

# The Parasocial Contact Hypothesis

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*We propose a communication analogue to Allport's (1954) Contact Hypothesis called the Parasocial Contact Hypothesis (PCH). If people process mass-mediated parasocial interaction in a manner similar to interpersonal interaction, then the socially beneficial functions of intergroup contact may result from parasocial contact. We describe and test the PCH with respect to majority group members' level of prejudice in three studies, two involving parasocial contact with gay men (Six Feet Under and Queer Eye for the Straight Guy) and one involving parasocial contact with comedian and male transvestite Eddie Izzard. In all three studies, parasocial contact was associated with lower levels of prejudice. Moreover, tests of the underlying mechanisms of PCH were generally supported, suggesting that parasocial contact facilitates positive parasocial responses and changes in beliefs about the attributes of minority group categories.*

*Keywords: Parasocial; Contact Hypothesis; Prejudice; Television Studies*

One of the most important and enduring contributions of social psychology in the past 50 years is known as the Contact Hypothesis (Dovidio, Gaertner, & Kawakami, 2003). Credited to Gordon W. Allport (1954), the Contact Hypothesis, or Intergroup Contact Theory, states that under appropriate conditions interpersonal contact is one of the most effective ways to reduce prejudice between majority and minority group members. Coincidentally, two years after Allport's book, *The Nature of Prejudice*, was published, Horton and Wohl (1956) argued for studying what they dubbed *para-social interaction*: "One of the most striking characteristics of the new mass media—radio,

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television, and the movies—is that they give the illusion of face-to-face relationship with the performer” (p. 215).

In this essay we describe a mass communication equivalent to Allport’s Contact Hypothesis that we call the *Parasocial Contact Hypothesis* (PCH). If people process mass-mediated communication in a manner similar to interpersonal interaction, then it is worth exploring whether the socially beneficial functions of intergroup contact have an analogue in parasocial contact. After reviewing the salient portions of the theoretical literature concerning intergroup contact and parasocial relationships, we describe the Parasocial Contact Hypothesis and report three studies that test the hypothesis. Two studies examine majority group members’ level of prejudice toward gay men and one study examines majority group members’ level of prejudice toward male transvestites.

### **Intergroup Contact Theory**

After decades of research, there are many explanations and models that attempt to explain stereotypes, social categorization, intergroup bias, and how contact can decrease prejudice (Brewer & Brown, 1998; Hewstone, Rubin, & Willis, 2002). We believe the reduction of prejudice through intergroup contact is best explained as the *reconceptualization of group categories*. Allport (1954) understands prejudice as a result of a hasty generalization made about a group based on incomplete or mistaken information. The basic rationale for the Contact Hypothesis is that prejudice can be reduced as one learns more about a category of people. Rothbart and John (1985) describe belief change through contact as “an example of the general cognitive process by which attributes of category members modify category attributes” (p. 82). A person’s beliefs can be modified by that person coming into contact with a category member and subsequently modifying or elaborating the beliefs about the category as a whole.

Categories are formed based on learning the relevant functional, perceptual, or other sorts of attributes that members of a category share. To be meaningful and useful, categories must include items and exclude others, thus humans acquire social categories by learning a set of “similarity/difference relationships” that demarcate one category from another (Schiappa, 2003). If majority group members believe that people defined by a category are different from them in ways they believe are unpleasant, detrimental, or otherwise negative, then the attitudes they hold toward such a group constitute prejudice (whether invidious or not). Prejudicial attitudes toward a category of people, such as “Arabs” or “gay men,” may be based on a negative experience, a mass mediated stereotype, or socialization from family, friends, or other sources. As Hogg and Abrams (1988) put it, “categorization can thus be considered to be the process underlying and responsible for stereotyping” (p. 73).

Herek (1986, 1987) suggests that such attitudes perform an “experiential-schematic” function that is part of a person’s knowledge about the world. Past experience, direct or otherwise, with members of a group category guides subsequent interactions with or about that group. Researchers such as Brewer and Brown (1998)

and Leippe and Eisenstadt (1994) contend that an important part of the willingness to adjust one's beliefs about a category of people depends on the dissonance new information about a group creates (Festinger, 1957). Herek (1986) notes that attitudes serving an "expressive" function are more resistant to change; for example, if the belief that homosexuality is immoral is an important part of a conservative Christian's self-identity, changing such a belief would create more dissonance than would ignoring information that challenges it. Accordingly, a good deal of attention has been paid to the conditions under which intergroup contact is more or less likely to influence prejudicial attitudes.

Because avoidance of members of specific groups is a form of negative social behavior that is consistent with negative attitudes (Brewer & Brown, 1998, p. 578), positive contact can create a sense of dissonance that can lead to attitude change. The contact must be sustained and non-superficial in order to create a dissonant condition in which negative beliefs come into conflict with new beliefs resulting from positive experiences. Additionally, group members must feel of equal status, share common goals, and not be opposed by a salient authority (Allport, 1954; Williams, 1964). If any of these conditions are not met, prejudicial beliefs may increase (if the groups are in competition, for example) and any dissonance can be resolved without changing prejudicial attitudes.

Following Pettigrew (1998), we find it most useful to concentrate on the process of change that take place through contact, since (we shall argue) the process can be reproduced through mediated contact. Pettigrew describes these processes as learning about the minority or "outgroup," changing behavior, generating affective ties, and majority or "ingroup" reappraisal.

Learning about the outgroup was conceived by Allport (1954) as the major way that intergroup contact has effects, and the benefits of such learning have been clearly demonstrated (Gardiner, 1972; Stephan & Stephan, 1984). Rothbart and John (1985) have qualified intergroup contact theory by arguing that disconfirming evidence alters stereotypes only if (a) the minority group members' behavior is inconsistent with their stereotype, (b) contact occurs often and in various contexts, and (c) the minority members are judged as typical. If majority group members have rewarding interactions with minority group members and learn sufficient new information through repeated contact, the dissonance between "old prejudices and new behavior" can be resolved by revising one's attitudes (Pettigrew, 1998, p. 71). For such dissonance to be sufficient motivation for attitude change, the contact must be successful in generating some sort of intimacy or affective tie toward minority group members (Amir, 1976; Pettigrew, 1997a, 1997b, 1998). In short, contact results in changes in the manner in which ingroup members categorize outgroup members. The category may still exist (such as "Arabs" or "gay men") but the salient traits (category-attributes) and the perceived similarity/difference relationships will be modified if the contact experience has been sufficiently positive to change attitudes (Hewstone et al., 2002, pp. 589–593; Oakes, Haslam, & Reynolds, 1999, p. 64).

Extensive empirical research supports intergroup contact theory. Pettigrew and Tropp's (2003) meta-analysis of over 700 independent samples confirms the Contact

Hypothesis for a variety of minority groups and conservatively estimates the average correlation between contact and prejudice as  $-.21$  ( $N > 250,000$ ,  $p < .0001$ ) (see also Pettigrew & Tropp, 2000). Interpersonal contact has proven to be an effective means to reduce prejudice toward homosexuals, in particular. Applying the Contact Hypothesis to heterosexuals and homosexuals, Herek (1987) found that college students who had pleasant interactions with a homosexual tend to generalize from that experience and accept homosexuals as a group. Herek and Glunt's (1993) national study of interpersonal contact and heterosexuals' attitudes toward gay men found that contact "predicted attitudes toward gay men better than did any other demographic or social psychological variable" (p. 239); such variables included gender, race, education, age, geographic residence, marital status, number of children, religion, and political ideology. Herek and Capitanio (1996) found that contact experiences with two or three homosexuals are associated with more favorable attitudes than are contact experiences with only one individual. Pettigrew and Tropp (2003) meta-analysis of contact-hypothesis studies included 33 studies involving attitudes toward homosexuals and found a significant negative relationship,  $r = -.25$ , between contact and sexual prejudice ( $n = 12,074$ ,  $p < .0001$ ).

Given the fact that interpersonal contact has proven a successful means of reducing prejudice, we turn to the issue of whether parasocial contact has the same potential.

### Parasocial Interaction as Parasocial Contact

Horton and Wohl (1956) introduced the phrase "parasocial interaction" to suggest that communication media can provide viewers with "an apparently intimate, face-to-face association with a performer" (p. 228). Because the human brain processes media experiences similarly to how it processes "direct experience," people typically react to televised characters as they would real people (Kanazawa, 2002). The idea that "mediated life" is equivalent to "real life," at least as far as people's cognitive and behavioral responses are concerned, is the central claim of what Reeves and Nass (1996) call the "media equation."

In a media-rich environment, people may come to "know" more people parasocially than directly through interpersonal contact. Few people have direct contact with the President of the United States, but virtually everyone in the world has strong opinions about the person holding that office. Most media users form attitudes and beliefs about many politicians, athletes, journalists, and entertainers with whom their contact has been exclusively through the mass media. In addition to parasocial contact with "real" individuals, people also have parasocial contact with fictional characters (Auer & Palmgreen, 2000). Obviously human beings are *capable* of making a distinction between a fictional character on a television program and people we know in the real world; however, most of the time while watching television or a movie we do not make the effort to do so.

Mass communication research arguably has over-worked the concept of "parasocial interaction," or PSI, to the point that its use as a measure has outstripped theoretical understanding (Schramm, Hartmann, & Klimmt, 2002). Scholars recently have argued

that PSI is under-theorized, treated as uni-dimensional by some and multi-dimensional by others, and used to describe an antecedent, a process, and an outcome (Auter & Palmgreen, 2000; Cohen, 2001; Giles, 2002; Rubin & Rubin, 2001). PSI has been used to describe disparate responses of affinity, interest, friendship, identification, similarity, liking, or imitation. The lack of theoretical precision regarding PSI is reflected in how survey instruments to assess it have been constructed (Giles, 2002; Schramm et al., 2002). PSI is typically measured with Likert scale responses to items such as “I think my favorite TV personality is like an old friend” or “My favorite TV personality seems to understand the things I know.” Factor analyses by Gregg (2005) suggest that almost all standard parasocial interaction scale items load on to interpersonal variables such as social attraction or perceived homophily when included in the same instrument. Accordingly, we believe it prudent to interpret most measures of PSI in the literature as documenting a variety of specific parasocial responses to mediated contact.

Thus, for our purposes, we treat PSI as *contact* or *exposure* and use the phrase *parasocial response* as shorthand for the cognitive and affective reactions we have to such contact. When we experience a televised character, we form impressions, make judgments about their personality, and develop beliefs about them. As Rubin and Rubin (2001) note, PSI is “grounded in interpersonal notions of attraction, perceived similarity or homophily, and empathy” (p. 326). People use the same communication-related cognitive processes for both mediated and interpersonal contexts, and “people and media are coequal communication alternatives that satisfy similar communication needs and provide similar gratifications” (Perse & Rubin, 1989, p. 59). Just as people form positive or negative attitudes toward other people in “real life,” television viewers develop positive or negative attitudes about the characters they watch on television (Conway & Rubin, 1991). And, just as interpersonal interaction can lead to various sorts of interpersonal responses and relationships, parasocial interaction can lead to various sorts of parasocial responses and (one-sided) relationships.

Scholars have documented the formation of parasocial relationships for viewers of local television newscasters, soap-opera characters, celebrities appearing in commercials, talk-radio hosts, characters in situation comedies, sports celebrities, and favorite television personalities (Giles, 2002; Gregg, 2005). Kanazawa (2002) reports that watching certain types of television has the same effect on subjective satisfaction with friendships as having more friends and socializing with them more often. Koenig and Lessan (1985) and Gleich and Burst (1996) state that viewers describe and evaluate television personalities, neighbors, and friends in functionally equivalent ways. Cohen (2004) relates that subjects responded to a hypothetical parasocial “break-up” in similar ways as they would to interpersonal break-ups. As reported in a meta-analysis of thirty parasocial interaction studies by Schiappa, Allen, and Gregg (in press), three qualities strongly associated with parasocial contact are the social attractiveness or likeability of the characters, their perceived realism, and perceived homophily.

The analogy between parasocial and interpersonal interaction has encouraged researchers to explore the relevance of interpersonal communication theories to

understand the kinds of relational judgments viewers make about televised characters. Drawing from Uncertainty Reduction Theory (Berger & Calabrese, 1975), Perse and Rubin (1989) report in their study of soap-opera viewers that length of acquaintance is positively related to attributional confidence for both interpersonal and parasocial relationships. Rubin and McHugh (1987) suggest that both interpersonal and parasocial contact over time lead to a reduction of uncertainty about others, allowing for increased social and task attraction (cf. Rubin & Step, 2000). In short, we believe the analogies between interpersonal and parasocial interactions and interpersonal and parasocial relationships have sufficient support that it is worth exploring whether mediated forms of contact could influence attitudes about minority groups.

### **The Parasocial Contact Hypothesis**

We contend that parasocial contact can provide the sort of experience that can reduce prejudice, particularly if a majority group member has limited opportunity for interpersonal contact with minority group members. Perse and Rubin (1989) claim that viewers formulate impressions of televised characters to reduce uncertainty about social behavior, and that “*people*” constitutes a “construct domain that may be sufficiently permeable to include both interpersonal and television contexts” (p. 73). If we can learn from televised characters representing distinct social groups, then it is possible that parasocial contact could influence attitudes about such groups in a manner consistent with the influence of direct intergroup contact. Such a possibility is anticipated by Allport’s recognition of the importance of mass media in forming beliefs about minorities (1954, pp. 200–202), and by Rothbart and John (1985) inclusion of the media as sources of images that can instill stereotypical beliefs about minorities (p. 83).

The research on parasocial relationships suggest that the processes involved in positive intergroup contact as described by Pettigrew (1998) can be reproduced through mediated contact. One can learn about a minority group from mediated messages and representations, and if one has a positive experience, one’s behavior is altered in that one normally will seek out additional (parasocial) contact rather than avoid it. One can develop affective ties with persons known only through mediated communication, and, whether one reappraises one’s beliefs about one’s ingroup or not, the resulting parasocial relationships could encourage a change in prejudicial attitudes about the outgroups to which minority characters belong.

Previous research can be interpreted as providing support for the PCH. When direct contact is minimal, television can play an influential role in viewers’ attitudes about minority group members, and such influence may increase or decrease prejudice (Armstrong, Neuendorf, & Brentar, 1992; Fujioka, 1999; Tan, Fujioka, & Lucht, 1997). Support for the influence of parasocial contact was found in a survey of college student reactions to the popular television show, *Will & Grace* (Schiappa, Gregg, & Hewes, in press). First, there was a significant correlation between viewing frequency and measures of parasocial involvement, suggesting that repeated exposure to the show increased viewer involvement with the characters. Second, there was a negative



correlation between the level of prejudice toward gay men and viewing frequency and between the level of prejudice and parasocial involvement. Third, the negative correlation between level of prejudice and parasocial involvement was strongest with those students reporting few or no gay acquaintances, and was not significant for those with three or more gay friends. This last finding strongly suggests that, for those viewers who already had extensive interpersonal contact with gay people, exposure to *Will & Grace* was not associated with any lower levels of prejudice. Contact has done its job already, so to speak. But for those with little to no interpersonal contact with homosexuals, the association between parasocial interaction and lower levels of prejudice was quite marked. Such data strongly suggest that parasocial contact may function in an analogous manner to interpersonal contact.

In what follows, we offer three studies that explore and test the PCH. The studies are guided by two key questions: (1) Can parasocial contact by majority group members with minority group members lead to a decrease in prejudice? (2) Are the effects of parasocial contact moderated by previous interpersonal contact with minority group members?

### Study 1

The optimal conditions specified under the Contact Hypothesis require a certain amount of translation to a mass-mediated context. As noted earlier, participants must feel of equal status, share common goals, have sustained and non-superficial contact, and not be opposed by a salient authority (Allport, 1954; Williams, 1964). All of these factors potentially influence the dissonance that positive contact can produce. While sustained and non-superficial contact is obviously relevant to parasocial contact, it is not clear that such factors as feeling of equal status, sharing common goals, and opposition of a salient authority are particularly relevant to viewing television (with the exception of children viewing television with authority figures such as parents or teachers).

The question then becomes: What sort of parasocial contact with mass-mediated characters is necessary to influence attitudes toward minority groups? That is, what are the minimal conditions under which parasocial contact may influence prejudicial attitudes? Direct interpersonal contact has proven to be an effective way to reduce prejudice when majority group members are exposed repeatedly to diverse (typical and atypical), likable, explicit representatives of a minority group (Pettigrew, 1998; Simon, 1998). If the analogy between interpersonal and parasocial interaction is taken seriously, then it follows that parasocial contact has the potential to decrease prejudice when majority group viewers are exposed repeatedly to diverse, likable, and clearly identifiable representatives of a minority group. To determine whether a particular set of viewing experiences provides the requisite sort of exposure, several questions are relevant: Does the exposure provide enough information about minority characters for viewers to form distinct opinions about them? In particular, are viewers able to form judgments about how the characters act (uncertainty reduction), whether they find the characters interpersonally attractive, and have a sense of how similar or

dissimilar the characters are from themselves (perceived homophily)? Based on the analogy with the Contact Hypothesis, the argument is that without the ability to form such specific judgments about characters that represent a minority group, parasocial contact would not provide the sort of sustained and non-superficial contact required to influence attitudes toward minority groups. Furthermore, viewers need to be able to form distinct judgments about all central characters (both minority and majority group members), if we are to be confident that the parasocial contact with minority group characters is *relatively* non-superficial.

Exposure to minority group representatives must not only be sufficient for viewers to form discrete judgments about them, those judgments must be relatively positive. That is, if viewers decide that minority group representatives are socially unattractive, totally unlike them, unpredictable, unreliable, and so forth, then obviously prejudice toward the category of people the character represents is unlikely to decrease. As a minimal condition for parasocial contact to promote a change in attitudes, we would conjecture that the judgments made of minority group characters must be at least as positive as the judgments made of majority group characters. We would predict:

- H1: Exposure will result in discriminating judgments among central characters in terms of uncertainty reduction, perceived homophily, and social, task, and physical attraction; such exposure will result in judgments of individual minority group characters that are not consistently lower than judgments of individual majority group characters.

The literature in intergroup contact theory consistently stresses that majority group members must reach a certain level of “intimacy” or develop “affective ties” with minority group members for there to be sufficient dissonance to lead to attitude change. Put in mass communication terms, parasocial contact must be with a positive portrayal of a minority. Obviously, whether a particular portrayal is “positive” or “negative” is a matter of perception. We operationalize the idea of a positive response as one or more of the following parasocial responses: uncertainty reduction, social attraction, task attraction, physical attraction, or perceived homophily.

Viewers must consider minority group characters sufficiently likable or admirable to provide motivation for attitude change. Such motivation has been documented in the Contact Hypothesis literature as stemming from social attraction, or likeability, as well as from “respect” or task attraction (Kiesler & Goldberg, 1968) that results from working co-operatively to pursue common goals. Liking and task competence can be mutually reinforcing as long as a competent person seems “human” and fallible (Aronson, Willerman, & Floyd, 1966). Given that social attraction and positive social judgments often are correlated with physical attraction (Dion, Berscheid, & Walster, 1972), it is also possible that physical attraction could provide the needed dissonance with prejudicial attitudes to induce attitude change.

As noted previously, attitude change involves a reappraisal of how the majority group member understands the category to which minority group members belong. The similarity/difference relationships that demarcate the outgroup minority category from the majority member’s own ingroup are revised when prejudice is reduced



such that the common humanity of both groups is recognized, and perceived differences reduced (Pettigrew, 1998). Five studies reported in a meta-analysis of parasocial interaction literature by Schiappa, Allen, and Gregg (in press) note that parasocial contact is positively correlated with perceived homophily ( $r = .48, p < .05, N = 614$ ).

Given the theoretical rationale for parasocial contact leading to attitude change toward minority characters and the rationale for the importance of specific interpersonal responses, we would predict:

- H2: Exposure to positive portrayals of minority group members will lead to a decrease in prejudicial attitudes. Level of prejudice will be related negatively to one or more measures of positive parasocial response (i.e., levels of uncertainty reduction, perceived homophily, social, physical, and task attraction) to minority group characters.

While the literature concerning intergroup contact provides compelling evidence that interpersonal contact can reduce prejudice, there appears to be a ceiling effect. That is, while having interpersonal contact with more than one representative of a minority group provides added opportunity for gaining information about their group and can thus reduce prejudice more than contact with only one representative, it has not been demonstrated that a measurable linear relationship extends past having interpersonal contact with two or three minority group members (Herek & Capitanio, 1996). It follows, therefore, that the possible beneficial effects of parasocial contact with minority characters would be strongest with those viewers with the least direct interpersonal contact with the minority group, and have less or no effect for those with a great deal of interpersonal contact with that minority group. We would predict:

- H3: The more minority group acquaintances that majority group members report, the weaker the association will be between positive parasocial responses with minority group members and lower levels of prejudice.

## Method

### Stimuli

*Six Feet Under* is a critically acclaimed television series that averaged 5.7 million viewers for its first two seasons and earned six Emmy awards, two Golden Globes, and a Peabody award. *Six Feet Under* is described by HBO (2003) as providing a “darkly comic look at the Fishers, a dysfunctional family who own and operate an independent funeral home in Los Angeles. Patriarch Nathaniel Fisher is no longer living (except in the hearts and visions of his family). So his wife Ruth, sons Nate and David, and daughter Claire are left to cope with the routine and not-so-routine aspects of life in the grief-management business.”

During the first season of *Six Feet Under*, a prominent story line dealt with David Fisher coming to terms with his homosexuality and gradually coming out to his family, friends, and church (Bunn, 2002). Keith Charles is a gay, African-American police officer who described by HBO as “the love of David’s life.” As a member of the

Fisher family, David is a central character. Keith is a supporting character who appears in most of the first season's episodes and has been featured regularly on the *Six Feet Under* HBO website as a regular cast member. David and Keith are explicitly identified as gay, yet are quite different in terms of personality; Keith is an assertive police officer and "out," while David is a deferential funeral home director and, at least during the first season, keeps his homosexuality confidential. We would note that the characters and plot lines in *Six Feet Under* stand in contrast with *Will & Grace*, since the latter is a light comedy with arguably little "threat" to heterosexual norms posed by the main characters (Battles & Hilton-Morrow, 2002).

#### *Procedure*

Participants consisted of 174 (107 females, 65 males, 2 unspecified) college students between the ages of 18 and 36 ( $M = 21.76$ ,  $SD = 2.49$ ) enrolled in an undergraduate course titled "Television Studies: *Six Feet Under*" in the spring semester of 2003 at a major Midwestern university. The course description and syllabus emphasized that the course would use *Six Feet Under* as a common text for discussion in order to introduce students to various rhetorical and communication theories as they apply to television. The course met once a week for 3 hours for 15 weeks. On the first night of class, all students present completed one of two surveys. Seventy-four students (43 females, 28 males, 3 unspecified) were randomly assigned to a pre-test group to complete a survey that included standard demographic questions, an item assessing previous exposure to *Six Feet Under*, an item assessing prior exposure to *Will & Grace*, an item assessing exposure to *Queer as Folk*, and an instrument measuring Attitudes Toward Lesbians and Gay Men (ATLG). The remaining students completed a survey unrelated to this study about death attitudes. This second group (post-test only) did not complete the ATG instrument until after all episodes were viewed ( $n = 100$ ). The sample was split into two groups in order to allow us to test for instrument sensitization for those completing the pre-test.

Over a period of five weeks, students were shown ten episodes of the thirteen aired in the first season of *Six Feet Under*. Short clips were shown and a brief summary provided only for the three episodes not shown in full during class so that students could keep up with various plot narratives; the other ten episodes were shown in full. The average number of episodes viewed by participants was 10.4, as a number of students became sufficiently interested in the show to rent the episodes not fully shown in class. During the five weeks of viewing, there was *no* in-class discussion of the show. After attendance was taken each class meeting, one episode was shown followed by a 15-minute break, then a second episode was shown. No discussions were held concerning the shows during class until the experiment was concluded. The episodes of *Six Feet Under* were discussed throughout the remainder of the semester in the context of television research in general.

All participants completed a 200-item post-test after viewing ten episodes of the show *Six Feet Under*, consisting of basic demographic questions, ATLG, sexual conservatism, and six instruments measuring degrees of uncertainty reduction, social attractiveness, physical attractiveness, task attractiveness, perceived homophily,

and parasocial interaction for the six main characters. Items were reversed on half of the surveys administered to prevent biasing results from respondent fatigue and question order. An item asked how many gay acquaintances participants had (“I do not know any gay, lesbian, or bisexual people personally,” “I am acquainted with a few gay, lesbian, or bisexual people, but not as friends,” “I have one or two gay, lesbian, or bisexual friends or close co-workers,” “I have more than two gay, lesbian, or bisexual friends or close co-workers”).

Subsequent *t*-tests found no evidence of sensitization to the instruments for the group completing both the pre- and post-tests, as there were no significant differences ( $p < .40$ ) between the pre- and post-test group and the post-test-only group in scores on the ATLG (which was the only instrument appearing in both the pre-test and the post-test). Consequently, in what follows we do not differentiate between the two post-test groups, and instead treat them as one group.

### *Measures*

The post-viewing survey included questions specifically tailored to solicit judgments about six main characters from the first season. Four of the six are members of the Fisher family: Ruth, the mother of the family, sons Nate and David, and daughter Claire. The other two characters included in the survey were Keith Charles, described above, and Brenda Chenowith, Nate Fisher’s love interest in the first season.

All scales consisted of 7-point Likert-type items. Shortened versions of established instruments were used to keep the number of survey items manageable; in all cases, we selected the items factor analyses have indicated load the highest. The uncertainty reduction scale contained five items adapted from Kellerman and Reynolds (1990) that assess how well the participant feels he or she knows each individual character (e.g., “How well do you think you can predict X’s feelings and emotions?”), with answers ranging from “very well” to “not well at all.” A number of studies have documented the validity and reliability of the instrument (Rubin, Palmgreen, & Sypher, 1994). In our study, Cronbach’s  $\alpha$ s for the six characters ranged from a low of .87 (David and Ruth) to a high of .91 (Brenda and Nate).

Social, task, and physical attraction were assessed using the interpersonal attraction measures described by McCroskey and McCain (1974). A number of studies have demonstrated validity and reliability of the instrument (Rubin et al., 1994). Our social attraction scale was composed of four 7-point (“strongly agree” to “strongly disagree”) Likert scale items that examine how desirable social interaction with the character would be (e.g., “I think X could be a friend of mine”). Cronbach’s  $\alpha$ s ranged from a low of .83 (Ruth) to a high of .87 (Nate). The physical attraction scale was made up of four 7-point Likert scale items that explore how the participants feel about the character’s physical appeal (e.g., “X is very attractive physically”). Cronbach’s  $\alpha$ s ranged from a low of .81 (Ruth) to a high of .92 (Nate). The task attraction scale consisted of four 7-point Likert scale items examining how the participants feel about working with the character (e.g., “I have confidence in X’s ability to get the job done”). Cronbach’s  $\alpha$ s ranged from a low of .67 (David) to a high of .83 (Brenda).

The perceived homophily scale was adapted from that developed by McCroskey, Richmond, and Daly (1975). Validity and reliability has been illustrated by McCroskey et al. and others (Rubin et al., 1994). Our scale consisted of five 7-point Likert scale items that explore how similar or different the character is from the participant (“X perceives things like I do,” “X is similar to me,” “X and I share similar attitudes”). Cronbach’s  $\alpha$ s ranged from a low of .91 (Ruth) to a high of .96 (Claire).

The Attitude Toward Gay Men sub-scale is part of Herek’s (1984, 1988) Attitudes Towards Lesbians and Gay Men (ATLG) instrument. Convergent validity is supported by several studies conducted by Herek and colleagues showing that the ATG is consistently correlated with other theoretically-relevant constructs. Higher levels of prejudice correlate significantly with high religiosity, lack of contact with homosexuals, adherence to traditional sex-role attitudes, belief in a traditional family ideology, and high levels of dogmatism (Herek, 1987, 1988, 1994; Herek & Capitanio, 1996; Herek & Glunt, 1993). The ATG short form consists of five statements concerning gay men (such as “Homosexual behavior between two men is just plain wrong”). In Study 1, Cronbach’s  $\alpha$ s were similar to those found by Herek (pre-test  $\alpha = .81$ , post-test  $\alpha = .82$ ). The ATL sub-scale consists of five statements concerning lesbians, such as “Female homosexuality is a sin”). In Study 1, Cronbach’s  $\alpha$ s were similar to those found by Herek (pre-test  $\alpha = .86$ , post-test  $\alpha = .84$ ).

## Results

Data were analyzed using only surveys completed by students who reported that they had never seen an episode of *Six Feet Under* prior to the course, yielding a pre-test group ( $n = 56$ ) and a post-test group ( $n = 126$ ) with no prior exposure to the content of the series.

H1 anticipated that exposure to appropriate stimuli would result in viewers being able to make discriminating judgments among the central characters of *Six Feet Under* in terms of uncertainty reduction, perceived homophily, and social, task, and physical attraction. To test this hypothesis, a multivariate repeated-measure ANOVA test was conducted for the six characters across each of the five scales. There was a significant main effect across characters for all scales,  $F(6, 96) = 945.59, p < .001$ . Additionally, a repeated-measure, within-subjects ANOVA test was conducted for each scale (uncertainty reduction, perceived homophily, etc.), where the independent variable was character and each participant evaluated each character across all six scales. There was a significant main effect found with all scales, including uncertainty reduction,  $F(5, 116) = 52.34, p < .001$ ; social attraction,  $F(5, 114) = 54.19, p < .001$ ; task attraction,  $F(5, 111) = 88.52, p < .001$ ; physical attraction,  $F(5, 118) = 67.51, p < .001$ ; and perceived homophily,  $F(5, 116) = 43.39, p < .001$ .<sup>1</sup> It is clear, then, that participants formed distinct judgments about each character in terms of the dimensions assessed.

The literature on the Contact Hypothesis suggests that the potential to decrease prejudice improves with contact with noticeably different representatives of a minority group (Rothbart & John, 1985). Accordingly, a paired  $t$ -test was conducted with all

scales between the two gay characters, David and Keith, to assess the distinctness of participants' judgments about them. Significant differences were found on all measures (all  $p < .05$ ). It is clear that participants formed distinct judgments about each gay character in terms of the dimensions assessed.

H1 also anticipated that exposure to appropriate stimuli will result in judgments of individual minority group characters in terms of levels of uncertainty reduction, perceived homophily, and social, task, and physical attraction that are not consistently lower than judgments of individual majority group characters. To test this hypothesis with respect to participants' exposure to *Six Feet Under*, a  $t$ -test for dependent means compared the means of straight characters with the means of gay characters for each variable. There were no significant differences (no  $p < .15$ ) between groups with respect to uncertainty reduction, social attraction, physical attraction, or perceived homophily. The one scale where there was a significant difference was task attraction: Gay characters scored *more* task attractive ( $M = 14.1$ ,  $SD = 5.5$ ) than the straight characters ( $M = 26.3$ ,  $SD = 4.9$ ),  $t(115) = -19.56$ ,  $p < .001$ . In sum, parasocial contact with the main characters of *Six Feet Under* was of sufficient quantity and quality that viewers were able to form distinct and discrete positive judgments about the minority group characters.

H2 anticipated that exposure to the gay characters in *Six Feet Under* would lead to a decrease in prejudicial attitudes. The form of the ATG administered in this study was scored such that higher scores indicate *lower* levels of sexual prejudice. Using the pre-test ATG score as a test value ( $M = 19.11$ ,  $SD = 6.7$ ,  $n = 56$ ), we conducted a one sample  $t$ -test of the post-test scores ( $M = 21.43$ ,  $SD = 5.9$ ,  $SE = .52$ ,  $n = 126$ ) and found the difference significant,  $t(125) = 4.4$ ,  $p < .001$ , and in the predicted direction. By contrast, a similar comparison of pre-test ATL scores ( $M = 26.11$ ,  $SD = 7.1$ ,  $n = 55$ ) and post-test ATL scores ( $M = 26.85$ ,  $SD = 6.6$ ,  $n = 123$ ) found no significant difference ( $p = .21$ ).

H2 also anticipated that level of prejudice would be related negatively to one or more measure of positive parasocial response. Correlations between parasocial response measures (uncertainty reduction, perceived homophily, social, task, and physical attraction) and ATG scores were not significant for David's character (no  $p < .07$ ) with the exception of physical attraction, which was significantly correlated with ATG scores ( $r = -.29$ ,  $p < .001$ ). For Keith, there were significant correlations between ATG scores and social attraction ( $r = -.31$ ,  $p < .001$ ), physical attraction ( $r = -.41$ ,  $p < .001$ ), task attraction ( $r = -.18$ ,  $p < .05$ ), and perceived homophily ( $r = -.38$ ,  $p < .001$ ), but not uncertainty reduction ( $r = -.17$ ,  $p < .06$ ).

H3 predicted that the more gay acquaintances and friends the participants said they have, the weaker the association will be between parasocial contact with minority characters and lower levels of prejudice. Number of gay contacts correlated with ATG scores such that the more gay contacts a person reported, the lower the level of prejudice ( $r = .40$ ,  $p < .001$ ). Participants were divided into two groups, those with little to no gay contact ( $n = 50$ ) and high contact (one or more gay friends,  $n = 75$ ). To test H3 the correlations between the various parasocial response measures on one hand and ATG on the other were calculated for the high contact and low contact

groups. These pairs of correlations were done separately for ratings of David and Keith yielding a total of ten paired correlations. We predicted that these correlations would be greater for the low contact group than for the high contact group, employing a one-tailed test for differences in the magnitude of correlations (Cohen & Cohen, 1983). Of the ten differences in correlations only three (social, physical, and task attraction with ATG for David) were in the predicted direction. Of those, none of the differences achieved significance at the .05 level. The actual *p* values for those three hypotheses ranged from .33 to .70, thus failing to support H3 across all ten tests.

### Discussion

Support was found for H1: parasocial contact appears to have yielded the same sorts of judgments about televised characters as people make as a result of direct contact. Furthermore, the judgments made about the two gay characters, David and Keith, are comparable to those made about the straight characters.

Results were consistent with H2: the post-test measure of prejudice toward gay men (ATG) was lower than the pre-test mean after parasocial contact with the gay characters of *Six Feet Under*. The fact that the post-test measure of prejudice toward lesbians (ATL) was not significantly different than the pre-test implies that, if the lower ATG scores were a result of parasocial contact, the effects of PCH were specific to the category of gay men. Such a result is consistent with prior research indicating that positive attitudes toward lesbians do not consistently result in positive attitudes about gay men (Herek, 1988). Furthermore, the post-test levels of prejudice were correlated with four interpersonal measures for Keith and one for David, indicating the more positive the parasocial response, the more likely prejudice would be lower.

H3 was not confirmed. While ATG scores varied in the predicted direction based on the number of gay personal contacts, the association of parasocial response measures and lower levels of prejudice was not significantly different when parsed by subgroups. These results appear to conflict with Schiappa, Gregg, and Hewes's (in press) findings with respect to *Will & Grace*. A more sensitive and direct test of this hypothesis requires paired pre-test/post-test data to compare the *changes* in individual ATG scores with parasocial response measures (see Study 2 below).

The data from Study 1 offers general support for the Parasocial Contact Hypothesis. When parasocial contact is of sufficient quantity and quality to allow the sort of judgments to be made about mass mediated characters that people make with direct interpersonal contact, prejudicial attitudes may be reduced.

### Study 2

We conducted a second study to test the PCH for four reasons. First, *Queer Eye for the Straight Guy* provides an unusually rich stimulus. The show is a reality-based makeover show featuring five gay professionals assisting a heterosexual male, as the title suggests. Accordingly, it provides viewers with contact with five different men who are explicitly identified as gay. Increasing contact with a category or social group “enables one to make



finer and finer discriminations within the category”; the greater the “diversity and volume of contact,” the greater the potential of such contact to decrease prejudice (Taylor, 1981, p. 102). Second, because the show is an example of “reality TV,” it allows us to examine the parasocial responses to another genre of television programming.

Third, it is important to employ a design that would strengthen the ability to draw causal inferences and address the potential confounds of history and pre-test sensitization; specifically, we employ the Solomon (1949) four-group design for Study 2. Fourth, we wished to pursue the specific contention that reduction of prejudice through intergroup contact is best explained as the reconceptualization of group categories.

Rothbart and John (1985) argue that contact facilitates the cognitive process by which attributes of individual category members modify perceived attributes of the category as a whole. As Taylor (1981) notes, “a stereotype is usually characterized as a set of trait adjectives that describes a social group” (p. 102). As “trait adjectives” (category-attribute beliefs) are modified, the similarities and differences used to categorize people change, as do our attitudes toward such categories. In addition to testing H2 (that prejudice would be decreased and would be associated with measures of positive parasocial responses) and H3 (the more gay acquaintances and friends the participants said they have, the weaker the association will be between parasocial contact with minority characters and lower levels of prejudice), we also anticipated:

H4: Parasocial contact with minority group members will result in changes in category-attribute beliefs about the minority group as a whole.

H5: Changes in levels of prejudice about a minority group will be associated with changes in category-attribute beliefs about a minority group.

## Method

### Stimuli

*Queer Eye for the Straight Guy* debuted in 2003 and became the “hottest show of the summer” (Giltz, 2003). After some initial reshuffling of cast members, the show features a team of gay makeover advisors: Jai Rodriguez on culture, Thom Filicia on interior design, Carson Kressley on fashion, Kyan Douglas on grooming, and Ted Allen on food and wine. In each episode, the self-described “Fab Five” descend on the living quarters of a heterosexual male and attempt to change his lifestyle, appearance, and living quarters for the better. In this study, the episodes shown were selected on the basis of convenience, as we relied on episodes available on DVD and on the sampling of shows provided by Scout Productions, the company that produces *Queer Eye*.

### Procedures

Participants consisted of 160 students (88 female, 66 male, 6 missing or “other”) between the ages of 18 and 57 ( $M = 23.7$ ,  $SD = 5.7$ ) recruited from the undergraduate population during summer session 2004 at a major Midwestern university. Participants were randomly assigned to one of four groups: pre-test/post-test control,

pre-test/post-test treatment, post-test-only control, and post-test-only treatment. Participants assigned to the two pre-test/post-test groups completed the pre-test at least two weeks prior to the actual experiment and were given a room number, date, and time to return for a “television viewing session.” The pre-test consisted of standard demographic items, a measure of number of gay acquaintances (described in Study 1), the ATLG instrument, and three 30-item “Personality Inventories” (described below).

At the viewing sessions, participants assigned to a control group were first administered the study post-test including the ATLG and Personality Inventories. They were then shown television programming and completed an additional survey unrelated to this study. Participants assigned to the treatment groups were shown three episodes of *Queer Eye* for a total of 135 minutes of program content. After viewing the episodes, the participants then completed the post-test including the ATLG, Personality Inventories, and various parasocial response measures.

#### *Measures*

The ATLG instrument is described above in Study 1. While in the earlier study the short form of the ATLG was used, in this experiment the full twenty-item scale was used, which includes ten items about gay men (ATG) and ten items about lesbian women (ATL). Across the six measurements (two pre-test, four post-test), Cronbach’s  $\alpha$ s for the ten-item ATG instrument ranged from .88 to .93, and for the ten-item ATL instrument ranged from .90 to .93.

The Personality Inventories were constructed using a series of “trait adjectives” (Taylor, 1981) as category-attribute statements for three social groups: heterosexual men, homosexual men, and heterosexual women. The items were drawn from the short form version of Bem’s Sex Role Inventory (1974, 2004) and were worded as category-attribute statements, such as “In general, male heterosexuals are affectionate.” Participants responded to each item using a 7-point Likert scale responses (strongly agree to strongly disagree). For each of the three categories, ten statements used trait adjectives categorized by Bem as stereotypically masculine (“aggressive,” “assertive,” etc.), ten as feminine (“affectionate,” “compassionate,” etc.), and ten as undifferentiated (“conscientious,” “reliable,” etc.). The degree of change in beliefs was measured by comparing pre-test and post-test scores on each item of the Personality Inventory for Male Homosexuals and then summing the absolute values of the different scores. No change in beliefs = 0, whereas the maximum possible change in beliefs = 180. Obviously, this test can only be applied to the two pre-test/post-test groups.

The post-test also included a series of items to assess parasocial responses to the show. It was judged impractical to ask items about each of the five main characters separately, so instead a series of items assessing social attractiveness, physical attractiveness, task attractiveness, and perceived homophily were posited about the group as a whole, such as “The Fab Five perceive things like I do.” Cronbach’s  $\alpha$ s for these measures were as follows: social attraction (.85), physical attraction (.76), task attraction (.74), and perceived homophily (.93).

### Results

The use of the Solomon (1949) four-group design allowed for comparisons across two pre-test/post-test groups as well as two post-test-only groups.

H2 anticipated that exposure to the gay characters in *Queer Eye* would lead to a decrease in prejudicial attitudes. A comparison of pre-test ATG scores between the two pre-test/post-test groups showed no significant difference ( $p = .72$ ), indicating that randomization was successful. The form of the ATG administered in this study was scored such that higher scores indicate lower levels of sexual prejudice. For the pre-test/post-test treatment group, post-test scores showed an increase in the ATG score ( $M = 55.5$ ,  $SD = 11.9$ ), indicating less prejudice toward gay men, compared to the pre-test scores ( $M = 50.2$ ,  $SD = 13.6$ ) that was statistically significant,  $t(39) = 6.95$ ,  $p < .001$ . A comparison of pre-test and post-test ATL scores for the same group found no significant change ( $p = .67$ ). For the pre-test/post-test control group, pre-test and post-test ATG scores were not significantly different ( $p = .29$ ). A comparison of the two post-test-only groups indicated that the treatment group's ATG scores ( $M = 55.9$ ,  $SD = 13.3$ ) were higher than the control group's ( $M = 48.7$ ,  $SD = 13.8$ ), indicating less prejudice, and the difference was significant,  $t(78) = 2.4$ ,  $p < .05$ . A comparison of the post-test ATG scores between the pre-test/post-test treatment group and post-test-only treatment group showed no significant difference. Similarly, there was no significant difference between the post-test ATG scores for pre-test/post-test control group and post-test-only control group (no  $p < .31$ ).

H2 also anticipated that level of prejudice would be related negatively to levels of perceived homophily, or social, physical, or task attraction. The most direct test of this hypothesis is to examine the correlation between *gains* in ATG scores (indicating a reduction in prejudice) for the pre-test/post-test treatment group and parasocial response measures. Three measures correlated significantly with ATG gain scores: social attraction ( $r = -.29$ ,  $p < .05$ ), task attraction ( $r = -.31$ ,  $p < .05$ ), and perceived homophily ( $r = -.33$ ,  $p < .05$ ). Furthermore, the post-test ATG scores for the two treatment groups correlated significantly with social attraction ( $r = -.51$ ,  $p < .001$ ), physical attraction ( $r = -.42$ ,  $p < .001$ ), and perceived homophily ( $r = -.54$ ,  $p < .001$ ), but not task attraction ( $p = .27$ ).

H3 predicted that the more gay acquaintances and friends the participants said they have, the weaker the association will be between televised contact with minority characters and lower levels of prejudice. The most direct test of this hypothesis is to examine the correlation between changes in ATG scores for the pre-test/post-test treatment group and number of gay contacts. As predicted, the number of gay contacts correlated with ATG change scores such that the more gay interpersonal contacts a person reported, the smaller the change in ATG score ( $r = -.26$ ,  $p < .05$ ). Grouping together participants who indicated no close gay contacts and those with one or more close gay contacts, the ATG change scores for those with low contact ( $M = 6.58$ ,  $SD = 5.3$ ) was higher than those with high contact ( $M = 4.05$ ,  $SD = 4.2$ ) and the difference was significant,  $t(37) = 1.65$ ,  $p = .05$ , one-tailed.

H4 states that parasocial contact with minority group members will result in changes in category-attribute beliefs about the minority group as a whole. As expected, the treatment group showed a greater degree of changed beliefs ( $M = 30.5$ ,  $SD = 16.2$ ) than did the control group ( $M = 8.42$ ,  $SD = 6.9$ ) that was statistically significant,  $t(78) = 7.9$ ,  $p < .001$ . We also summed the absolute values of the different scores for all items in the Personality Inventory for Male Heterosexuals and found no significant difference between the treatment and control groups ( $p = .56$ ).

H5 predicts that changes in levels of prejudice about a minority group will be associated with changes in category-attribute beliefs about a minority group. As anticipated, for the pre-test/post-test treatment group, changes in ATG score were significantly correlated with change in beliefs about gay men ( $r = .38$ ,  $p < .05$ ).

### Study 3

Given that the PCH received support in the first two studies, a third study was undertaken to test the generalizability of the PCH to another stigmatized minority group. Schiappa, Gregg, and Lang (2004) report that qualitative and quantitative data gathered in a class on "Masculinity and Film" indicates that students' attitudes about male transvestites changed in a more favorable direction after watching comedian Eddie Izzard's *Dress to Kill*. Accordingly, in this study we used an experimental design to test the PCH with respect to the category of male transvestite. Specifically, we tested H2, that prejudice would be decreased and would be associated with measures of positive parasocial responses; H4, that parasocial contact with minority group members will result in changes in category-attribute beliefs about the minority group as a whole; and H5, that changes in levels of prejudice about a minority group will be associated with changes in category-attribute beliefs about a minority group. We anticipated that too few participants would know male transvestites to test H3, regarding prior interpersonal contact.

#### Method

##### Stimuli

*Dress to Kill* (2002) is an Emmy Award-winning comedy special featuring stand-up comedian and transvestite Eddie Izzard. In his routine, performed while dressed in women's clothing, Izzard notes that transvestites are heterosexual (as opposed to gay drag queens) and suggests there are all sorts of transvestites, ranging from "Executive Transvestites" to "Weirdo Transvestites." Most of the 80-minute comedy routine is not about transvestitism, however, as Izzard's topics range from European history to the growing pains of adolescents.

##### Procedure

Participants consisted of sixty-one (36 female, 25 males) college students between the ages of 18 and 38 ( $M = 23.3$ ,  $SD = 4.34$ ) recruited from the undergraduate population during summer session of 2004 at a major Midwestern university. Participants were randomly assigned to a treatment or control group. All participants

completed a pre-test that consisted of basic demographic questions, Herek's ATLG instrument, five category-attribute statements about male transvestites, and an Attitudes Toward Transvestites (ATT) instrument. Control group members were given a lecture on public speaking and then completed a post-test consisting of the five category-attribute statements about male transvestites and the ATT instrument. Treatment group members watched Eddie Izzard's *Dress to Kill* and then completed a post-test consisting of instruments measuring uncertainty reduction, social attractiveness, physical attractiveness, task attractiveness, perceived homophily, and ATT. All participants were also asked if they knew anyone who was a male transvestite.

### Measures

The instruments for uncertainty reduction, social, task and physical attraction, and perceived homophily are described above in Study 1. The items for these instruments were worded to be statements specifically about Eddie Izzard, such as "I think Eddie Izzard could be a friend of mine." Cronbach's  $\alpha$ s for the measures were as follows: uncertainty reduction (.82), social attraction (.89), physical attraction (.92), task attraction (.84), and perceived homophily (.91). The category-attribute statements prompted by Izzard's routine included: "'Transvestites' and 'drag queens' are pretty much the same thing," "Other than what they wear, transvestites are generally like everyone else," "Most transvestites are heterosexual." The degree of change in beliefs was measured by comparing pre-test and post-test scores on each category-attribute item and then summing the absolute values of the different scores. No change in category-attribute beliefs = 0, while the maximum possible change in beliefs = 30.

The ATT scale consisted of 10 evaluative items that were adapted from the wording of Herek's ATLG instrument, such as "The idea of men wearing women's clothing is ridiculous to me," "Transvestites are sick," and "Men wearing women's clothing is just plain wrong." Across the four measurements of the ATT (pre-test/post-test for two groups), Cronbach's  $\alpha$ s varied from .89 to .97.

### Results

H2 predicted that exposure to positive portrayals of minority group members will lead to a decrease in prejudicial attitudes. For the treatment group, post-test scores showed an increase in the ATT score ( $M = 47.5$ ,  $SD = 15.7$ ), indicating *less* prejudice toward male transvestites, compared to the pre-test scores ( $M = 41.5$ ,  $SD = 17.5$ ) that was statistically significant,  $t(30) = 6.0$ ,  $p < .001$ . The pre-test ( $M = 43.3$ ,  $SD = 16.2$ ) and post-test ( $M = 42.9$ ,  $SD = 16.1$ ) scores for the control group were not significantly different ( $p = .30$ ). A  $t$ -test comparing pre-test scores for the control and treatment groups was not significantly different ( $p = .68$ ).

H2 also predicted that the level of prejudice will be related to levels of uncertainty reduction, or perceived homophily, or social, physical, or task attraction for minority group characters. Gain in ATT scores, indicating the degree of reduction in prejudice, did not correlate significantly with any measures (no  $p < .17$ ). Post-test ATT scores

correlated significantly with social attraction ( $r = -.64, p < .001$ ), physical attraction ( $r = -.74, p < .001$ ), and perceived homophily ( $r = -.71, p < .001$ ), but not uncertainty reduction or task attraction (no  $p < .21$ ).

H4 states that parasocial contact with minority group members will result in changes in category-attribute beliefs about the minority group as a whole. As expected, the treatment group showed a greater degree of changed beliefs ( $M = 7.7, SD = 5.5$ ) than did the control group ( $M = 1.0, SD = 1.3$ ) and the difference was statistically significant,  $t(58) = 6.4, p < .001$ .

H5 predicts that changes in levels of prejudice about a minority group will be associated with changes in category-attribute beliefs about a minority group. As anticipated, changes in ATT score were significantly correlated with change in beliefs about transvestites ( $r = .44, p < .05$ ).

### *Discussion*

The three hypotheses tested in this study were generally supported. Parasocial contact with Eddie Izzard led to a decrease in reported prejudice, and that decrease was associated with specific belief changes. Specific parasocial response measures were associated with higher post-test ATT scores, but were not associated with the amount of change.

### **Conclusion**

Cumulatively, the studies reported here provide support for the PCH for two minority groups and across three television genres. The PCH has significant theoretical and social implications. For decades, mass communication researchers have insisted that mass media and television, in particular, can influence viewers' beliefs about the world. Research on parasocial contact and the relationships that such contact produces is significant because it suggests that one form of learning is about individuals and categories of people.

To be sure, there are limitations to the inferences that can be drawn from the three studies reported here. First, the participants were all college students. In Study 1, because students voluntarily enrolled in the course, they are not a random sample and cannot be assumed to be representative even of all college students. This process effectively mirrors the practical reality of television behavior, since virtually all television viewing is a matter of self-selection. The practical constraints of using a course made it impossible to have a randomly assigned control group. The absence of a control group, however, means that factors apart from the experiment could have influenced student attitudes during the weeks involved.

Second, only further research can establish whether parasocial contact with other minority groups would have the same results that were found in these studies with respect to gay men and male transvestites. Future research should not only test the PCH with respect to other minority groups, but should also seek to understand the quantity and qualities of mass mediated content required to induce attitude change. For example, how many episodes of programming are necessary to influence attitudes?



Is comedic, dramatic, or reality programming more likely to induce change? What sort of interactions between majority and minority characters within the programming are most productive of attitude change? Additional research also should investigate how parasocial responses change over time with continued contact and whether or not attitude change, such as what we have documented, persists over time.

While our tests of underlying mechanisms were generally supported, it should be stressed that it is unlikely that there is a single aspect of parasocial contact that can be identified as causally related to attitude change. As our review of the literature on the Contact Hypothesis indicated, dissonance and attitude change results from a combination of factors, including new information about a minority group and a sense of trust, respect, or attraction with representatives of a minority group. In Study 1, we found associations between lower prejudice levels and four parasocial response measures with respect to one minority character, but only one such association for the other character. In Study 2, attitude change was correlated with social attraction, task attraction, and perceived homophily, but not physical attraction. In Study 3, three parasocial response measures were associated with higher post-test ATT scores, but none were significantly correlated with the amount of change. Contrary to our expectations, none of the three studies found an association between attitude change and uncertainty reduction. While we did not test for it, we also suspect the positive responses to gay characters by majority group representatives in the programs also contributed to favorable parasocial responses by our participants, as social comparison theory would suggest (Festinger, 1954; Wood, 1989). Further research will allow greater elaboration and specification of the most important elements of parasocial contact for inducing attitude change.

As Allport puts it, “a differentiated category is the opposite of a stereotype” (1954, p. 173). If televised or otherwise mass-mediated portrayals of minority group characters can provide parasocial contact that facilitates the sort of differentiation that interpersonal contact between majority and minority group members has been documented as having, we have another reason to take the power of mass media’s influence on attitudes seriously. The PCH should be taken seriously by social psychologists interested in intergroup contact theory as well as mass-communication researchers interested in prosocial uses of mass media.

## Note

- [1] In Study 1, reports of degrees of freedom vary due to missing items, since even one unanswered item for one scale on one character would reduce the  $n$  for a given test by one.

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