Interpersonal Behavior, Perception, and Affect in Status-Discrepant Dyads: Social Interaction of Gay and Heterosexual Men

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Social stigma theory guided this study of social interaction in status-discrepant dyads. Interpersonal trait judgments were characterized by out-group covariation bias at the individual and dyadic levels. Men used shared stereotypes and idiosyncratic generalizations regarding characteristics of out-group members when judging their traits, and this was most pronounced in heterosexual men's judgments of gays. Heterosexual men were accurately aware of how gay men judged their traits, whereas gay men made inaccurate predictions. Verbal and nonverbal behaviors of heterosexual men were consistent with their feelings about the social interaction, whereas public displays and private experience were discrepant among gay men. Methodological and statistical implications for research on social interaction in status-discrepant dyads and estimation of out-group covariation bias are considered.

Gay men are a stigmatized group that confronts negative attitudes and discrimination (Herek, 1989). Male–male sexual behavior remains illegal in some parts of America (Bowers v. Hardwick, 1986), and the concept of gay marriage elicits strong emotional responses. When the HIV–AIDS epidemic appeared, the notion of “gay disease” emerged (Herek & Glunt, 1988). In fact, gay men have been killed because of their sexual orientation, leading to calls for hate crime legislation (Herek, 1989). Because of their marginalized and devalued status, the social interaction of gay men and heterosexual men offers the opportunity to study the behavioral, perceptual, and affective processes that occur when stigmatized and nonstigmatized persons meet face to face.

The responses of both members of the status-discrepant dyad were measured, and this is an important extension of the work on intergroup contact. Often, the focus has been on the nonstigmatized individual; the stigmatized partner was treated primarily as the stimulus affecting the response of the higher status participant. This one-sided focus is common (see a discussion by Devine, Evett, & Vasquez-Suson, 1996), although exceptions do exist (e.g., Deaux & Major, 1987; Frable, Blackstone, & Scherbaum, 1990; Ickes, 1984). To study reciprocal social interaction of gay and heterosexual men, we used the asymmetric block design. We also used a statistical model that treated each member of the dyad as both an actor (or perceiver) and a partner (or target). Consequently, many facets of social behavior and perception that are not estimable with standard designs and analyses became the focus of this study.

This research is theoretically and practically important because, as Crocker, Major, and Steele (1998) indicated,

One of the most interesting, and least understood or researched, areas related to social stigma concerns the dynamics of interactions between stigmatized and nonstigmatized individuals. As the United States and many other countries become increasingly multicultural, as many institutions previously dominated by White males open their doors to women and minorities, and as laws protecting the rights of individuals to have access to educational and occupational opportunities regardless of race, gender, religion, disability, and in some cases sexual orientation are enacted and enforced, interactions between stigmatized and nonstigmatized individuals have become, and will continue to become more common. (p. 538)

Social Stigma and Interpersonal Processes

Social stigma theory (Crocker et al., 1998; Steele, 1997; Steele & Aronson, 1995) seeks to explain the impact of negative social stereotypes on the behavior of devalued (i.e., low status) and valued (i.e., high
status) persons. This theory builds on Goffman’s (1963) analysis of the ancient practice of marking a deviant person with a stigma so that others could readily identify the “tainted” and respond with socially sanctioned disdain and disgust. An individual marked by stigma is relegated to a social status beneath that of nonstigmatized persons (Jones et al., 1984). The stigmatized are less worthy, and their status profoundly impacts the responses of both the unmarked and the marked in dyadic interaction.

Situational Effects on the Dyadic Interaction of Stigmatized and Nonstigmatized Persons

In unstructured situations, largely devoid of role prescriptions or explicit norms, individuals rely on well-developed cognitive representations of stigmatized and nonstigmatized groups as a guide for behavior (Snyder & Ickes, 1985). In structured situations, behavior is guided by environmental cues, social roles, or behavioral scripts, and cognitive representations of categories have less impact on behavior. Consequently, this research was designed to be unstructured so that the interaction partner would be the most salient feature of the situation and so that well-established attitudes would impact behavior.

The Nonstigmatized Member of the Dyad

Members of one social category may experience the perceptual field as being engulfed by a salient feature of a member of another social category. For example, a person of European ancestry interacting with a person of African ancestry may find that distinctive physical features, such as skin color, engulf the perceptual field. An invisible feature (e.g., sexual orientation) may be equally salient and, as a result, may cause one to respond stereotypically.

The link between social status and perceptual processes has been considered by Fiske (1993), who developed a model of the effect of power (a consequence of having high status) on stereotyping that places attention in a key mediating role. She suggested that because high-status persons affect outcomes of low-status persons, the latter pay more attention to the former in social interaction in an attempt to control and predict their outcomes. High-status persons need not attend as vigilantly to low-status partners because reinforcement is often not contingent on the reaction of the low-status member of the dyad. Fiske’s model predicts more stereotyping (i.e., category-based generalization) of low-status members by high-status members. Nonstigmatized persons should be less mindful of their interaction partners and should pay less attention to “different elements in an environment” and should engage the other with “minimal awareness” of the other’s thoughts and feelings (Frable et al., 1990, p. 141).

The Stigmatized Member of the Dyad

When the probability of membership in a social category is low (Frable et al., 1990) and a set of negative cognitive generalizations for members of the category are widely shared (D’Andrade, 1984), stigma is the consequence (Goffman, 1963). In a dyad, both the stigmatized and the nonstigmatized members are aware of negative cultural stereotypes and the low-status member faces a psychologically demanding task. Indeed, the cognitive demands on a marginalized person are much greater than those faced by a person of higher status. Is the lack of responsiveness by a health care provider an expression of prejudice or preoccupation with a task at hand? Such a dilemma shows that the marginalized person in dyadic interaction with a higher status partner must process considerably more information. Frable et al. (1990) demonstrated that in unstructured dyadic interaction “marginality engendered mindfulness” and that marginalized persons considered the situation from the perspective of the other, paid closer attention to environmental features, and recalled more of them when compared with higher status persons.

The stigmatized member of a dyad may strive to know whether a social partner is prejudiced to determine whether the interaction is benign or threatening. In fact, low-status persons manifest interpersonal sensitivity because high-status members are actually more expressive (Snodgrass, 1992; Snodgrass, Hecht, & Ploutz-Snyder, 1998). However, if the low-status member of a dyad is attentive (Fiske, 1993) and mindful (Frable et al., 1990) but the high-status member is nonexpressive, then the low-status member’s awareness of the thoughts and feelings of the high-status partner should be diminished.

An inability to detect the thoughts and feelings of another may be particularly threatening for a stigmatized person (Crocker et al., 1998). A general principle derived from stereotype threat theory (Steele, 1997) states that “where bad stereotypes about . . . groups apply, members of these groups can fear being reduced to that stereotype. And for those who identify with the domain to which the stereotype is relevant, this predicament can be self-threatening” (p. 614). Gay men are considered by the broader culture to be “pedophiles” and less than “real men.” When a
gay man interacts with a heterosexual man, there is likely a concern by the former that one’s core sense of identity is ignored. The psychological consequences of being reduced to a stereotype include emotional reactions that impair task performance (Steele & Aronson, 1995) and disidentification with the context in which the stereotype is most relevant. However, disengagement from the broader society is not a viable option for gay men. Consequently, a strategy of compensation may be used to counteract or disprove negative generalizations about one’s category (Crocker et al., 1998).

**Stigma Consciousness and Behavior**

Pinel (1999) hypothesized that members of stigmatized groups vary in “the extent to which they expect to be stereotyped” (p. 115) and termed this construct *stigma consciousness*. Pinel reported that gay men and lesbians who were low in stigma consciousness were more likely to differentiate between discrimination directed at their group relative to discrimination directed at them personally, whereas those scoring high on stigma consciousness did not make this differentiation. What are the implications for social behavior if one is high on stigma consciousness? A stigmatized person who anticipates stereotyping by a high-status partner is expected to engage in socially desirable self-presentation to create a positive impression (Crocker et al., 1998).

Methodological and Statistical Approaches for Research on Status-Discrepant Dyads

**Single and Multiple Interaction Research Designs**

Most research on dyads uses the single interaction design, in which a person is in one and only one dyad. An infrequently used alternative is the multiple interaction design, in which multiple dyads are formed so that a member of one category interacts with multiple members of another category (Malloy & Albright, 2001). As a result, the responses of an individual to multiple members of another category and multiple responses to the individual by members of another category are available. We used a multiple interaction design, termed the asymmetric block, which is particularly useful for the study of status-discrepant dyads. In this study, groups of 4 persons composed of 2 gay men and 2 heterosexual men were formed randomly, and each person interacted with 2 members of the other category. For example, Gay Man 1 (G1) interacted in separate dyadic interactions with Heterosexual Man 1 (H1) and Heterosexual Man 2 (H2), and G1’s behavior during each interaction was recorded. Likewise, the behaviors of H1 and H2 while interacting with G1 were also recorded. This design permits theoretically interesting analytic possibilities that are precluded in a single interaction design.

**Social Relations Modeling of Dyadic Behavior**

Consider the social interaction of two men (i and j) and assume that i is gay and that j is heterosexual. Consider first i’s response to j on some dimension X. One can estimate person i’s stable social behavior across interactions with j (and other members of j’s category) and is called i’s *actor effect*. One can also estimate j’s effect on i’s behavior (and other members of i’s category), and this is called j’s *partner effect* on i. These effects are at the individual level of analysis and represent generalized consistent responses of individuals. An actor effect is consistency of behavior while interacting with multiple partners, and a partner effect is the consistency of multiple partners’ responses to the individual. It is important to note that perception and affect may be studied similarly, although the nomenclature *perceiver* and *target* are used in lieu of actor and partner, respectively.

One may also estimate effects that are dyadic, or specific to unique dyadic combinations of persons, after controlling for perceiver (or actor) and target (or partner) effects. Of particular interest in this research are intradividual dyadic processes that are concerned with the relationship of a person’s unique judgments of another on multiple personality factors. For example, if i judges j uniquely positively or negatively on one personality factor, does i judge j uniquely positively or negatively on another personality factor? Whereas perceiver and target effects are generalized patterns in perceptions across persons, intradividual uniqueness represents dyadic patterns in perceptions within persons across traits.

Theoretically, the interaction of i and j produces i’s social response to j (\(X_{ij}\)) and j’s social response to i (\(X_{ji}\)) on variable X. Equations 1 and 2, called the social relations model (Kenny, 1994), are specifications of the generalized and dyadic components. Formally stated:

\[
X_{ij} = \mu + \alpha_i + \beta_j + \gamma_{ij} + \epsilon_{ij}, \tag{1}
\]

and

\[
X_{ji} = \mu + \alpha_j + \beta_i + \gamma_{ji} + \epsilon_{ji}, \tag{2}
\]
where $\mu_i$ is the average level of social behavior across interactions, $\alpha_i$ and $\alpha_j$ are actor (or perceiver) effects for $i$ (a gay man) and $j$ (a heterosexual man), $\beta_i$ and $\beta_j$ are partner (or target) effects for $i$ and $j$, $\gamma_{ij}$ and $\gamma_{ji}$ are dyadic uniqueness effects for $i$ and $j$, and $\epsilon_{ij}$ and $\epsilon_{ji}$ are error components in each score.

**Phenomena Estimable Using a Social Relations Analysis**

Respectively, the perceivers and target effects or the actor and partner effects may be used to quantify theoretically interesting perceptual (Kenny, 1994) and behavioral (Kenny, Mohr, & Levesque, 2001) phenomena. For example, consider interpersonal perceptions on a personality dimension. The perceivers effect quantifies the person’s tendency to judge multiple partners similarly on a dimension, although they in fact vary. This is an eye of the beholder effect. The target effect quantifies agreement in multiple judges’ ratings of a common target (Kenny, Albright, Malloy, & Kashy, 1994). In the asymmetric block design, actor effects pertain to consistency of behavior across interactions with members of another category, and partner effects pertain to the consistency of responses elicited by the person from members of the other category.

The uniqueness effect quantifies responses one person makes to another after the generalization of individual effects have been controlled. For example, one can assess the relationship of $i$’s unique judgment of $j$ on a set of personality factors. We were particularly interested in correlating uniqueness effects in judgments of the out-group across a set of personality factors at the dyadic level, as well as at the individual or generalized level. These correlations provide a new approach to estimating out-group covariation bias (Linville, Fischer, & Yoon, 1996) at the two levels of analysis, using specific components of scores rather than undecomposed scores.

One may also measure $j$’s prediction of $i$’s judgment of $j$ (as well as $i$’s prediction of $j$’s judgment of $i$), and this is termed metaperception. Meta-accuracy is achieved when metaperceptions are related to interpersonal perceptions, and research shows that people have the capacity for accurate metaperception for trait judgments and affect (Kenny, 1994). In the present context, these data allowed us to determine whether the members of one category knew accurately how the members of the other category judged them during a social interaction.

Actor and partner effects for different variables may be used to estimate phenomena such as reciprocality between persons (i.e., generalized interpersonal reciprocity). For example, if the actor effects in verbal behavior of gay men (e.g., amount of talking) and the target effects for perceived liking of gay men by heterosexual men are correlated, then the resulting estimate can answer the question of whether verbally responsive gay men are liked more or less by their heterosexual interaction partners.

The multiple interactions design, coupled with a social relations analysis, also provides a general method for personality research (Malloy & Kenny, 1986). Of most interest in this study was the association of an individual-difference measure and the individual-level components of interpersonal perceptions estimated by the social relations analysis. Specifically, Pinel’s (1999) research on stigma consciousness suggests that members of a devalued social category vary in the extent to which they expect to experience prejudice. A low-status person who is conscious of stigma may behave in a fashion that increases the likelihood of positive evaluations from the high-status partner (Ickes, 1984; Kleck, 1968; Kleck, Ono, & Hastorf, 1966). A social relations analysis provides a very precise estimate of these associations by correlating a person’s score on an individual-difference measure with their target effect (i.e., consensual judgments of the individual by others) and their perceivers effect (i.e., consistency in the individual’s judgments of multiple partners). As Malloy and Kenny (1986) showed, the precision is attained because individual-difference measures are correlated with components of perception scores that index very specific phenomena rather than with scores containing a mix of components.

**Hypotheses**

**Differentiation of a Social Partner’s Characteristics**

Low-status persons are more attentive (Fiske, 1993) and process more information about a higher status partner (Frable et al., 1990). This behavior derives, in part, from awareness that the other may hold a negative view of the category to which one belongs (Pinel, 1999) and that the partner may be seeking information to confirm that view (Steele, 1997). Conversely, the high-status member of the dyad may be expected to be more expressive (Snodgrass et al., 1998; Eagly, 1987), less attentive (Fiske, 1993), and less mindful of the other while interacting with a low-status partner (Frable et al., 1990). Furthermore, when members of one group have less familiarity
with members of another group, there is a tendency to “perceive greater covariation among features of out-group members” (Linville et al., 1996, p. 423) and is termed out-group covariation bias. We assumed that heterosexual men have less contact and familiarity with gay men than vice versa because of their relative distributions in the general population. We anticipated that heterosexual men’s interpersonal perceptions of gay men across the Big Five personality factors (McCrae & Costa, 1997) would be less differentiated than gay men’s judgments of heterosexual men. Specifically, we expected that partner effects in heterosexual men’s trait judgments of gay men would be more highly intercorrelated than would the partner effects in gay men’s judgments of heterosexual men, reflecting an out-group covariation bias (Hypothesis 1A). Conversely, we anticipated that the intercorrelations of heterosexual men’s perceiver effects on traits when judging gay men would be more highly intercorrelated than equivalent estimates for gay men judging heterosexual men’s traits (Hypothesis 1B). When a high-status person judges a low-status person, there is insufficient discriminant validity in the judgments on different trait dimensions resulting in out-group covariation bias.

We also anticipated evidence of out-group covariation bias at the dyadic level. Specifically, we expected that intradimensional uniqueness effects (i.e., the y’s) in heterosexual men’s judgments of gay men on the Big Five factors would be intercorrelated because the failure to differentiate characteristics of low-status men should occur both generally and within specific dyads (Hypothesis 1C).

**Metaperception: Accuracy and Inaccuracy**

Dyad members made trait judgments following social interaction, and they also predicted how their social interaction partner judged them. These predictions are termed metaperceptions. Accuracy is achieved when predictions and judgments by one’s partner are similar. According to Kenny (1994), people assume that others who observe their behavior interpret it as they do themselves and, when this is the case, accuracy results.

However, in a status-discrepant dyad, the process of metaperception may operate differently. Heterosexual men have negative attitudes toward gay men (Herek, 1994), and this is well known by gay men. Because of this awareness of the base rate for negative attitudes, a gay man may predict that a randomly selected heterosexual male will evaluate him negatively although he would not evaluate himself in this way (Simon, Glassner-Bayerl, & Stratenwerth, 1991). The heterosexual men in this study knew that they would be interacting with gay men, and we assumed that their attitudes toward gay men would be more positive than might be anticipated in the general population. We actually encountered heterosexual men who declined to participate in this study because they did not want to be in a social interaction with a gay man. In fact, as reported later, the heterosexual men in this study held attitudes toward gay men that were somewhat positive. This logic led to the prediction that gay men’s metaperceptions of how their heterosexual partners judged them would be inversely related to how they were actually judged (Hypothesis 2). Among heterosexual men, however, we expected that the association of predictions and judgments would conform to the typical pattern and would show a positive relationship (Hypothesis 3).

**Verbal and Nonverbal Behavior, Affect, and Attitudes Toward the Interaction**

Social interactions were video recorded so that verbal and nonverbal behaviors could be coded from the videotapes on the basis of a system developed by Duncan and Fiske (1977). A verbal responsiveness factor was formed that included three variables: social questions, short back-channels (e.g., “yes” or “mhm”), and long back-channels (“I agree” or “That’s right”). A nonverbal responsiveness factor was formed that included four variables: smiling, laughing, gazing, and physical distance. Of general interest was the relationship between one’s verbal and nonverbal responsiveness and one’s affect for a partner and the partner’s affect for the individual. We predicted that men who were verbally responsive would be liked by their social interaction partners (Hypothesis 4).

The behavior of stigmatized people is designed to promote a positive reaction by nonstigmatized partners by disconfirming negative stereotypes (Crocker et al., 1998). Nonstigmatized persons may behave more consistently with their actual feelings in the interaction because there is less concern with stereotyped evaluation. Impression management is of greater necessity for stigmatized persons than for nonstigmatized persons, and, as a result, a stigmatized person’s verbal and nonverbal responses may not reflect how they actually evaluate the social interaction or their affect for the partner. Consequently, we predicted that the verbal and nonverbal responses of gay men would be less directly related to their experience of the interaction and their affect for their heterosexual partners. Among heterosexual men,
we anticipated that verbal and nonverbal responses would be more directly related to their experience of the interaction and affect for their gay partners (Hypothesis 5).

High-status persons process limited information about low-status persons (Fiske, 1993; Frable et al., 1990). The social interactions we created were brief (20 min), and, as a result, norms of propriety would lead new acquaintances to exchange verbal responses at about an equal level. However, we anticipated that among gay men, verbal responsiveness and the processing of information regarding partner characteristics would be positively related but inversely related among heterosexual men (Hypothesis 6). High-status and low-status persons may be equally responsive, but they may be differentially attending to specific details about the partner (Fiske, 1993).

Individual Differences and Social Interaction

When category membership makes one a potential target of discrimination, or even violence, one would be inclined to manage the impressions of others so that the probability of a negative outcome is reduced. This is why gay men have historically kept their sexual orientation safely hidden in “the closet.” In this study, gay men knew that their partners knew they were gay, so category membership could not be hidden. However, we anticipated that gay men who were the most conscious of the stigma held toward their group would respond to heterosexual partners so that these partners would judge them as comfortable and enjoying the social interaction (Hypothesis 7). To the extent that one anticipates stigmatization (Pinel, 1999), one should actively attempt to prevent it and manage the impression of a potential stigmatizer (Crocker et al., 1998).

In addition, we explored the relationship between instrumentality and expressiveness, as measured by Bem’s (1974) Sex Role Inventory (BSRI), on the basis of an assumption that greater expressiveness (i.e., a less traditional sex role orientation) among heterosexual men should be related to more positive judgments of the characteristics of gay men. We did not, however, test a specific hypothesis in this regard.

Method

Participants

Participants were self-identified gay (n = 20) and heterosexual (n = 20) men in New England from the general public, colleges, and universities, who responded to flyers advertising the study and were given an honorarium of $10.00. Participants were informed that they would be interacting with two men whose sexual orientation was different from their own. All men were at least 18 years of age, and most appeared to be of European ancestry. To maximize privacy and anonymity, we did not collect detailed demographic data.

Procedures and Measures

Each experimental session included 4 participants (2 gay and 2 heterosexual men) in a randomly formed group. Participants were escorted to private locations and completed an informed consent document, the BSRI (Bem, 1974), and the Stigma Consciousness Questionnaire (SCQ; Pinel, 1999). Heterosexual men completed a 5-item Attitude Toward Gays (ATG) Scale (Herek, 1994). To maintain equivalent procedures, gay men completed the ATG from the perspective of a heterosexual. The BSRI is a widely used measure of the masculinity and femininity constructs, and the SCQ measures stigma consciousness. The ATG Scale measures heterosexual men’s attitudes toward gay men.

Dyads were formed so that in each of two separate rooms, there was 1 gay and 1 heterosexual man. The experimenter told participants, “This is a getting-to-know you situation. After I turn on the camcorder, please take a seat over there (while pointing to two chairs) and then introduce yourselves to each other.” The experimenter then activated the recording device, said, “OK, please take a seat and then introduce yourselves to each other,” and then left the room. After 20 min elapsed, the experimenter returned, shut off the recording device, stated “Thank you. There are just a few more questions for both of you to respond to now,” and escorted 1 of the participants from each of the dyads to a private room while leaving their partners in the room where the interaction took place. Participants rated, using 10-point scales, how much they enjoyed the interaction (1 = not enjoyable, 10 = enjoyable) and how interesting (1 = uninteresting, 10 = interesting) and how comfortable (1 = strained, 10 = comfortable) they judged the interaction. Participants also judged the personality traits of their partners, and the specific traits were selected to represent Factors 1 (Extraversion), 2 (Agreeableness), 4 (Emotional Adjustment), and 5 (Culture) of the Big Five factor structure. Factor 3 (Conscientiousness) was excluded because the interaction was not expected to provide information on this factor. Two traits served as indicators of each of the four factors and were selected from items used in...
past research on interpersonal perception (Kenny et al., 1994). The factors and trait adjectives were as follows: 1 (introverted, 10 = extroverted and 1 = quiet, 10 = talkative), 2 (1 = unpleasant, 10 = pleasant and 1 = uptight, 10 = easygoing), 4 (1 = anxious, 10 = calm and 1 = unsure, 10 = self-confident), and 5 (1 = unintelligent, 10 = intelligent and 1 = unsophisticated, 10 = sophisticated). Correlations of group means for indicators of Factors 1, 2, 4, and 5 were .77, 1.00, .79, and .57, respectively, and indicate acceptable reliability (Kenny, 1979). Participants also made predictions (metaperceptions) of how they were judged by their partners on the same set of personality traits using an identical 10-point scale.

Participants also used 10-point scales to rate their affect for their interaction partners, and three specific items were used. The men indicated liking for their interaction partner (1 = dislike, 10 = like), whether their partner could be their friend (1 = disagree, 10 = agree), and their similarity to their partner (1 = dissimilar, 10 = similar). The average intercorrelation of affect indicators was .74. Individuals also predicted their partner’s affect for them using equivalent scales.

Two open-ended narrative measures were used to record thoughts and feelings for an interaction partner. The first was “Please recall and describe any thoughts you had when interacting with your partner,” and the second was “Please recall and describe any feelings you had when interacting with your partner;” the number of thoughts and feelings listed were counted. Memory for the objective characteristics of an interaction partner was assessed by four open-ended questions. Participants indicated in written form the color of a partner’s hair, shirt, eyes, and shoes. The experimenter recorded this information for each participant so accuracy could be assessed. We also counted the number of references to wives, girlfriends, or sports (among heterosexual men) and references to intimate partners and sports (among gay men). After the first set of ratings was completed, participants were escorted to a room where the second 20-min interaction occurred. Following this second 20-min interaction that proceeded exactly as the first, the same set of measurements were taken.

Verbal and nonverbal behavior during the interactions were coded from videotaped recordings and were based on Duncan and Fiske’s (1977) work. A verbal responsiveness factor was the average of counts on the following three verbal behaviors: social questions, short back-channels, and long back-channels. Interrater reliabilities for these variables were .93, .93, and .82, respectively. A nonverbal responsiveness factor was composed of average standard scores on the following four variables: smiles, laughs, gazes, and physical distance from the midpoint of a table at which the participants were seated. Interrater reliabilities for these variables were .92, .95, .96, and 1.00, respectively. Total speaking time was also measured with reliability of .99.

Design and Analysis

In the asymmetric block design (see Table 1), there are two subgroups and every member of one subgroup interacts with every member of the other subgroup. This design provides sufficient data to estimate the parameters of Equations 1 and 2. Estimation was accomplished using software called BLOCKO (Kenny, 1995).

Results

Descriptive Statistics

Table 2 presents the means and standard deviations for the personality judgments, ratings of the quality of the interactions, interpersonal affect, and nonverbal and verbal behaviors. Except for positive nonverbal displays, differences between group means were not statistically reliable. Heterosexual men’s attitudes toward gay men were measured using Herek’s (1994) short form of the ATG, with a 5-point metric (1 = strongly disagree to 5 = strongly agree). Scores on the 5-item ATG scale could range from 5 (most positive attitudes) to 25 (least positive attitudes), with a score of 15 indicating neutral attitudes. The mean score on the ATG was 11.05 (SD = 4.82) and showed that heterosexual men’s attitudes toward gay men were somewhat positive. ATG scores were normally distributed, with a reliability of .84 (coefficient alpha).

Table 1

<table>
<thead>
<tr>
<th>Asymmetric Block Design</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>G1</td>
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<tr>
<td>G2</td>
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<tr>
<td>H1</td>
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<td>H2</td>
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Note. G and H represent gay and heterosexual men, respectively, and numbers represent different people. An X represents dyadic behavior, perception, or affect.
Table 2
Means and Standard Deviations: Ratings on Personality Factors, Quality of the Interaction, Positive Affect, Verbal and Nonverbal Behavior, and Attitudes Toward Gays

<table>
<thead>
<tr>
<th>Variable</th>
<th>Responses by gay men to heterosexual men</th>
<th>Responses by heterosexual men to gay men</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Extraversion</td>
<td>8.09</td>
<td>1.14</td>
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<tr>
<td>Agreeableness</td>
<td>8.93</td>
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<td>Emotional Adjustment</td>
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<tr>
<td>Culture</td>
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<td>0.83</td>
</tr>
<tr>
<td>Quality of interaction</td>
<td>8.51</td>
<td>0.95</td>
</tr>
<tr>
<td>Positive affect</td>
<td>7.64</td>
<td>0.33</td>
</tr>
<tr>
<td>Nonverbal positive*</td>
<td>11.83</td>
<td>0.87</td>
</tr>
<tr>
<td>Verbal responsiveness</td>
<td>11.75</td>
<td>1.01</td>
</tr>
<tr>
<td>Attitude toward gays*</td>
<td>11.05</td>
<td>4.82</td>
</tr>
</tbody>
</table>

Note. Means are based on group as unit of analysis (n = 10) and multiple indicators of each construct. *Means are based on person as unit of analysis. *p < .05.

Interpersonal Perceptions of Stigmatized and Nonstigmatized Persons

A social relations analysis estimated the perceiver, target, and uniqueness effects for the personality judgments. Recall that the perceiver effect (i.e., δ) indexes the extent to which a perceiver fails to differentiate the characteristics of multiple partners that, in fact, vary. The target effect (i.e., β) is a measure of the consistent effect of the individual on trait judgments made by multiple partners. After controlling for these general effects, the dyadic uniqueness effect (i.e., γ) was estimated. Presented in Table 3 are the correlations of target effects across factors and in Table 4 are correlations of perceiver and intrapersonal uniqueness effects across pairs of factors. Results in Table 3 show that heterosexual perceivers did not differentiate the standing of gay targets on the different personality factors. Correlations of gay men’s target effects (on the basis of judgments by heterosexual men) for combinations of factors were all statistically reliable, with an average intercorrelation of .69. The correlation of heterosexual men’s targets effects (on the basis of judgments by gay men) was .53, and three of the six correlations were statistically reliable. These results showed that if gay targets were judged high or low on one personality factor by heterosexual perceivers, then they tended to be judged consistently high or low on other personality factors by those perceivers, confirming Hypothesis 1A. Heterosexual targets, in contrast, were differentiated to a greater extent on different personality factors by gay perceivers; however, one half of the target effects on different factors were reliably correlated. This showed out-group covariation bias in judgments of heterosexual men by gay men.

The data in Table 4 for heterosexual perceivers shows that if they judged their gay partners similarly on one factor, then they tended to judge those partners similarly on other factors. All intercorrelations of perceiver effects on different combinations of factors were statistically reliable, and the average intercorrelation was .74, confirming Hypothesis 1B. Among gay perceivers, two of the six correlations of perceiver effects were reliable across factors (2–5, r = .58; 4–5, r = .75), with an average intercorrelation across factors of .37.

There was evidence of out-group covariation bias at the dyadic level for both gay and heterosexual men. The average correlation of uniqueness effects on the four personality factors for heterosexual men’s judgments of gay men was .99 (p < .01), with a range from .63 to 1.00. Judgments of heterosexual men by gay men also evidenced dyadic out-group covariation bias, with an average correlation of uniqueness effects on personality factors of .93 and a range from .34 to 1.00. It is noteworthy that all six of the correlations of uniqueness effects on factors for heterosexual perceivers were statistically reliable (p < .05), whereas three of six were statistically reliable for gay perceivers.

Results confirmed the general hypothesis that the traits of stigmatized people are differentiated less by high-status partners, whereas the stigmatized show somewhat greater differentiation of partner’s traits.

Table 3
Intercorrelations of Target Effects in Interpersonal Perceptions on Personality Factors for Gay and Heterosexual Men

<table>
<thead>
<tr>
<th>Target effects on factors</th>
<th>Gay targets</th>
<th>Heterosexual targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–2</td>
<td>.81*</td>
<td>.41</td>
</tr>
<tr>
<td>1–4</td>
<td>.69*</td>
<td>.23</td>
</tr>
<tr>
<td>1–5</td>
<td>.58*</td>
<td>.26</td>
</tr>
<tr>
<td>2–4</td>
<td>.83*</td>
<td>.58*</td>
</tr>
<tr>
<td>2–5</td>
<td>.45*</td>
<td>.51*</td>
</tr>
<tr>
<td>4–5</td>
<td>.67*</td>
<td>.76*</td>
</tr>
<tr>
<td>Average</td>
<td>.69*</td>
<td>.53*</td>
</tr>
</tbody>
</table>

Note. Factors 1, 2, 4, and 5 are Extraversion, Agreeableness, Emotional Adjustment, and Culture, respectively. Average correlations are based on Fisher’s z transformations. df = 18.
*p < .05.
At the dyadic level, judgments by both heterosexual and gay men were characterized by substantial co-variation across personality factors.

**Metaperceptions on Traits**

A metaperception is a prediction of how others judge oneself, and the accuracy of metaperception is estimated by the correlation of target effects on judgments and perceiver effects on predictions (Malloy & Albright, 1990). Results in Table 5 show that metaperceptions for heterosexual men were accurate on the personality factors of Agreeableness and Culture \( (p < .05) \), with a trend for Emotional Adjustment \( (p = .09) \) and nonsignificant results for Extraversion.

The average meta-accuracy correlation \( (r = .37, p < .05) \) for heterosexual men was statistically reliable. Similar estimates for gay men, however, were significant only for Culture. On this factor, gay men were significantly in error \( (r = .78, p < .05) \). The average meta-accuracy correlation for gay men was not statistically reliable \( (r = –.23) \). These results provided support for Hypotheses 2 and 3, respectively.

**Metaperceptions of Affect**

Participants rated how much they liked the individuals they interacted with and how similar they were to their partners. Among gay men, there was no evidence for accurate awareness of liking by their heterosexual partners \( (r = –.26, p = .27) \), whereas heterosexual men were accurately aware of liking by their gay partners \( (r = .45, p = .05) \). Gay men were accurately aware of the extent to which they were judged as similar or dissimilar by heterosexual men \( (r = .78, p < .01) \), whereas heterosexual men did not know how similar or dissimilar they were judged by their gay partners \( (r = .24, p = .31) \). Presumably, gay men were aware that heterosexual men would judge them different from themselves and based their predictions on this awareness to achieve accuracy.

**Verbal and Nonverbal Behavior**

Verbal and nonverbal behaviors were coded from the videotaped dyadic interactions by two coders and then averaged. The average speaking time was equal for gay and heterosexual men, with means of 8.44 min. Variability was also equal, with standard deviations of 2.08 min for each group of men. A verbal responsiveness factor was computed by averaging the number of social questions, short back-channels, and long back-channels. Gay and heterosexual men were equally responsive to one another \( (M_s = 11.75 \text{ and} \)
behavior in a fashion that maintained a positive climate for their heterosexual partners (r = −.14), judgment that the interaction was interesting (r = −.24), and comfort in the interaction (r = −.06). In contrast, among heterosexual men, verbal responsiveness was positively and reliably associated with positive affect for a partner (r = .49, p < .05), comfort in the interaction (r = .54, p < .05), and judgment of the interaction as interesting and enjoyable (rs = .34 and .19, respectively, ps > .05). Among heterosexual men, greater verbal responsiveness was associated with greater liking of their partners and more comfort in the interactions. These results confirmed Hypothesis 5.

Although gay men’s verbal responsiveness was unrelated reliably to affect for a partner and evaluation of the interaction, there were clear relationships between nonverbal behaviors, affect for a partner, and attitudes toward the interaction. As displayed in Table 6, when a partner was liked less and the interaction was judged less enjoyable, interesting, and comfortable, gay men displayed more positive nonverbal behaviors, such as smiling, laughing, and gazing at the partner (rs = −.43, −.53, −.35, and −.47, respectively). These results confirmed the prediction that the nonverbal behavior of gay men would be inversely, rather than directly, related to their affect for their partner and their evaluation of the quality of the interaction.

We also observed a difference in the relationship of positive nonverbal behavior and liking by one’s interaction partner for the two groups of men. Among heterosexual men, those who displayed higher levels

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Correlations of Verbal and Nonverbal Behavior With Affect and Attitude Toward the Interaction</th>
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</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Gay men</td>
</tr>
<tr>
<td></td>
<td>Verbal</td>
</tr>
<tr>
<td>Positive affect by one’s interaction partner</td>
<td>.58*</td>
</tr>
<tr>
<td>Positive affect for one’s interaction partner</td>
<td>−.14</td>
</tr>
<tr>
<td>Enjoyment of interaction</td>
<td>.03</td>
</tr>
<tr>
<td>Interaction interesting</td>
<td>−.24</td>
</tr>
<tr>
<td>Comfortable in interaction</td>
<td>−.06</td>
</tr>
</tbody>
</table>

Note. Entries are correlations of the perceiver effects on variables and the actor effects on nonverbal and verbal factors from the social relations analysis. An exception is positive affect by one’s interaction partner, which is the target effect from the social relations analysis. df = 16.

‡p < .07. *p < .05.
of positive nonverbal behavior were liked more by their gay partners \((r = .45, p < .05)\), whereas gay men who displayed higher levels of positive nonverbal behavior were liked less by their partners \((r = -.41, p < .07)\).

**Verbal Responsiveness and Social Memory**

Among gay men, scores on the verbal responsiveness factor were significantly correlated with correct recall of the physical characteristics of a partner \((r = .58, p < .05; \text{see Table 7})\). Among heterosexual men, these variables were inversely related and showed that increased verbal responsiveness was associated with fewer thoughts about the partner \((r = -.54, p < .05)\) and less accurate recall of a partner’s physical characteristics \((r = -.37, p = .11)\). These results provided only partial support for Hypothesis 6.

**Stigma Consciousness, Behavioral Flexibility, and Interpersonal Perception**

We predicted that gay men who were most conscious of stigma would respond so that their nonstigmatized partner would think well of them (Crocker et al., 1998). To test Hypothesis 7, we used a strategy developed (Malloy & Kenny, 1986) for estimating the relationship of individual-difference measures and the components of interpersonal perceptions. Specifically, we correlated the stigma consciousness scores of gay men with their partner effects on perceived enjoyment of, interest in, and comfort during the social interaction. Results showed that stigma consciousness was positively and reliably \((p < .05)\) correlated with a gay man’s partner effect on perceived enjoyment \((r = .52)\), interest in \((r = .62)\), and comfort during \((r = .60)\) the interaction, as judged by his heterosexual partner. Consistent with Hypothesis 7, gay men who were the most conscious of stigma behaved in a fashion that conveyed to their social partners that the social interaction was positive rather than negative.

For each participant, instrumentality (i.e., masculinity) and expressiveness (i.e., femininity) scores from the BSRI were correlated with the perceiver effect on trait judgments. Among heterosexual men, a consistent pattern of association between expressiveness (i.e., the femininity score) and trait judgments was observed. Heterosexual men who indicated that expressive traits were more self-descriptive rated their gay partners reliably \((p < .05)\) higher on Factors 1 \((r = .49)\), 2 \((r = .64)\), 4 \((r = .65)\), and 5 \((r = .40)\). These results showed that heterosexual men who were less stereotypically masculine in gender role orientation judged gay men more positively on personality factors.

**Discussion**

According to Crocker et al. (1998), “one of the most interesting, and least understood or researched areas related to social stigma concerns the dynamics of interactions between stigmatized and nonstigmatized individuals” (p. 538). The present research adds new empirical data on these dynamics. We measured reciprocal behavior, perception, and affect of gay and heterosexual men interacting in a get-acquainted paradigm to understand interpersonal processes in status-discrepant dyads.

**Interpersonal Perception of Traits**

**High-status dyad members.** We found that judgments of gay men by heterosexual men were characterized by a rather striking pattern of covariance in which all combinations of target effects for gay men on personality factors were reliably related. At the individual level of analysis, the average correlation of target effects was .69. For such strong evidence of out-group covariation to emerge at the individual level, heterosexual men had to share similar assumptions regarding patterns of trait covariation in the group of persons being judged that were applied to the 2 gay partners. Assuming that gay men are normally distributed on the Big Five personality factors, if heterosexual men judged them on the basis of their behavior, then the intercorrelations of target effects should be low because the Big Five personality factors are conceptually and empirically independent (McCrae & Costa, 1997). Such a strong pattern of covariance suggests that heterosexual men judged gay men, in large part, using shared generalizations

<table>
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<tr>
<th>Table 7</th>
<th>Verbal Responsiveness, Social Cognition, and Memory</th>
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<tbody>
<tr>
<td>Variable</td>
<td>Gay men verbal factor</td>
</tr>
<tr>
<td>Thoughts about partner</td>
<td>.25</td>
</tr>
<tr>
<td>Correct recall of partner characteristics</td>
<td>.58*</td>
</tr>
</tbody>
</table>

*Note.* Entries are correlations of the actor effects on variables and the verbal factor from the social relations analysis. \(df = 18\).

*Characteristics were colors of shirt, hair, eyes, and shoes. \(*p < .05.*\)
regarding the traits of category members. This result confirmed our expectation of out-group covariation bias (Linville et al., 1996).

Across personality factors, heterosexual men’s perceiver effects and intraindividual uniqueness effects also showed a strong pattern of covariance. Recall that the perceiver effect is the tendency to similarly judge others who in fact vary. Among heterosexual men, all combinations of perceiver effects for personality factors were significantly intercorrelated, with a mean of .74. At the dyadic level, uniqueness components of heterosexual men’s judgments on multiple factors were reliably correlated, with a mean of .99.

This pattern of correlated perceiver, target, and uniqueness effects across personality factors in heterosexual men’s judgments of gay men confirms that they were category-based perceptions (Fiske, 1993; Judd & Park, 1988) originating in both shared (generalized individual level) and idiosyncratic (intraindividual dyadic) assumptions about the characteristics of category members. Heterosexual men have limited contact with gay men because there are many more heterosexuals in the general population and because sexual orientation is not commonly discussed in social relationships. Limited contact with an out-group and a limited sample of behavior by out-group members is predicted to produce the out-group covariation bias (Linville et al., 1996; Simon et al., 1991) that we observed.

Low-status dyad members. Gay perceivers also judged their heterosexual partners on the basis of category membership, although the intercorrelations of perceiver, target, and uniqueness effects were weaker than those just discussed. Three of six combinations of target effects on personality factors were significantly correlated, and the average intercorrelation of heterosexual men’s target effects was .53. Although this average intercorrelation is weaker for gay men than for heterosexual men, gay men also judged their heterosexual partners using shared generalizations about members of the category.

Gay men also showed correlated perceiver effects across the personality factors; however, the magnitude of associations were weaker (mean r = .40) than the equivalent estimates for heterosexual men (mean r = .74). At the dyadic level, among gay men, there was strong evidence of correlated intraindividual uniqueness effects, with an average intercorrelation of .93. Gay men used both shared (generalized individual level) and idiosyncratic (intraindividual dyadic) generalizations about heterosexual men when judging the personality traits of interaction partners.

Overall, shared category-based generalizations were used by men of both groups when making intergroup judgments. However, the results at the dyadic level show that out-group covariation bias is even stronger at this level than at the generalized individual level. This highlights the necessity of studying intergroup judgments at multiple levels of analysis.

Accuracy and Inaccuracy of Metaperception

The metaperception results are noteworthy. The level of accuracy in metaperceptions among heterosexual men (r = .46) was consistent with the average level of meta-accuracy reported by Kenny and DePaulo (1993) of r = .51 on the basis of results from six studies. However, the meta-accuracy among gay men is quite at odds with this result. In fact, all meta-accuracy correlations were negative (average r = -.23) for gay metaperceivers. This result is important because there is not a single negative estimate reported by Kenny and DePaulo in their review of the literature.

In general, people know how others judge them on personality traits (Kenny, 1994), and this accuracy can be achieved by using self-perception as a basis for metaperception. When behavior affects self-perception and others’ perceptions similarly, use of self-perception is a reasonable basis for achieving accurate metaperception. However, the case of status-discrepant dyads offered an opportunity to study the accuracy of metaperception under conditions in which self-perception could not be used as a basis for metaperception.

Gay men as a group likely do not view themselves more negatively or positively than heterosexual men (Simon et al., 1991), but they are well aware of the negative views of their group. As a result, their predictions of judgments were likely not based on self-perception but rather on awareness of negative stereotypes. In this study, however, the heterosexual men who participated held somewhat positive attitudes toward gay men. Keep in mind that the heterosexual men were willing to participate in a conversation with 2 gay men, have the interactions videotaped, and evaluate and be evaluated by 2 gay partners. However, the gay men may have assumed, on the basis of a long history of bigotry, that a heterosexual partner would judge them negatively. This is a process that would lead to the very unusual negative estimates of the accuracy in metaperception among gay men.

Because these results for gay men are so discrepant from what is typically found in the metaperception literature, they warrant further theoretical and empirical attention. When metaperceptions are not based on
self-perception (Kenny, 1994) or objective observation of one’s own behavior (Albright & Malloy, 1999) but on the category membership of the perceiver and the metaperceiver, accuracy may be greatly enhanced or greatly reduced. If the gay men in our study had interacted with members of a group known to harbor hatred for them, then use of category membership to predict judgments by such bigots would have likely enhanced meta-accuracy. However, in this study, the use of category information led to meta-inaccuracy because predictions about how one would be judged by heterosexual men were inversely related to judgments actually made.

Behavior and Affect: Private Experience and Public Display

Dyad members were liked to the extent that they asked questions and responded with short and long back-channels, and this result held for both gay and heterosexual men. Although verbal responsiveness was associated with liking, this behavior was associated with affect for one’s partner differently in the two groups. Among heterosexual men, verbal responsiveness was positively associated with ratings of positive affect and comfort in the interaction, whereas among gay men, verbal responsiveness was independent of affect for one’s partner, enjoyment of, comfort during, and interest in the interaction. Verbal behavior matched affect for one’s partners among heterosexual men but was independent of affect for one’s partners among gay men.

Nonverbal behavior offered another glimpse into the discrepancy between private experience and public display. Among heterosexual men, positive nonverbal displays were positively associated with liking by a gay partner \((r = .45)\) as well as liking for a gay partner \((r = .37)\) and suggest that nonverbal displays were commensurate with affect. Among gay men, however, positive nonverbal behavior was inversely related to liking by one’s partner \((r = -.41)\) and liking for one’s partner \((r = -.43)\). Furthermore, gay men who displayed the highest level of positive nonverbal behavior reported significantly less enjoyment of the social interaction and felt the least comfortable in the interaction \((rs = -.53 \text{ and } -.47\), respectively). In status-discrepant dyads, behavior and affect may be more consistent among high-status members and more inconsistent among low-status members.

What is the psychological meaning of behavioral and affective inconsistency? Such inconsistency results from what Crocker et al. (1998) called a strategy of compensation, which “involves attempting to overcome or disprove prejudice by behaving in very positive ways” (p. 541). Gay men are well aware of the negative cultural stereotypes held toward them and that their behavior could be interpreted by a heterosexual partner on the basis of such stereotypes. Gay men were also well aware that they were participants in an experiment that made their devalued sexual orientation highly salient. This alone may have brought into clear focus the frustration, anger, and resentment that members of a devalued category experience. Gay men who displayed the highest levels of positive verbal and nonverbal behavior, that is, acted in positive ways, were those who had the most negative private experiences. This disconnection between public display and private experience holds great potential for understanding the phenomenology of stigmatized persons when interacting with higher status partners. If a stigmatized person is highly vigilant, mindful, and alert while simultaneously masking private experience in an interaction, then there may be reduced capacity to engage a social interaction partner authentically. Until the pervasive stereotype that gay men are not “real men” is confronted, both the behavior of gay and heterosexual men will be constrained by arbitrary cultural norms defining masculinity.

Stigma Consciousness, Social Interaction, and Interpersonal Perception

An important finding concerns the role of stigma consciousness in social interaction. Pinel (1999) has demonstrated that members of stigmatized groups differ in the extent to which they “expect to be stereotyped by others” (p. 115). Gay men who most expected to be stigmatized were judged by heterosexual men as more comfortable in, interested in, and enjoying of the interaction. Behavior by stigmatized persons was designed to convey a positive impression to a higher status social partner, particularly when expecting the high-status partner to respond with prejudice. Somewhat similar results were reported by Miller, Rothblum, Felicio, and Brand (1995), who found that women with devalued physical traits (i.e., obesity) behaved in a very friendly manner in social interaction with a higher status (i.e., normal weight) partner in an attempt to convey a positive impression.

Methodological Implications and Limitations

One important feature of this study was the focus on the responses of both the stigmatized and the non-
stigmatized members of an interacting dyad. We used a multiple interaction design and an analysis that permitted decomposition of responses into actor (or perceiver), partner (or target), and uniqueness effects for each member of the dyad. This approach is significant conceptually and statistically. With a multiple interaction design, the researcher can determine whether a response is stable across interaction partners and to what extent it is partner specific. If only one dyadic interaction were to occur, then simultaneous analyses of generalized (actor and partner) and dyadic effects would have been impossible. Use of the asymmetric block design and componential analysis also permitted estimation of out-group covariance bias at both the individual and dyadic levels and offers a new, fine-grained analytic approach for the study of this phenomenon.

This research is limited because we focused only on asymmetric dyads. Research that includes equal and unequal status dyads in a single study has the potential to further clarify the present results. Such studies will require a design called the round robin and would include both symmetric (equal status) and asymmetric dyads (unequal status). A social relations analysis can be performed within and between categories. We expect that results for symmetric dyads should mimic those reported for dyads in general (Kenny, 1994).

This study is limited because generalizations only apply to heterosexual and gay men who would be willing to engage in social interaction with men having a different sexual orientation. These men may not represent gay and heterosexual men in general, and we did encounter men who would not participate because of the interactions that were required. In fact, in this study, heterosexuals’ attitudes toward gay men were somewhat positive. However, if the variance in attitudes was increased by including men with more negative views of those with a different sexual orientation, then the results obtained could actually be stronger than we observed.

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