents were questioned about habitual media behavior prior to their arrival at the university.

Although there is always greater unreliability to be expected with measures which rely on long-term recall, it was felt that unreliability in order to achieve greater validity for whatever systematic variance was extracted was a justifiable tradeoff. As Seltiz, Wrightsman, and Cook (1976, p. 197), have pointed out, "a valid measure with low reliability is more useful than a reliable measure of something one does not care to measure." It has been shown that in at least some other categories of habitual behavior, that retrospective data can be relied upon (cf., Ferber & Birnbaum, 1979). Moreover, respondents questioned during

pretesting of the survey instrument reported no special difficulty with the retrospective nature of the media exposure questions.

5. The specific transformation was $\text{LN}(\text{NP} + 10)$, where $\text{NP} = (\text{minutes-per-day}) \times \text{X} (\text{days-per-week})$. "10" was added to the raw newspaper score as the adjustment for the problem of taking the log of 0 that yielded the most normal resulting distribution.

6. Given the degree of empirical intercorrelation between several groupings of conceptually-distinct independent variables, it is possible for significant relationships to be suppressed in regression analysis. This is especially the case for the two TV news exposure measures and for the interracial contact measures. Using this procedure allows for detecting significant contributions of groups of related variables, while permitting differences in their impacts to be detected.

7. Unfortunately, the sample sizes in Waves 2 and 3 were too small to permit this sort of breakdown.

8. The significance of the block of two news exposure measures suggests that the insignificance of individual betas was the result of collinearity between local news viewing and national news viewing.

9. Examination of zero-order and partial correlations confirms this interpretation of the reduction in significance that came about in the regression analysis. The magnitude of the zero-order correlation between newspaper exposure and relative outcomes was .20; the partial correlation, controlling for all other predictors in the regression equation, was actually greater: .26.

10. Separate analyses of black and white contributions scores were conducted on Wave 1 data. These revealed that the influence of perceived relative outcomes on perceived relative contributions was entirely due to the impact of beliefs about relative outcomes on estimated black contributions. The greater the

perceived difference between black and white economic outcomes, the lower the perceived productivity of blacks.

11. The equation was re-analyzed using the combined TV-news exposure score. This analysis did result in a significant coefficient related to TV news. Local news and network news exposure appear to work additively in this case, and the collinearity of the variables when both are entered into the equation reduces the effect attributable to either one independently to nonsignificance.

12. The latter finding supports the idea that attitudes about welfare and unemployment are racially colored, at least among white college students.

Table 1.

Correlations of Perceived Relative Outcomes with media exposure and interpersonal contact with blacks: Three waves.

Predictors	Wave 1 Full Sample	Wave 1 Sub- Sample	Wave 2	Wave 3
Sex	-.19**	-.25*	-.33**	-.18
SES	.12	.22*	.03	.02
Integration	-.09		-.22*	-.14
Interpersonal Contact	-.02			
IC-Friends			-.21*	-.05
IC-Phone			.03	-.30**
Newspaper	.09	.11	.07	.20*
TV News	.14*	.21*	.31**	.04
Local News	.16*	.22*	.35**	.06
National News	.16*	.22*	.13	-.15
TV Drama	-.03	-.10	.03	-.30**
TV Blacks	.01	.06		
TV Sports	.01	.05	.37**	.07

* $p \leq .05$

** $p \leq .01$

Table 2.

Regressions predicting Perceived Relative Outcomes: Three waves.

Predictors	Wave 1 Full Sample	Wave 1 Sub- Sample	Wave 2	Wave 3
Sex ^a	-.14	-.15	-.17	.08
SES	.11	.20*	.04	-.17
Integration	-.13		-.08	-.21
Interpersonal Contact	.05			
IC-Friends			-.24*	.00
IC-Phone			.05	-.27*
Newspaper	.06	.02	-.17	.27%
Local News	.13	.14	.25%	.06
National News	.09	.22%	-.05	-.13
TV Drama	-.08	-.24*	-.11	-.31*
TV Blacks	.03	.14		
TV Sports	.05	-.05	.22	-.11
College ^b				-.11
R ²	.094	.19	.27	.29
F	1.531	2.995	2.368	2.032
p	.13	.005	.02	.04
N	159	111	76	66
Incremental R ² :				
Interpersonal	.011		.059	.091%
All Media	.035	.094%	.091	.128%
TV News	.026	.069*	.042	.014

.10 < p < .05

* p < .05

**p < .01

^aStandardized Beta coefficients are reported^b0=Big Ten students; 1=Urban university students.

Table 3.

Correlations of Perceived Relative Contributions with media exposure,
interpersonal contact with blacks, and Relative Outcomes: Three waves.

Predictors	Wave 1 Full Sample	Wave 1 Sub- Sample	Wave 2	Wave 3
Sex	-.05	-.08	.05	-.15%
SES	.06	-.00	.11	-.11
P. Outcomes	.26**	.28**	.13	.43**
Integration	-.07		-.02	.06
Interpersonal Contact	-.08			
IC-Friends			.03	.01
IC-Phone			.09	-.20*
Newspaper	-.08	-.14	-.10	.09
TV News	.14*	.09	.09	.12
Local News	.11	.09	.08	.00
National News	.16*	.15	.02	.14
TV Drama	.05	.06	-.08	-.11
TV Blacks	-.05	-.15		
TV Sports	.10	.05	.06	.15%

% .10 < p < .05

* p ≤ .05

**p ≤ .01

Table 4.

Regressions predicting Perceived Relative Contributions: Three waves.

Predictors	Wave 1 Full Sample	Wave 1 Sub- Sample	Wave 2	Wave 3
Sex	.08	-.00	.16	-.09
SES	.08	-.05	.07	-.15
P. Outcomes	.24**	.33**	.11	.44**
Integration	.04		-.02	.17
Interpersonal Contact	-.12			
IC-Friends			.07	.00
IC-Phone			.14	-.12
Newspaper	-.13	-.19*	-.14	.00
Local News	.03	-.00	.12	-.11
National News	.15	.09	-.03	.14
TV Drama	-.01	.15	-.21	.09
TV Blacks	-.09	-.26*		
TV Sports	.14	.04	.18	.03
College				-.08
R ²	.126	.185	.116	.276
F	1.814	2.390	.691	1.656
p	.06	.02	.74	.10
N	150	105	70	65
Incremental R ² :				
Interpersonal	.009		.023	.034
All Media	.050	.101%	.063	.025
TV News	.021	.005	.009	.021

.10 < p < .05

* p < .05

**p < .01

Table 5.

Correlations of (White - Black) Stereotype Favorability with media exposure, interpersonal contact with blacks, and Relative Outcomes: Three waves.

Predictors	Wave 1 Full Sample	Wave 1 Sub- Sample	Wave 2	Wave 3
Sex	.06	.07	-.18%	-.13
SES	.12	.12	-.01	-.09
P. Outcomes	.06	.02	.39**	.32**
Integration	-.15*		-.25*	-.27*
Interpersonal Contact	-.24**			
IC-Friends			-.26*	-.01
IC-Phone			.04	-.17
Newspaper	-.07	.15	.10	.09
TV News	-.02	-.03	.27*	.05
Local News	.03	-.01	.21*	.06
National News	.13	.12	.30**	-.12
TV Drama	-.01	-.04	-.03	-.14
TV Blacks	-.17*	-.18*		
TV Sports	.11	.09	.07	.05

* $p \leq .05$

** $p \leq .01$

Table 6.

Regressions predicting (White - Black) Stereotype Favorability: Three waves.

Predictors	Wave 1 Full Sample	Wave 1 Sub- Sample	Wave 2	Wave 3
Sex	.20*	.22*	-.12	.32%
SES	.20*	.15	.03	-.38*
P. Outcomes	.05	.02	.27%	.16
Integration	.05		-.14	-.44**
Interpersonal Contact	-.33**			
IC-Friends			-.20	-.00
IC-Phone			.00	-.19
Newspaper	-.13	-.16	.07	.41*
Local News	-.01	-.07	.05	-.14
National News	.23*	.29*	.16	-.01
TV Drama	-.07	-.09	-.05	-.03
TV Blacks	-.20*	-.22*		
TV Sports	.24**	.20%	-.06	.27
College				-.10
R2	.208	.153	.28	.32
F	3.301	1.909	1.776	1.905
P	.001	.060	.084	.058
N	150	105	62	61
Incremental R2:				
Interpersonal	.082**		.059	.154*
All Media	.111**	.131*	.036	.119
TV News	.039*	.050%	.027	.013

% .10 < p < .05

* p ≤ .05

**p ≤ .01

Table 7.

Correlations of Individual Responsibility for Unemployment and Welfare with media exposure and interpersonal contact with blacks: Wave 1.

Predictors	All cases		Sub-sample	
	Welfare	Unemploy	Welfare	Unemploy
Sex	.09	.15*	.21*	.23**
SES	-.00	.07	.03	.14
Integration	-.20**	-.26**		
Interpersonal Contact	-.16*	-.22**		
Newspaper	-.11	-.18*	-.12	-.10
TV News	.16*	-.07	.10	-.06
Local News	.12	-.10	.07	-.07
National News	.15*	.02	.12	-.00
TV Drama	.07	-.04	.00	-.11
TV Blacks	.12	-.02	.03	-.09
TV Sports	-.03	-.15*	-.06	-.10

* $p \leq .05$

** $p < .01$