Creating, Producing and Evaluating Prosocial TV

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ABSTRACT

Utilising the scientific literatures on race relations and television effects, a dramatic science fiction pilot programme was created. The programme, Star Crusaders, depicted an interracial team of young adults cooperating in an equal status relationship in pursuit of a common goal: the end of inter-group hostilities on other planets. The production of the programme encountered a number of difficulties in articulating the theory-based conceptualisation: a limited budget, the inability to cast characters in a true equal status relationship, and problems in obtaining full cooperation among writers, producers, and directors in articulating the concept as a videotape production. The evaluation of the programme considered the methodological complexities of communication effects research, and reports the results of three studies. The first study conducted a content analysis of the pro-social and inter-racial content of the programme. The second investigation examined the perceptions of 104 university undergraduates concerning programme content. The third study examined the effects of the programme in a field experiment utilising 948 elementary and junior high school students as subjects. Findings are discussed in terms of educational television’s potential for positively impacting social attitudes and behaviours.

This article documents the creation, production and evaluation of a prosocial programme, created by the author, for educational television. Prosocial programming is defined as programming that contains models emphasising positive social relations: cooperation, interpersonal empathy, non-violent problem resolution, counter-stereotypical images, and the like. The paper describes the scientific literatures that provided the foundation for the creative concept and identifies several problematic issues raised during the production of the programme that are informative for other social scientists venturing into the production of educational television. Finally, the article describes the complexity of issues involved in the evaluation of educational television, and presents the results of a three-phase research plan.

Genesis

I was asked to consult on the writing of a proposal to the U.S. Department of Education for the development of a pilot television programme designed to positively impact
minority group isolation and inter-racial attitudes. The proposal called for the production of a pilot programme that would reduce, eliminate or prevent minority group isolation. The resulting programme was to be suitable both for classroom use and for general broadcasting.

As a social science consultant, it was my job to provide reviews of the relevant scientific literatures in race relations (including minority portrayals on television) and in the anti- and pro-social effects of televised media. It was, in fact, the review of these bodies of literature that gave rise to the creative concept for the pilot programme.

The Race Relations Literature

Much has been learned by psychologists and sociologists concerning prejudice, discrimination and the effects of intergroup contact (see Barron, 1975; Fairchild & Gurin, 1978). The developers of any television series that is designed to promote inter-racial and inter-ethnic understanding should therefore be intimately familiar with the 'state of the art' of those conditions that lead to a reduction of prejudice and inter-racial hostilities. The purpose of the current project was to glean the 'bottom line' in assessing those factors that promote inter-racial harmony.

The Contact Hypothesis

Most of the research in this area was stimulated by notions of a 'contact hypothesis' (Allport, 1954). While it was originally thought that inter-racial contact would almost automatically lead to positive inter-racial attitudes, Amir (1969, 1976) concluded that it was naïve to assume that any intergroup contact would necessarily produce 'favourable' results; many studies had indicated that contact produced positive or more tolerant intergroup attitudes, but these were balanced by other studies showing no change in attitude, or even a negative (less tolerant, more prejudiced) outcome.

This mixed empirical picture is equally evident in studies on school desegregation. While many studies found that inter-racial contact prompted by school desegregation led to favourable attitude changes, an equal number of studies have demonstrated no change or even an increase in racial cleavage (see Carithers, 1970; Fairchild & Gurin, 1978; St John, 1975; Stephan & Feagin, 1980).

Conditions of Inter-racial Contact

Clearly there are some situations in which inter-racial contact results in the easing of tensions, and others which aggravate inter-racial hostilities. Amir (1976) specified several of the conditions which lead to favourable attitude and behaviour change: (1) equal status contact; (2) unequal status contact where the minority group member has the higher status; (3) a supportive social climate; (4) intimate rather than casual contact; (5) contact seen by the participants as pleasant or rewarding; and (6) different groups having superordinate goals in common.

Amir (1976) also identified those conditions which tend to strengthen prejudice: (1) when there is competition between the groups; (2) when the contact is forced, tension-laden, or unpleasant; (3) when one of the groups loses status or prestige during the contact; (4) when the members of a group are in a state of frustration (e.g. economic impoverishment) leading to ethnic scapegoating; and (5) when the status of the minority group member is low relative to that of the majority group.
Race Relations in the Mass Media

A review of the literature concerning race relations in the mass media, especially in television, provided a clear sense of the 'needs' for prosocial educational television programming. Several studies examining the portrayals of women and minorities in North American television have noted the consistently demeaning and stereotypical images that predominate for these groups (e.g. Berry, 1980; Cohen, 1977; Comstock et al. 1978; Graves, 1980; Pierce, 1980; Poindexter & Strom, 1980; U.S. Commission on Civil Rights, 1977; Wells, 1981). This situation is in no way limited to Blacks, as content analyses have indicated that the roles portrayed by Asians and Latinos were equally demeaning (Comstock et al., 1978; Graves, 1980).

These negative portrayals of women and minorities are rarely balanced by programming offering counter-stereotypical images. Indeed, in an assessment of broadcast television directed at children, Weigel & Howes (1982) underscored the tremendous lack of programming that might offer children vicarious models of positive inter-racial relations. This lack of available programming is accentuated by the literature that suggests that such programming can, in fact, have beneficial effects on social attitudes.

Television and Social Attitudes

Although the bulk of the literature on the impact of television has focused upon the consequences of televised violence (for reviews, see Bogart, 1980; McLeod, 1980; Roberts & Bachen, 1981; Withey, 1980a), a growing body of literature has examined the effects of the televised media on positive social attitudes (see Gunter, 1981; Rushhton, 1979, for reviews). Friedrich & Stein (1975), for example, demonstrated that children are capable of learning a variety of ideals and values through television: obeying rules, delaying gratification, increasing cooperation, and developing self control. Similarly, Alper & Leidy (1970), in a cross-sectional sample of American youth, found that CBS's National Citizenship Program increased agreement with attitudes advanced in the programme.

The educational television series, Freestyle, was also effective in reducing traditional sex-role stereotyping in young viewers (Ettema, 1980, Johnston, Ettema & Davidson, 1980). These effects were enhanced by a companion discussion in classrooms, and persisted in a test-retest period covering nine months. In like manner, Houser (1978) demonstrated that films designed to reduce prejudice in elementary school children were effective in doing so in a racially mixed sample. She showed three groups of children, aged 5 to 9, either two prosocial films, one prosocial film, or no film at all. Children viewing one or more films were significantly more favourable in subsequent intergroup attitudes and behaviours than the group seeing no film. Similarly positive findings were reported on the effects of Sesame Street on social attitudes (e.g. Bogatz & Ball, 1971; Coates & Pusser, 1976; Smith, 1977) as well as for the television programmes Vegetable Soup (Mays et al., 1975), Lassie (Sprafkin, Liebert & Poulos, 1975), and The Waltons (Baran, Chase & Courtright, 1979). Thus, when deliberately programmed, educational television can positively alter intergroup attitudes, especially under conditions of repeated exposure (Graves, 1980).

Despite the documented potential of prosocial television to affect social attitudes and behaviours, one of the chief difficulties facing educators is the simple lack of suitable films (cf. Houser, 1978; Weigel & Howes, 1982). Even commercial broadcast television is notably bereft of programming depicting cross-racial association. Weigel & Howes' (1982) content analysis underscored this point when they reported that cross-racial associations constituted only one percent of children's network programming.
The Need for Prosocial Programmes

It became clear after reviewing this literature that there was considerable opportunity for growth in the area of educational programming for positive social and inter-racial relations. Five specific needs were identified.

1. To provide attractive and appealing television programming, directed toward youth, promoting interracial harmony and positive multi-cultural exchange.
2. To provide positive images of racial minorities.
3. To provide role models engaged in positive inter-racial behaviours.
4. To provide youth with a value base that will enhance inter-racial and inter-ethnic appreciation and interaction.
5. To provide racially isolated individuals with vicarious experiences of an inter-ethnic and inter-racial nature.

Although these needs focus on intergroup relations, underlying them is a sensitivity to the quality of cross-gender portrayals. This is due to the rich body of literature documenting the stereotypic and tightly circumscribed portrayals of women in television (e.g. Lemon, 1977; Morgan, 1982; Seggar, 1977; Weigel & Loomis, 1981; Zuckerman, Singer & Singer, 1980). An additional need guiding the creative effort, therefore, was to develop television programming that provided viewers with images that reverse gender stereotypes.

Creating Star Crusaders

Although no single television programme can hope to meet all of the identified needs, it seemed possible to approximate several of them with the following concept for a television programme: an inter-racial and cross-gender team of skilled young adults, cast in counter-stereotypical roles, travels to other planets to solve problems of an intergroup nature. This brief 'formula' accomplishes most of the conditions of the contact hypothesis: equal status contact, pursuit of a common goal, cooperative interactions, positive affective experiences on the part of the models, and successful outcomes. Moreover, this programme design capitalised on the popularity of young actors and actresses with school-age audiences (Holosko, Gould & Baggaley, 1983).

The use of a science fiction format takes advantage of the contemporary appeal of this genre while allowing issues of intergroup hostility—racism, prejudice, and discrimination—to be addressed in a context that is non-threatening to viewers, thus avoiding potential defensive reactions. This deliberate use of fantasy, and therefore the implicit presentation of thematic content, was also responsive to the warning issued by Janis (1980) in his discussion on television effects:

For certain types of messages, explicit presentation might evoke so much psychological resistance that implicit presentations are more effective... The themes may be more readily internalised from a variety of implicit presentations than from an equal number of exposures to explicit presentations that can be easily identified as deliberate efforts to influence one's personal beliefs or attitudes.

Of course, the development of a concept for a television programme was insufficient for production purposes. What was needed was an actual 'treatment' or script. As originally created, the treatment was as follows:

Our group of protagonists (the Star Crusaders) is approached by an alien from another world with a special request: to go to a far away galaxy in order to bring peace to a world that is afflicted by war, prejudice and the threat of total
self-annihilation. Our inter-racial (Asian, Black, Latino and White) team of protagonists (including a robot), each specially talented, readily agree to give it a try.

The plot revolves around the group's attempts to bring peace to a world at war. The odds are formidable, but this group has come well-equipped with the latest advances in Earth's 'peace-time weaponry'. Each member is a specialist of a particular 'peaceful' weapon: magic, mentalism, acrobatics/gymnastics, logic-tactics-persuasion, and computer-sciences/robotics.

The conflicting groups (defined by differences in eye colour) on the planet have developed a capability of total self-destruction. In order to demonstrate one group's innate superiority over the other, they have engaged in a dangerous escalation of the arming of a 'doomsday' device.

The conflicting groups' escalation in hostilities becomes out of control, and the doomsday device is set on an irrevocable course. Neither group has the technology, alone, to disarm the device.

The 'Star Crusaders' combine their skills, demonstrating an equal status relationship, and ultimately get the opposing factions to cooperate in combining their technologies to stop the calamity. In so doing, the opposing factions gain a new respect for each other and commit themselves to the tenets of a peaceful co-existence.

A short story was written that formed the basis for the proposal to the U.S. Department of Education. After funding in late 1980, production on the pilot television programme began in earnest in early 1981, and was completed in June 1981.

Production

A number of difficulties in articulating the 'Star Crusaders' concept were encountered at the production stage of the project, many of them attributable to one source: a limited budget. The total budget for the 30 minute pilot programme was about $75,000, which does not compare favourably with the tens of millions of dollars that go into the production of contemporary science fiction motion pictures. As a result, a primary challenge to the production team was the development of a television programme that 'looked' expensive but was relatively low-budgeted. Although this challenge was partially met, it was obvious that the tremendous costs associated with broadcast television production would leave the final product far short of the quality of contemporary fare.

Another early budgetary limitation was the lack of resources for formative research, unlike the production of the previously mentioned Freestyle (Williams, La Rose & Frost, 1981). In short, the production of Star Crusaders did not permit an evaluation plan that sought and utilised feedback from a sample of the intended audience during the course of production. Such an evaluation has been shown to be useful in the production of educational television (Holosko et al., 1983), especially when the perceptions of teachers and students are taken into account (Young, 1982).

The lack of money was also implicated in the extent to which the various characters could adequately display their particular skills. With characters cast as a mentalist with psi abilities, a gymnast with unusual physical dexterity and body control, a magician, a computer science specialist, and a tactician, a number of 'special effects' were required to showcase these varied and unusual talents. Special effects, unfortunately, were prohibitively expensive from the standpoint of the operating budget of Star Crusaders. In the end, the character of the magician was omitted from the production, the portrayal of one character's psi abilities was limited to the psycho-kinetic movement of a metal sphere.
(aided by an off-camera fish pole and monofilament line), the gymnast’s abilities were
portrayed by the use of slow motion techniques during a dance exercise, and the
portrayal of the robot was accomplished by a hand-held calculator and an off-camera
voice-over.

Finally, money was implicated in a number of scripting decisions that were inconsis-
tent with the Star Crusaders concept. Most importantly, budgetary limitations forced the
casting of the Star Crusaders into unequal status relationships; principle characters are
paid more (by actors’ union rules), and the budget for Star Crusaders did not permit five
actors and actresses to receive ‘top billing’, so the final programme tended to emphasise
the role and input of only one character (cast in the person of a Black male).

The Star Crusaders concept was also difficult to articulate in a shooting script for
other pragmatic considerations. For example, the original conception of group difference
on the alien planet called for the manipulation of eye colour. Although this is possible in
a video production, it would have been difficult to do so (necessitating contact lenses,
special camera angles, etc.). As a result, the final shooting script for Star Crusaders
omitted the portrayal of opposing factions, and instead called for the depiction of a
single Hitlerian demagogue. This change in the script was important because it played
down inter-group conflict, emphasising instead the idiosyncratic influence of a single
individual.

Perhaps the most serious problem, however, was the lack of full cooperation and
coordination among the writers, producers, and director of the production. With many
principals involved, each with competing interests, maintaining the essential elements of
the Star Crusaders concept proved difficult. As a result, a number of features of the final
production actually acted against the original conceptualisation. For example, while the
concept called for the casting of characters in counter-stereotypical roles, scenes in the
programme depicting intergroup hostilities on the alien planet showed two or three Black
characters (extras) in a highly stereotypical fashion (with head rags, toothpicks and mean
demeanours). The final tape of Star Crusaders was, therefore, equivocal with regards to
counter-stereotypical portrayals, as the following synopsis indicates.

The videotape begins with one of the Crusaders observing the Milky Way
galaxy through an observation window. The other Crusaders join him in the
ship’s observation room. Logan (a middle-aged Black male) seeks to keep the
younger crusaders entertained. Jim (a young adult Black male) demonstrates
psychokinetic ability by moving a metal sphere mentally; Tom (a young adult
White male) demonstrates his physical agility in a slow motion dance routine;
Susan (a young adult Asian female) displays her command of history by
playing a game that relies on historical information; Miguel (a young adult
Mexican-American male) shows off his hand-held talking computer. Logan
briefs the group regarding their mission: to answer a call for help from an
individual (Commissioner Foster, a middle-aged White female) from another
planet. After arriving on the alien planet, Foster explains to the Crusaders that
the planet is afflicted by violence, hatred and warfare, largely as the result of a
single Hitlerian demagogue, Frederick Smith (a middle-aged White male).
Images of intergroup conflict are depicted while Foster narrates. Foster asks the
Crusaders for their help. After deliberating the nature of the help, the Crusaders
elect to debate Smith publicly, hoping to discredit him. The subsequent
debate between Jim and Smith focuses on Smith’s emphasis on separatism and
nationalism, and Jim’s emphasis on peace and harmony. The debate ends, with
Jim the obvious winner, when Jim points out that the separatist strategy has
resulted in epidemic warfare on the planet. The programme ends with Foster
thanKing the Crusaders for their assistance. She notes that, after the debate, warring factions have agreed to new diplomatic efforts and that Smith has lost most of his following.

It should be noted that the difficulties associated with this production were not necessarily routine. Indeed, Ettema (1980) documented an unusual spirit of cooperation among social scientists, producers and educators in the production of Freestyle. Nevertheless, the issues raised during the production of Star Crusaders do not seem to be unique or necessarily atypical. Rather, budget limitations, compromises in conceptualisations, and the lack of full cooperation among the principles in the production may be expected in projects of this nature.

Evaluation

Despite the compromises made during the production of Star Crusaders, the final tape was aired in Los Angeles during the summer of 1982, and was suitable for classroom use. The programme was then systematically evaluated to assess the extent to which it met its objectives.

In order to untangle the “complicated web of interactions” (Abeles, 1980) in television effects, a varied collection of data was necessary. Following the suggestions of Graves (1980), McLeod (1980) and Withey (1980b), the evaluation of Star Crusaders involved the comprehensive assessment of programme content, audience perceptions and audience effects. Background variables (viewer characteristics and past behaviours) and variables related to the viewing situation were also taken into account. Consequently, a three-phase research plan was implemented for the evaluation of Star Crusaders.

Study 1: Content Analysis

The first phase of the evaluation involved a detailed content analysis of the pilot programme, systematically examining a variety of features of action, plot, character, character interaction and outcome.

Procedure

This part of the evaluation leaned heavily on recent methodological advances in content analysis for interracial interaction (Weigel, Loomis & Soja, 1980): partitioning the programme into discrete, two-minute intervals and coding for types of social interactions, types of inter-racial interactions, and the portion of time characters of different races are depicted. Thus, a number of measures of programme content are made available: the percent of time individuals of different ethnic and/or gender groups are depicted; the percentage of positive and/or negative inter-racial interactions; and the quality of intra-race vs. inter-race relationships. Such an analysis also permits a comparison of Star Crusaders with Weigel & Howes’ (1982) content analysis of prime time television on the following variables: percent of time with depictions of Blacks (6.6% in Weigel & Howes’ investigation), and on-screen cross-racial interactions (1%).

Results

The results of the content analysis indicated that, of the total amount of ‘human appearance time’ in the programme (22 minutes 36 seconds), 63.8% depicted an actor or actress who was White, 58.5% depicted one or more Blacks, 25.2% depicted an Asian.
and 24.7% depicted an Hispanic. Males accounted for 86.9% of the human appearance time compared to 45.6% for females. An inter-racial cast appeared in 40.4% of the programme, although 'positive inter-racial interaction' accounted for somewhat less time (35.6%), and 'negative inter-racial interaction' accounted for 4.8% of the total human appearance time in the programme.

Study 2: Audience Content Analysis

The experimenter-conducted content analysis was supplemented by an 'audience content analysis'. Here, an audience was asked to make judgments about the implicit and explicit themes in the pilot videotape. Questions focused on programme recall, appeal, perceptions of the intended audiences, perceptions of the appeal of the programme for different age groups, character identification, and self-reported impacts (respondents were encouraged to report on effects as well as non-effects). In order to assess the uniformity of perceptions and self-reported effects, subgroup differences were examined for responses to the closed-ended items. Subgroups contrasted were males vs. females and liberals vs. conservatives.

Subjects

Subjects were 104 university undergraduates (59 females and 45 males) attending a large American university (UCLA), who received partial course credit in Introductory Psychology for participating in the research. Sixty-five (62.5%) of the students were White, 19 (18.3%) were Asian, 9 (8.7%) were Hispanic, 6 (5.8%) were Black, and 5 (4.8%) classified themselves as 'Other'. Their mean age was 18.8 years (with a range of 17 to 26); 70 (67.3%) were in the first year of college, 22 (21.2%) were in their second year, and 11 (10.6%) were in their third- or fourth-year of school. When asked to report how they described their political orientation, five students (4.8%) described themselves as 'extremely liberal', 54 (51.9%) as 'somewhat liberal', 41 (39.4%) as 'somewhat conservative', and 3 (2.9%) as extremely conservative'.

Materials

Students completed a two-part questionnaire. Part One consisted of open-ended questions on programme recall, appeal, thematic intent and personal impact. Part Two consisted of closed-ended questions that re-examined these same issues. Included in this part of the questionnaire was a section that asked the students to report how much they thought the programme was for, or against, the following 17 social issues, problems or groups: violence, non-violence, war, peace, racial harmony, racial conflict, cooperation, competition, positive minority group images, negative minority group images, positive images of women, negative images of women, technology, individual achievement, group achievement, family harmony and family conflict. The latter two items were included to serve as 'control' variables, since the pilot videotape had little to do with family harmony or conflict. In addition, students were asked to report how much the programme impacted their own attitudes and values in 18 areas: violence, non-violence, war, peace, cooperation, competition, racial harmony, racial conflict, Blacks, Chicanos (i.e. Mexican Americans), Asians, Whites, technology, individual achievement, group achievement, family harmony, family conflict and women.
Procedure
Students attended one of several group showings of the pilot videotape. These showings were in one of several video-equipped classrooms on the university campus that accommodated between 20 and 50 students. These classrooms had several large, wall-mounted, colour video monitors, which permitted clear viewing for all students. Students were asked to view the 30-minute programme and then complete a questionnaire at its termination.

Results (1): Perceived Programme Content
In the open-ended section of the questionnaire, students were asked to list the major themes in the programme. They were allowed to report several themes, but only the first four were coded. The majority of students identified a variety of prosocial purposes of the production. Over half (n = 64, 61.5%) reported that the programme attempted to emphasise 'peaceful and cooperative living'; over a third (n = 36, 34.6%) pointed specifically to the programme's negative view of prejudice, racism and discrimination; and about a third (n = 33, 31.7%) said that the main point of the programme was to encourage interpersonal cooperation.

In the closed-ended portion of the questionnaires, students were asked "How much do you think the programme was for or against each of the following issues or groups?". They were given a seven-point scale to apply to 17 items (where +3 = strongly in favour, 0 = neutral and -3 = strongly against). A comparison of the means and standard deviations of these 17 items (Table I) reveals that 'peace' was identified as the most salient feature that the programme attempted to emphasize, and that 'war' and 'violence' were viewed as issues it was most strongly against. Single-sample t tests, to determine the statistical reliability of inter-item differences, revealed that the 17 items formed four non-overlapping groups. The items in the first group (those perceived as being of most positive emphasis) were 'peace', 'racial harmony', 'group achievement' and 'cooperation'. At the other end of the continuum, students reported that they perceived the programme as being most against 'violence', 'war' and 'racial conflict'. In the middle were two groups of items that were viewed as being of lesser emphasis, either positive or negative, one group including 'positive minority group images', 'positive images of women', 'family harmony', 'technology' and 'individual achievement', while the other group included 'competition', 'family conflict', 'negative images of women' and 'negative minority group images'.

Results (2): Self-reported Impacts
In the open-ended portion of the questionnaire, students were asked "What kind of impact(s) did this programme have on you?". Nearly half of the students reported that the programme had either no impact (n = 26, 25%) or little impact (n = 18, 18.3%) on their attitudes or behaviours. Other students reported that the programme reinforced their existing attitudes (n = 16, 15.4%), increased their sensitivity to racial discrimination (n = 24, 23.5%) or increased their concern for problems on Earth (n = 14, 13.5%). Additional responses included "better respect for others" (n = 4, 3.8%) and the realisation that solutions to problems of intergroup conflict are possible (n = 4, 3.8%).

In the closed-ended portion of the questionnaire, students answered the question "How much did the programme affect the way that you feel about each of the following issues, themes or groups?". Their responses were on a seven-point scale ranging from -3 (very strong negative effect) to +3 (very strong positive effect) with 0 labelled 'no effect'. Again, four non-overlapping groups of items emerged from single-sample t comparisons. The first included 'cooperation', 'racial harmony' and 'peace'. In terms of self-reported
TABLE I. Perceived programme content; mean values reported (on scale +3 to -3) and standard deviations (SD)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Peace</td>
<td>2.79</td>
<td>0.89</td>
</tr>
<tr>
<td>Racial harmony</td>
<td>2.75</td>
<td>1.05</td>
</tr>
<tr>
<td>Non-violence</td>
<td>2.63</td>
<td>1.13</td>
</tr>
<tr>
<td>Group achievement</td>
<td>2.59</td>
<td>0.90</td>
</tr>
<tr>
<td>Cooperation</td>
<td>2.53</td>
<td>1.20</td>
</tr>
<tr>
<td>Violence</td>
<td>-2.80</td>
<td>0.62</td>
</tr>
<tr>
<td>War</td>
<td>-2.71</td>
<td>1.09</td>
</tr>
<tr>
<td>Racial conflict</td>
<td>-2.55</td>
<td>1.40</td>
</tr>
<tr>
<td>Positive minority group images</td>
<td>2.06</td>
<td>1.55</td>
</tr>
<tr>
<td>Positive images of women</td>
<td>1.79</td>
<td>1.37</td>
</tr>
<tr>
<td>Family harmony</td>
<td>1.70</td>
<td>1.40</td>
</tr>
<tr>
<td>Technology</td>
<td>1.50</td>
<td>1.37</td>
</tr>
<tr>
<td>Individual achievement</td>
<td>1.42</td>
<td>1.71</td>
</tr>
<tr>
<td>Competition</td>
<td>-0.50</td>
<td>1.74</td>
</tr>
<tr>
<td>Family conflict</td>
<td>-1.64</td>
<td>1.44</td>
</tr>
<tr>
<td>Negative images of women</td>
<td>-1.91</td>
<td>1.37</td>
</tr>
<tr>
<td>Negative minority group images</td>
<td>-2.20</td>
<td>1.52</td>
</tr>
</tbody>
</table>

negative impacts, the most extreme set of items was 'war', 'violence' and 'racial conflict'. Two groups of items had lower overall mean impacts, one indicating a slight positive impact ('non-violence', 'family harmony', 'technology', 'Blacks', 'Chicanos', 'Asians', 'individual achievement', 'women' and 'Whites') and the other with scores in the negative direction, indicating a slight negative impact on the viewers ('competition' and 'family conflict'). The full results are shown in Table II.

TABLE II. Self-reported impacts of themes; means (on scale +3 to -3) and standard deviations (SD)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperation</td>
<td>1.41</td>
<td>1.32</td>
</tr>
<tr>
<td>Racial harmony</td>
<td>1.40</td>
<td>1.31</td>
</tr>
<tr>
<td>Peace</td>
<td>1.34</td>
<td>1.45</td>
</tr>
<tr>
<td>War</td>
<td>-0.73</td>
<td>1.68</td>
</tr>
<tr>
<td>Violence</td>
<td>-0.73</td>
<td>1.60</td>
</tr>
<tr>
<td>Racial conflict</td>
<td>-0.99</td>
<td>1.60</td>
</tr>
<tr>
<td>Non-violence</td>
<td>1.10</td>
<td>1.44</td>
</tr>
<tr>
<td>Family harmony</td>
<td>0.82</td>
<td>1.25</td>
</tr>
<tr>
<td>Technology</td>
<td>0.90</td>
<td>1.26</td>
</tr>
<tr>
<td>Blacks</td>
<td>0.87</td>
<td>1.31</td>
</tr>
<tr>
<td>Chicanos</td>
<td>0.85</td>
<td>1.26</td>
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<tr>
<td>Asians</td>
<td>0.84</td>
<td>1.23</td>
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<tr>
<td>Individual achievement</td>
<td>0.82</td>
<td>1.28</td>
</tr>
<tr>
<td>Women</td>
<td>0.69</td>
<td>1.35</td>
</tr>
<tr>
<td>Whites</td>
<td>0.66</td>
<td>1.33</td>
</tr>
<tr>
<td>Competition</td>
<td>-0.30</td>
<td>1.23</td>
</tr>
<tr>
<td>Family conflict</td>
<td>-0.44</td>
<td>1.39</td>
</tr>
</tbody>
</table>
Results (3): Gender Differences

Only two gender differences emerged in programme perceptions. Females were more likely than males to view the programme as emphasising peace, and females were more likely than males to see the programme as emphasising positive minority group images. In contrast, a number of gender differences emerged in terms of self-reported effects. Females reported higher mean ratings for the programme’s effects on their views toward ‘non-violence’, ‘peace’, ‘cooperation’, ‘racial harmony’ and ‘group achievement’. Moreover, females had more extreme scores at the other end of the continuum: ‘violence’, ‘war’ and ‘racial conflict’. In sum, where gender differences emerged, they were in the direction of greater self-reported impacts for females than for males (Table III).

<table>
<thead>
<tr>
<th>Theme</th>
<th>Mean (female)</th>
<th>Mean (male)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Programme perceptions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peace</td>
<td>2.98</td>
<td>2.56</td>
<td>t_{df}=2.51, p&lt;0.05</td>
</tr>
<tr>
<td>Positive minority group images</td>
<td>2.32</td>
<td>1.71</td>
<td>t_{df}=2.04, p&lt;0.05</td>
</tr>
<tr>
<td>(b) Self-reported effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-violence</td>
<td>1.39</td>
<td>0.74</td>
<td>t_{df}=2.28, p&lt;0.05</td>
</tr>
<tr>
<td>Peace</td>
<td>1.78</td>
<td>0.80</td>
<td>t_{df}=3.59, p&lt;0.01</td>
</tr>
<tr>
<td>Cooperation</td>
<td>1.88</td>
<td>0.84</td>
<td>t_{df}=4.34, p&lt;0.01</td>
</tr>
<tr>
<td>Racial harmony</td>
<td>1.81</td>
<td>0.93</td>
<td>t_{df}=3.55, p&lt;0.01</td>
</tr>
<tr>
<td>Group achievement</td>
<td>1.59</td>
<td>1.00</td>
<td>t_{df}=2.36, p&lt;0.05</td>
</tr>
<tr>
<td>Violence</td>
<td>-1.05</td>
<td>-0.27</td>
<td>t_{df}=-2.57, p&lt;0.05</td>
</tr>
<tr>
<td>War</td>
<td>-1.08</td>
<td>-0.16</td>
<td>t_{df}=-2.78, p&lt;0.01</td>
</tr>
<tr>
<td>Racial conflict</td>
<td>-1.46</td>
<td>-0.36</td>
<td>t_{df}=-3.56, p&lt;0.01</td>
</tr>
</tbody>
</table>

Results (4): Political Orientation

Although liberals and conservatives did not differ in programme perceptions on any of the 17 items, a number of differences emerged with respect to self-reported effects. In all cases, the politically conservative students reported being more affected by the videotape than liberals: for ‘peace’, ‘cooperation’, ‘Asians’, ‘Whites’, ‘individual achievement’ and ‘family harmony’ (Table IV).

<table>
<thead>
<tr>
<th>Theme</th>
<th>Mean (conservatives)</th>
<th>Mean (liberals)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peace</td>
<td>1.73</td>
<td>1.05</td>
<td>t_{df}=-2.38, p&lt;0.05</td>
</tr>
<tr>
<td>Cooperation</td>
<td>1.75</td>
<td>1.17</td>
<td>t_{df}=-2.27, p&lt;0.05</td>
</tr>
<tr>
<td>Asians</td>
<td>1.11</td>
<td>0.64</td>
<td>t_{df}=-1.98, p&lt;0.05</td>
</tr>
<tr>
<td>Whites</td>
<td>1.00</td>
<td>0.43</td>
<td>t_{df}=-2.21, p&lt;0.05</td>
</tr>
<tr>
<td>Individual achievement</td>
<td>1.18</td>
<td>0.57</td>
<td>t_{df}=-2.43, p&lt;0.05</td>
</tr>
<tr>
<td>Family harmony</td>
<td>1.14</td>
<td>0.60</td>
<td>t_{df}=-2.18, p&lt;0.05</td>
</tr>
</tbody>
</table>

Study 3: A Field Experiment

The third phase of the evaluation involved the showing of the pilot videotape to groups of primary and secondary schoolchildren within a normal classroom situation. Classrooms of five multiracial (predominantly Black and Hispanic) public schools were
randomly assigned to the following conditions: (1) exposure to neutral programme (= 'control'); (2) exposure to *Star Crusaders* without discussion; or (3) exposure to *Star Crusaders* with discussion. Showing the programme with and without discussion follows the lead of previous research on educational television that has demonstrated heightened effects when discussion accompanied the media presentation (e.g. Himmelweit, 1980; Johnston et al., 1980; Wade & Poole, 1983).

**Subjects**

Subjects were 948 public school students. Just over half (n = 494) were in the fifth and sixth grades (corresponding to 10 to 12 years of age), and the remainder (n = 454) were in the seventh or eighth grades (corresponding to 12 to 14 years of age). These two groups are referred to as the 'elementary school sample' and the 'junior high school sample'. The elementary school sample consisted of 261 (52.8%) females, 233 (47.2%) males, 242 (49.1%) Blacks, 203 (41.1%) Chicanos, 5 (1%) Asians, and 43 (8.7%) Whites. The junior high school sample comprised 225 (49.6%) females, 228 (50.2%) males, 344 (75.8%) Blacks, 77 (17.0%) Chicanos, 8 (1.8%) Asians, and 25 (5.5%) Whites. Because of the small numbers of Asians in the sample, this group was deleted from ethnic-specific analyses. In addition, findings based on White students are tentative because of their small number in the sample.

**Procedure**

A sample of classrooms was randomly assigned to three conditions: Group One saw a 'control' film *Wild Kingdom*; Group Two saw *Star Crusaders*; and Group Three saw *Star Crusaders* and had a companion discussion. At the end of the film (or at the end of the discussion for Group Three), students were requested to complete a self-administered questionnaire.

**Materials**

The questionnaire examined the students' responses to the programme in five areas: programme appeal, agreement with the themes advanced in the programme, evaluation of and identification with the actors and actresses in *Star Crusaders*, attitude toward future interracial interaction, and a 'warm/cold' evaluation of four ethnic groups.

**Programme Appeal.** Students were asked to evaluate the programme they viewed according to four appeal criteria: (1) How much did you like the programme you just saw? (2) How much would you like to see a programme like this again? (3) How much do you think other students at this school would like to see this programme? and (4) If this programme were shown on your television set at home, how much would you like to see it? All items were answered on a four point scale (4 = Very much, 3 = Some, 2 = Only a little, and 1 = Not at all).

**Programme Themes.** Students agreed or disagreed with ten Likert-type items that focused on the implicit and explicit themes in *Star Crusaders*: (1) It is best to solve problems by getting different people to work together; (2) Some leaders can turn people against each other; (3) It is impossible for people who are different to live happily together; (4) People should be treated as human beings regardless of whether they are rich or poor, or different races; (5) Different groups should not try to work together; (6) In order for all of us to survive, we must first learn to live together in peace, harmony and understanding; (7) By working together, we can accomplish much more than by fighting each other; (8) People should respect each others' views and opinions;
Groups who are different will be happier if they could live separately; and (10) Some groups of people don't deserve any respect. Students responded by circling one of four numbers corresponding to 'agree a lot' (1), 'agree some' (2), 'disagree some' (3), and 'disagree a lot' (4).

Reactions to Star Crusaders Characters. Students were shown seven colour photographs (presented on a single 8 inch by 10 inch print) featuring the principle characters in Star Crusaders (the five Crusaders, Commissioner Foster and Frederick Smith). Characters were rated in terms of: (1) "How good do you think this person is as an actor or actress?" (character evaluation) and (2) "How much do you think you would want to be like this person?" (character identification). The response scale for the first of these items was great (1), very good (2), pretty good (3), not so good (4), kind of bad (5), and awful (6). The response scale for the second item was not at all (1), a little (2), some (3), very much (4) and a lot (5).

Interracial Interaction. Students answered two questions concerned with future interracial interaction: "How much would you like to have more friends who are of a different race?" and "If you could choose the kind of school you would go to, how much would you like to go to a school that had a lot of different races?". Both items had response scales of very much (4), some (3), only a little (2), and not at all (1).

Evaluation of Ethnic Groups. The last set of items in the questionnaire concerned the students' feelings toward four ethnic groups. Students were presented with a figure of a thermometer with a scale from 0 to 100 degrees, marked in 5 degree intervals. The top of the thermometer was labeled "I feel very close and warm to this group", while the bottom of the scale was labeled "I feel very distant and cold to this group". Students were asked to report "how close and warm (or distant and cold)" they felt toward four ethnic groups (Asian Americans, Black Americans, Mexican-Americans, and White Americans), and responded by selecting a 'temperature' (in degrees) from the figure.

Results (1): Programme Appeal

In general, elementary school children saw the discussion condition as most appealing, the 'Star Crusaders' condition as second most appealing, and the control condition as least appealing. This pattern was also evident for the elementary girls, and Blacks (Table V), but only non-significant trends were obtained for elementary boys, Hispanics, and Whites.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Means</th>
<th></th>
<th></th>
<th></th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>control</td>
<td>Crusaders</td>
<td>discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total elementary children</td>
<td>12.06</td>
<td>12.84</td>
<td>13.58</td>
<td></td>
<td>F(2,488) = 10.03, p &lt; 0.001</td>
</tr>
<tr>
<td>Elementary girls</td>
<td>11.90</td>
<td>13.17</td>
<td>14.00</td>
<td></td>
<td>F(2,257) = 10.85, p &lt; 0.001</td>
</tr>
<tr>
<td>Blacks</td>
<td>10.64</td>
<td>12.89</td>
<td>13.83</td>
<td></td>
<td>F(2,238) = 19.67, p &lt; 0.001</td>
</tr>
</tbody>
</table>

For the junior high school students, the highest appeal levels were for the Star Crusaders condition, and the lowest appeal was the control condition. This general pattern held for Hispanics, Blacks, Girls and the total junior high sample, but for Boys the discussion condition had the lowest appeal rating and the 'Star Crusaders' condition had the highest (all with p < .01). In contrast, Whites (with an n of only 41) showed no significant differences in rated appeal across the three conditions.
In general, the younger students rated the discussion condition as having the highest appeal (and the control condition with the lowest) whereas the older students rated the Star Crusaders condition (no discussion) highest on appeal, and the control condition the lowest.

Results (2): Agreement with Programme Themes

Students were given 10 statements that examined agreement with themes advanced in the programme. For the total, boys and Blacks in the elementary school subsample, the 'Crusaders' condition had the greatest level of agreement with programme themes, the discussion condition had the second highest level of agreement, and the control condition was least likely to agree with thematic content of Star Crusaders. Non-significant trends were evident for girls, Hispanics and Whites. In sharp contrast, the junior high subsamples did not differ in agreement or disagreement with thematic content across the three conditions. Only the junior high girls approached significant differences, with mean scores of 3.31 (scale of 1 to 4) for the control condition, 3.37 for the programme condition, and 4.46 for the discussion condition (where higher scores indicate more agreement with programme themes), with $F(2,201) = 2.08, p < .13$.

In addition to analyses on the total score for the 10 items assessing agreement/disagreement with the programme theme, separate analyses were conducted on each item. These analyses demonstrated that the programme impacted agreement on only two of the ten items (Table VI). In response to “It is best to solve problems by getting different people to work together”, significant differences across conditions were evident for elementary boys, elementary Hispanics, the junior high total, junior high boys and junior high Blacks. In response to “Some leaders can turn people against each other”, significant differences were obtained for the elementary total, elementary girls, elementary Hispanics and elementary Whites. Non-significant trends emerged for the remaining eight items in this ten-item set.

**Table VI. Agreement with programme themes, means (scale 1 to 4) and significance**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Means*</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>control</td>
<td>Crusaders</td>
</tr>
<tr>
<td>(a) “It is best to solve problems by working together”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary boys</td>
<td>1.66</td>
<td>1.58</td>
</tr>
<tr>
<td>Elementary Hispanics</td>
<td>1.63</td>
<td>1.59</td>
</tr>
<tr>
<td>Junior high total</td>
<td>1.89</td>
<td>1.64</td>
</tr>
<tr>
<td>Junior high boys</td>
<td>1.99</td>
<td>1.66</td>
</tr>
<tr>
<td>Junior high Blacks</td>
<td>1.91</td>
<td>1.57</td>
</tr>
<tr>
<td>(b) “Some leaders can turn people against each other”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary total</td>
<td>2.12</td>
<td>1.95</td>
</tr>
<tr>
<td>Elementary girls</td>
<td>1.93</td>
<td>1.85</td>
</tr>
<tr>
<td>Elementary Hispanics</td>
<td>2.23</td>
<td>2.30</td>
</tr>
<tr>
<td>Elementary Whites</td>
<td>1.93</td>
<td>2.00</td>
</tr>
</tbody>
</table>

*Lower scores indicate agreement with statement.

Results (3): Evaluation of Star Crusaders characters

Elementary students rated the 'Star Crusaders' as better actors and actresses in the programme and discussion conditions than in the control condition. In evaluating Susan
(the Asian female), the total sample of elementary students provided a similar pattern of rating to the girls, boys, Blacks, Hispanics and Whites. For Miguel (the Hispanic male), significant differences were obtained for the elementary total, elementary girls, elementary boys, elementary Blacks, elementary Hispanics and elementary Whites. None of the contrasts for the junior high school students was significant (see Table VII for all results).

For the evaluations of Tom (the White male), significant differences emerged for each of the elementary subsamples, but the only significant difference in the junior high sample was for Blacks. For the evaluations of Jim (the Black male who played the leading role), significant differences emerged for all sample segments except elementary and junior high Whites and junior high Hispanics. The general pattern of findings suggested more positive evaluations of Jim in the programme and discussion conditions than in the control condition; this was true for the total elementary sample, elementary girls, boys, Blacks and Hispanics and for the total, girls, boys and Blacks in the junior high sample.

For Logan (the older Black male), significant differences emerged for the elementary total, girls, boys, Blacks and Hispanics and for the junior high total, girls and Blacks. Similar, albeit non-significant, trends were observed for elementary whites, junior high Hispanics and junior high Whites. For Commissioner Foster (the middle-aged White female), significant differences were again limited to the elementary sample, including the total, the girls, boys and Whites.

For the evaluation of Frederick Smith (the white male 'villain'), none of the contrasts, for either the elementary or junior high sample, was significant, although trends suggested that the evaluations of this character were more positive in the control condition and least positive in the 'Star Crusaders' condition.

Results (4): Character Identification

In conjunction with the above analyses, students were asked to report how much they would like to 'be like' each of the Star Crusader characters. In general, students reported greater character identification in the programme and discussion conditions than in the control condition, with the exception of Frederick Smith, where identification was greatest in the control condition (Table VIII).

For identification with Susan, although only non-significant trends emerged for elementary Whites, junior high boys, junior high Hispanics and junior high Whites, significant differences were found for the elementary total, elementary girls, boys, Hispanics and Whites, and for the junior high boys. Not surprisingly, girls were more likely than boys to identify with this female character.

For identification with Miguel (the Hispanic male), significant differences emerged for the elementary total, elementary girls, boys, Hispanics and Whites, for the junior high total, boys and Blacks. Contrasts were not statistically significant for the junior high girls, junior high Hispanics or junior high Whites.

For identification with Tom (White male), significant differences across conditions were evident for all sample segments except junior high Hispanics and Whites. While for identification with Jim (the leading Black male), differences emerged for the elementary total, girls, boys, Blacks, Hispanics and Whites, and for the junior high total, boys and Hispanics. Only non-significant trends were obtained for the junior high girls, Blacks and Whites.

For Logan (the middle-aged Black male), significant differences were evident between the three conditions for the elementary total, girls, boys, Blacks and Hispanics, and for the junior high total, girls, boys and Blacks. Only non-significant trends were obtained for elementary Whites, junior high Hispanics and junior high Whites.
### Table VII: Evaluation of ‘Star Crusaders’ characters; means (scale 1 to 6) and significance

<table>
<thead>
<tr>
<th>Character/Sample</th>
<th>Means</th>
<th></th>
<th></th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>control</td>
<td>Crusaders</td>
<td>discussion</td>
</tr>
<tr>
<td><strong>Susan</strong></td>
<td></td>
<td></td>
<td></td>
<td>F(2,485) = 16.14</td>
</tr>
<tr>
<td>Elementary total</td>
<td>4.95</td>
<td>4.96</td>
<td>5.49</td>
<td></td>
</tr>
<tr>
<td>Elementary girls</td>
<td>5.12</td>
<td>5.06</td>
<td>5.53</td>
<td>F(2,257) = 6.26</td>
</tr>
<tr>
<td>Elementary boys</td>
<td>4.76</td>
<td>4.84</td>
<td>5.44</td>
<td>F(2,225) = 10.53</td>
</tr>
<tr>
<td>Elementary Blacks</td>
<td>4.92</td>
<td>5.06</td>
<td>5.36</td>
<td>F(2,235) = 3.82</td>
</tr>
<tr>
<td>Elementary Hispanics</td>
<td>5.09</td>
<td>4.79</td>
<td>5.59</td>
<td>F(2,198) = 11.93</td>
</tr>
<tr>
<td>Elementary Whites</td>
<td>4.47</td>
<td>4.93</td>
<td>5.57</td>
<td>F(2,40) = 4.03</td>
</tr>
<tr>
<td><strong>Miguel</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary total</td>
<td>3.96</td>
<td>4.65</td>
<td>4.89</td>
<td>F(2,485) = 24.93</td>
</tr>
<tr>
<td>Elementary girls</td>
<td>4.04</td>
<td>4.71</td>
<td>5.02</td>
<td>F(2,255) = 15.70</td>
</tr>
<tr>
<td>Elementary boys</td>
<td>3.87</td>
<td>4.58</td>
<td>4.74</td>
<td>F(2,224) = 9.68</td>
</tr>
<tr>
<td>Elementary Blacks</td>
<td>3.62</td>
<td>4.49</td>
<td>4.64</td>
<td>F(2,235) = 14.04</td>
</tr>
<tr>
<td>Elementary Hispanics</td>
<td>4.36</td>
<td>4.91</td>
<td>5.04</td>
<td>F(2,198) = 6.47</td>
</tr>
<tr>
<td>Elementary Whites</td>
<td>3.27</td>
<td>4.64</td>
<td>5.36</td>
<td>F(2,40) = 19.73</td>
</tr>
<tr>
<td><strong>Tom</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary total</td>
<td>3.64</td>
<td>4.42</td>
<td>4.94</td>
<td>F(2,482) = 38.41</td>
</tr>
<tr>
<td>Elementary girls</td>
<td>3.37</td>
<td>4.28</td>
<td>4.76</td>
<td>F(2,255) = 26.55</td>
</tr>
<tr>
<td>Elementary boys</td>
<td>3.94</td>
<td>4.58</td>
<td>5.15</td>
<td>F(2,224) = 14.49</td>
</tr>
<tr>
<td>Elementary Blacks</td>
<td>3.85</td>
<td>4.31</td>
<td>4.79</td>
<td>F(2,235) = 7.54</td>
</tr>
<tr>
<td>Elementary Hispanics</td>
<td>3.57</td>
<td>4.60</td>
<td>5.00</td>
<td>F(2,195) = 26.31</td>
</tr>
<tr>
<td>Elementary Whites</td>
<td>2.93</td>
<td>4.36</td>
<td>5.43</td>
<td>F(2,40) = 17.00</td>
</tr>
<tr>
<td>Junior high Blacks</td>
<td>3.72</td>
<td>4.18</td>
<td>4.10</td>
<td>F(2,322) = 4.26</td>
</tr>
<tr>
<td><strong>Jim</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary total</td>
<td>4.96</td>
<td>5.58</td>
<td>5.66</td>
<td>F(2,477) = 21.31</td>
</tr>
<tr>
<td>Elementary girls</td>
<td>4.89</td>
<td>5.65</td>
<td>5.61</td>
<td>F(2,251) = 17.01</td>
</tr>
<tr>
<td>Elementary boys</td>
<td>5.03</td>
<td>5.50</td>
<td>5.72</td>
<td>F(2,223) = 7.01</td>
</tr>
<tr>
<td>Elementary Blacks</td>
<td>5.52</td>
<td>5.77</td>
<td>5.84</td>
<td>F(2,232) = 4.89</td>
</tr>
<tr>
<td>Elementary Hispanics</td>
<td>4.46</td>
<td>5.22</td>
<td>5.51</td>
<td>F(2,193) = 12.67</td>
</tr>
<tr>
<td>Junior high total</td>
<td>5.04</td>
<td>5.58</td>
<td>5.19</td>
<td>F(2,424) = 8.40</td>
</tr>
<tr>
<td>Junior high girls</td>
<td>5.19</td>
<td>5.67</td>
<td>5.33</td>
<td>F(2,209) = 4.10</td>
</tr>
<tr>
<td>Junior high boys</td>
<td>4.88</td>
<td>5.48</td>
<td>5.06</td>
<td>F(2,211) = 4.49</td>
</tr>
<tr>
<td>Junior high Blacks</td>
<td>5.17</td>
<td>5.66</td>
<td>5.31</td>
<td>F(2,324) = 6.55</td>
</tr>
<tr>
<td><strong>Logan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary total</td>
<td>4.53</td>
<td>5.25</td>
<td>5.26</td>
<td>F(2,477) = 19.94</td>
</tr>
<tr>
<td>Elementary girls</td>
<td>4.42</td>
<td>5.20</td>
<td>5.30</td>
<td>F(2,251) = 13.73</td>
</tr>
<tr>
<td>Elementary boys</td>
<td>4.65</td>
<td>5.29</td>
<td>6.23</td>
<td>F(2,223) = 5.83</td>
</tr>
<tr>
<td>Elementary Blacks</td>
<td>4.73</td>
<td>5.28</td>
<td>5.42</td>
<td>F(2,229) = 8.37</td>
</tr>
<tr>
<td>Elementary Hispanics</td>
<td>4.40</td>
<td>5.29</td>
<td>5.43</td>
<td>F(2,196) = 6.96</td>
</tr>
<tr>
<td>Junior high total</td>
<td>4.70</td>
<td>5.21</td>
<td>4.88</td>
<td>F(2,422) = 6.76</td>
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<tr>
<td>Junior high girls</td>
<td>4.68</td>
<td>5.37</td>
<td>4.95</td>
<td>F(2,208) = 8.11</td>
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<td>Junior high Blacks</td>
<td>4.80</td>
<td>5.28</td>
<td>4.94</td>
<td>F(2,323) = 5.80</td>
</tr>
<tr>
<td><strong>Commissioner Foster</strong></td>
<td></td>
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</tr>
<tr>
<td>Elementary total</td>
<td>4.36</td>
<td>4.82</td>
<td>5.08</td>
<td>F(2,481) = 13.61</td>
</tr>
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<td>Elementary girls</td>
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<td>4.76</td>
<td>5.11</td>
<td>F(2,255) = 11.21</td>
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<tr>
<td>Elementary boys</td>
<td>4.51</td>
<td>4.89</td>
<td>5.06</td>
<td>F(2,223) = 3.54</td>
</tr>
<tr>
<td>Elementary Whites</td>
<td>3.93</td>
<td>4.86</td>
<td>5.14</td>
<td>F(2,40) = 5.27</td>
</tr>
<tr>
<td>Character/sample</td>
<td>Means</td>
<td></td>
<td>Significance</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
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<td>---</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>Crusaders</td>
<td>discussion</td>
<td></td>
</tr>
<tr>
<td><strong>Susan</strong></td>
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</tr>
<tr>
<td>Elementary total</td>
<td>4.70</td>
<td>5.21</td>
<td>4.88</td>
<td>$F(2,464)=8.45$ $p&lt;0.001$</td>
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<td>3.48</td>
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<td>4.00</td>
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<td>1.97</td>
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<td>2.92</td>
<td>2.80</td>
<td>3.72</td>
<td>$F(2,193)=7.10$ $p&lt;0.01$</td>
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<td>2.29</td>
<td>2.79</td>
<td>3.69</td>
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<td>1.63</td>
<td>2.08</td>
<td>2.29</td>
<td>$F(2,202)=4.72$ $p&lt;0.01$</td>
</tr>
<tr>
<td><strong>Miguel</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>2.79</td>
<td>$F(2,251)=7.61$ $p&lt;0.001$</td>
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<tr>
<td>Elementary boys</td>
<td>1.81</td>
<td>2.44</td>
<td>3.26</td>
<td>$F(2,215)=23.29$ $p&lt;0.001$</td>
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<td>2.27</td>
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<td>2.15</td>
<td>2.26</td>
<td>$F(2,41)=3.10$ $p=0.05$</td>
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<tr>
<td>Junior high girls</td>
<td>1.89</td>
<td>2.19</td>
<td>2.41</td>
<td>$F(2,195)=3.72$ $p&lt;0.05$</td>
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<tr>
<td>Junior high boys</td>
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<td>2.02</td>
<td>2.20</td>
<td>$F(2,217)=9.98$ $p&lt;0.001$</td>
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<tr>
<td><strong>Tom</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Elementary total</td>
<td>1.94</td>
<td>2.48</td>
<td>2.89</td>
<td>$F(2,461)=20.73$ $p&lt;0.001$</td>
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<td>1.67</td>
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<td>2.67</td>
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<td>2.23</td>
<td>2.53</td>
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<td>2.36</td>
<td>2.59</td>
<td>$F(2,216)=6.05$ $p&lt;0.001$</td>
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<td>2.11</td>
<td>2.63</td>
<td>3.03</td>
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<td>2.38</td>
<td>3.64</td>
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<td>2.07</td>
<td>2.14</td>
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<tr>
<td>Junior high girls</td>
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<td>2.00</td>
<td>2.04</td>
<td>$F(2,210)=3.42$ $p&lt;0.05$</td>
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<tr>
<td>Junior high boys</td>
<td>1.61</td>
<td>2.14</td>
<td>2.25</td>
<td>$F(2,190)=5.48$ $p&lt;0.01$</td>
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<tr>
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<td>1.99</td>
<td>2.04</td>
<td>$F(2,307)=9.66$ $p&lt;0.001$</td>
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<tr>
<td><strong>Jim</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Elementary total</td>
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<td>3.90</td>
<td>3.93</td>
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<td>3.77</td>
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<td>3.93</td>
<td>4.12</td>
<td>$F(2,213)=8.86$ $p&lt;0.001$</td>
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<td>4.19</td>
<td>$F(2,217)=4.48$ $p&lt;0.05$</td>
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<tr>
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<td>2.50</td>
<td>3.52</td>
<td>3.65</td>
<td>$F(2,189)=12.58$ $p&lt;0.001$</td>
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<tr>
<td>Elementary Whites</td>
<td>2.73</td>
<td>3.86</td>
<td>4.00</td>
<td>$F(2,40)=4.98$ $p&lt;0.05$</td>
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<td>3.26</td>
<td>$F(2,410)=3.72$ $p&lt;0.05$</td>
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<td>Junior high girls</td>
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<td>3.62</td>
<td>2.94</td>
<td>$F(2,60)=3.38$ $p&lt;0.05$</td>
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<td>Junior high Blacks</td>
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<td>3.62</td>
<td>2.94</td>
<td>$F(2,60)=3.38$ $p&lt;0.05$</td>
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<tr>
<td><strong>Logan</strong></td>
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<tr>
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<td>3.33</td>
<td>$F(2,462)=11.17$ $p&lt;0.001$</td>
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<td>2.53</td>
<td>3.20</td>
<td>3.33</td>
<td>$F(2,244)=7.50$ $p&lt;0.001$</td>
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<td>2.70</td>
<td>3.37</td>
<td>3.33</td>
<td>$F(2,215)=4.14$ $p&lt;0.05$</td>
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<tr>
<td>Elementary Blacks</td>
<td>2.63</td>
<td>3.35</td>
<td>3.44</td>
<td>$F(2,221)=5.64$ $p&lt;0.01$</td>
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<td>Elementary Hispanics</td>
<td>2.57</td>
<td>3.18</td>
<td>3.17</td>
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<td>2.98</td>
<td>2.84</td>
<td>$F(2,413)=6.47$ $p&lt;0.01$</td>
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<td>Junior high girls</td>
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<td>3.00</td>
<td>2.58</td>
<td>$F(2,210)=4.07$ $p&lt;0.05$</td>
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<tr>
<td>Junior high boys</td>
<td>2.41</td>
<td>2.95</td>
<td>3.11</td>
<td>$F(2,199)=3.90$ $p&lt;0.05$</td>
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<tr>
<td>Junior high Blacks</td>
<td>2.42</td>
<td>2.97</td>
<td>2.82</td>
<td>$F(2,318)=3.79$ $p&lt;0.05$</td>
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<tr>
<td><strong>Commissioner Foster</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Elementary total</td>
<td>2.24</td>
<td>2.63</td>
<td>2.93</td>
<td>$F(2,465)=9.36$ $p&lt;0.001$</td>
</tr>
<tr>
<td>Elementary girls</td>
<td>2.51</td>
<td>2.93</td>
<td>3.18</td>
<td>$F(2,248)=5.46$ $p&lt;0.05$</td>
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<td>Elementary boys</td>
<td>1.94</td>
<td>2.30</td>
<td>2.62</td>
<td>$F(2,214)=3.97$ $p&lt;0.001$</td>
</tr>
<tr>
<td>Elementary Blacks</td>
<td>2.00</td>
<td>2.49</td>
<td>2.84</td>
<td>$F(2,221)=6.50$ $p&lt;0.01$</td>
</tr>
<tr>
<td>Junior high Blacks</td>
<td>1.81</td>
<td>2.13</td>
<td>2.26</td>
<td>$F(2,317)=3.61$ $p&lt;0.05$</td>
</tr>
<tr>
<td>Junior high boys</td>
<td>1.43</td>
<td>1.80</td>
<td>2.29</td>
<td>$F(2,200)=9.11$ $p&lt;0.001$</td>
</tr>
</tbody>
</table>
For identification with Commissioner Foster (White female), significant differences emerged for the elementary total, girls, boys and Blacks, and for junior high boys and blacks, with non-significant trends for the others, but for Frederick Smith the pattern of significant differences differed from all the others. In general, identification with this antagonist of the programme did not differ across conditions with the exceptions of the elementary total, boys and Hispanics and for the junior high total. Note that, where significant differences occurred, they indicated less identification with Smith in the programme and discussion condition than for the control condition.

**Results (5): Attitudes toward Interracial Interaction**

Analyses were conducted on the sum of the two items concerned with future interracial interaction. Significant differences were evident (see Table IX) for the total elementary sample, elementary boys, Blacks and Hispanics. Although trends for the total elementary sample suggested greater acceptance of future interracial interaction in the programme and discussion conditions (with greater acceptance in the programme condition than the discussion condition), none of the contrasts was statistically significant.

**Results (6): Evaluation of Ethnic Groups**

On the measure of the students' feelings about the four ethnic groups, the only consistent effects were for feelings toward Whites in the junior high sample. Here the total sample rated Whites lowest in the *Star Crusaders* video programme condition and about equivalently for the control and discussion conditions. This general pattern was also evident for the junior high boys and junior high Blacks (Table X).


Table X. Evaluation of ethnic groups: means (scale of 0 to 100 'degrees') and significance

<table>
<thead>
<tr>
<th>Sample</th>
<th>Means</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>control</td>
<td>Crusaders</td>
</tr>
<tr>
<td>Feelings towards Whites</td>
<td>71.07</td>
<td>60.06</td>
</tr>
<tr>
<td>Junior high total</td>
<td>72.77</td>
<td>58.62</td>
</tr>
<tr>
<td>Junior high boys</td>
<td>69.55</td>
<td>57.81</td>
</tr>
</tbody>
</table>

Discussion

This prosocial pilot programme for educational television was a novel project that involved the articulation of a creative concept that was born of the social science literature. As such, the programme is responsive to the call by Janis (1980).

...the most valuable projects might well be those in which research workers collaborate with writers, producers and others in the television industry to develop and test new educational programs designed to build up accurate means-outcome scripts in the viewers.

Experiences during the production of Star Crusaders underscored budgetary considerations for educational television, as such programming must compete with elaborate and expensive commercial products. Similarly, a number of difficulties were raised in the articulation of abstract theoretical concepts in a shooting script that would be entertaining, educational and practical. Additional difficulties during the production involved problems of coordination of the many individuals involved in the project.

These difficulties notwithstanding, the potential benefits of theory-based productions of prosocial television encourage such attempts. Indeed, television remains the most important medium of mass communication in modern society. Through television it is possible to reach millions of individuals around the world at a relatively low per capita cost. Television is unexcelled in its ability to reach people in their homes or classrooms, thereby providing educational journeys around the world. The success of the Sesame Street series attests to the power of this medium (Lesser, 1974).

The evaluation of television programming confronts the researcher with a number of methodological difficulties and complexities. The evaluation described here, while comprehensive, failed to examine all, or even most, of the pertinent issues in mass communication effects research. Virtually every experimental 'control' must be viewed as an independent variable in itself. And the list of potentially important independent and mediating variables is virtually inexhaustible.

The two content analyses aptly demonstrated the ability to convey prosocial messages and images in television. The presentation of ethnically diverse actors and actresses is easy to accomplish if they are written into the programme as key characters, as in Star Crusaders. More importantly, the evaluation demonstrated that an audience was capable of accurately discerning the prosocial themes in the programme, and was willing to report being impacted by such material. In this regard, it is important to note that the explicit messages of the programme (those messages concerned with cooperation and intergroup harmony, or the threats of a leader who seeks to polarize the population), were most impactful, while the more implicit messages (the value of inter-ethnic and cross-gender interactions) were somewhat less impactful. This is evidenced in the audience content analysis by the fact that students reported the greatest impact in the
areas of war and peace, and somewhat less impact on racial attitudes and attitudes toward women.

The field experiment, in contrast, yielded a rich dataset that could only be briefly examined. Yet, that brief examination revealed that the *Star Crusaders* programme was highly appealing to the school-age audience, and competed well with an established nature programme already on North American broadcast television. Interestingly, the most consistent effects emerged for the evaluation of, and identification with, the *Star Crusaders* characters. Three trends emerged: first, the protagonists of the pilot videotape were more likely to be highly evaluated, and identified with, after seeing the programme (especially with a discussion); and they were less likely to identify with the antagonist after seeing the nature of his role in *Star Crusaders*. The second trend was that males and females were gender-restricted in terms of their willingness to identify with cross-gender characters. Males were more likely to identify with male characters while females were more likely to identify with female characters. Finally, although racial groups were more likely to identify with characters of their own race, exposure to a harmonious interracial team of actors facilitated cross-race identification. This was most notable in all students’ willingness to identify with the leading Black character (*Jim*).

Another important general trend emerged concerning the pattern of effects in the field experiment. Specifically, the younger children (the elementary sample) evidenced more consistent effects than older children. Not only was *Star Crusaders* more appealing to the younger audience but this audience also appeared to be more malleable with respect to prosocial attitudes. This finding is consistent with other investigations that have found efforts to change children’s attitudes via television to be more successful with young children (cf. Greenfield, 1984).

The programme, however, failed to impact in any consistent way students’ attitudes toward future interracial interaction, or their evaluation of the four target ethnic/racial groups. The use of the discussion appeared impactful only for the younger audience. Perhaps junior high students require more subtle, and less didactic, attitude change approaches.

Perhaps the most disheartening point that can be made about the evaluation is the fact that it is difficult to expect a single exposure to a 30-minute videotape to substantially alter racial and/or gender attitudes and behaviours. This is especially so because these attitude constellations are a part of the personality structure that evolves from years of interaction between individuals, significant others, and social institutions (including the mass media).

Indeed, when the mass media are viewed as agents of socialisation, it is clear that they have served, and continue to serve, primarily as teachers of social and gender stereotypes, and of the efficacy of the *violent* resolution of personal and interpersonal difficulties. Because of the prevalence of negative racial and gender stereotypes in the televised media (cf. Berry, 1980) and the exaggerated levels of violence and aggression (cf. Becker, 1982), it is unlikely that a 30-minute videotape will have a continuing impact on prosocial attitudes and behaviours.

Thus, what is clearly needed is a ‘series’ of prosocial programming for educational television that may counteract the negative influences extant on broadcast television. If a programme such as *Star Crusaders* were serialised, a rich research opportunity would be available for evaluation. Research could then be directed at the impact of different types of programmes, different exposure levels to the series, and may include research that examines the effects of different versions of the same programme. In this latter regard, it would be helpful to produce two or more versions of a single programme, in which, for example, the success or failure of the protagonists could be manipulated. The effects of such a manipulation (or others), could then be systematically examined.
Conclusion

The creation of educational television offers unique challenges and rewards to social scientists. In order to maximise this opportunity, research and theory-based concepts must be incorporated in educational programming. The production of such programming, however, poses a number of unique problems that must be overcome if the production effort is to be successful. Most important is the need to obtain full cooperation among the many principals involved in television production (actors and actresses, writers, producers, technicians, and social scientists). Evaluating educational television must also utilise multiple strategies in assessing programme content, audience perceptions and programme effects.

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REFERENCES


WITHEY, S.B. (1980a) An ecological, cultural, and scripting view of television and social behavior, in: WITHEY,


