Concern Over the Misidentification of Sexual Orientation: Social Contagion and the Avoidance of Sexual Minorities

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Membership in a valued group can provide an individual with a variety of benefits. As a result, people should be motivated to avoid being misidentified as a member of an outgroup, particularly a stigmatized outgroup. We argue that when group membership is not readily identifiable, concern over potentially being mistaken for a member of the outgroup (i.e., social contagion concerns) can be potent and can lead to avoidance of the outgroup. The current work shows that after controlling for negative attitudes toward homosexuality, social contagion concerns independently predict anxiety and avoidance in response to imagined, anticipated, and actual contact with a lesbian or gay individual. Results from these studies suggest that concern over misclassification of sexual orientation is an important and unique predictor of responses to contact with lesbian and gay people. Implications for intergroup contact and responses to other stigmatized groups are discussed.

Keywords: sexual orientation, social identity, prejudice/stereotyping, intergroup relations, social contagion

Membership in valued social groups affords considerable benefits, including bolstered self-esteem, a sense of belonging and affiliation, protection, and in some cases even material rewards (Billig & Tajfel, 1973; Boen, Vanbeselaere, & Feys, 2002; Cialdini & Richardson, 1980; Correll & Park, 2005; Greenberg et al., 1990; Harmon-Jones, Greenberg, Solomon, & Simon, 1996; Hodson, Dovidio, & Gaertner, 2002; Leary & Baumeister, 2000; Steele, 1988; Tajfel & Turner, 1986). Thus, it is not at all surprising that people would be highly protective of their social group as well as their membership in important social groups. Previous work and theory have focused on peo-

ple's motivation and efforts to maintain the dominance, prestige, and favorable evaluation of their ingroup (Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004; Sidanius & Pratto, 1999; Tajfel & Turner, 1986). We argue that similarly, people can be highly motivated to retain their group membership and, thus, may be sensitive to any threat that would exclude them from their social group and, even worse, result in being miscategorized as an outgroup member. In the present work, we focus specifically on one such type of motivation, the motivation that some heterosexual people experience to avoid being misidentified as lesbian or gay.

The motivation to be correctly classified into one's ingroup is likely particularly strong when the social group to which people belong is generally dominant and esteemed, and the outgroup is stigmatized and/or devalued. We argue that in such situations, the risk of being misclassified as an outgroup member would be particularly threatening if group membership is not readily apparent and even difficult to "prove" (such as one's sexual orientation, mental health status, or religion). Further, when group membership is not easily or unambiguously identifiable, we argue that some nonstigmatized people are likely to be motivated to avoid situations that heighten the chance of misclassification as members of stigmatized outgroups by either members of their ingroup or members of the stigmatized outgroup. One category of situations that presents an increased risk of misclassification is the association (e.g., friendship, contact) with outgroup members with concealable stigmas. Thus, the

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central premise of the current work is that one source of avoidance of contact with lesbian and gay people by heterosexuals is the desire to prevent the potential of being misclassified as lesbian or gay (LG).¹

The current work examines whether some people experience heightened concerns that contact with stigmatized outgroup members risks misclassification as an outgroup member, which we term social contagion concerns. In the present studies, we focus on a likely prevalent and problematic form of social contagion concerns: heterosexuals' fear of social contagion regarding interacting with LG individuals. We explore whether these social contagion concerns result in the desire and intention to avoid contact with lesbian/gay individuals. We argue that social contagion concerns act above and beyond typical negative attitudes toward the outgroup (i.e., sexual prejudice) and independently influence outgroup avoidance.

Sexual orientation is an ideal candidate for examining social contagion concerns because sexual prejudice is still prevalent and sexual orientation is not readily identifiable. Although attitudes toward lesbian/gay individuals have grown steadily more positive in the last several decades (Yang, 1997), they still remain relatively mixed. In a 2008 national poll by Gallup, about half of Americans still believe that homosexuality is morally wrong, and state referenda on same-sex marriage bans have repeatedly found majority support (Saad, 2008). Views on the moral acceptability or unacceptability of homosexuality have traditionally been at the heart of most research on sexual prejudice (see Kite & Whitley, 1996). However, to date, researchers have not assessed the degree to which people respond negatively toward LG people out of concern that they will be misclassified as lesbian/gay.

We argue that because sexual orientation is not necessarily readily apparent, a heterosexual person can be incorrectly categorized by an observer as gay/lesbian. As a result of this potential ambiguity, some heterosexual individuals may experience concern that they will be misclassified as LG were they to affiliate with LG individuals. As noted at the outset of this article, people are strongly motivated to maintain and retain their membership in valued social groups. When social group membership is a fundamental part of a person's identity (e.g., for some this may include their sexual orientation, religious group, political affiliation), misclassification threatens an important part of the self. For a heterosexual individual, misclassification as gay/lesbian could result in stigma and discrimination and, possibly, a loss in mating opportunities. Moreover, if the perceiver is a same-sex LG individual, miscategorization could put the heterosexual person in a situation where he or she has to try to clarify group membership and potentially even respond to romantic advances. This threat of misclassification and the potential consequences could be a source of anxiety and discomfort for some heterosexual people and lead to the desire to avoid situations that may increase the chances of misclassification (e.g., avoid contact with LG individuals).

Social contagion concerns regarding misclassification as a stigmatized group member may not be entirely unwarranted given the previous research demonstrating that interacting with people from stigmatized groups can result in stigma by association (Hebl & Mannix, 2003; Neuberg, Smith, Hoffman, & Russell, 1994; Sigelman, Howell, Cornell, Cutright, & Dewey, 1991). For example, Neuberg et al. (1994) found that a heterosexual man who is seen interacting with a gay man is rated more negatively and avoided

more than when the same man is seen interacting with a heterosexual partner. The broad implication of this work is that stigma is contagious and that nonstigmatized people who associate with stigmatized people take on some of that stigma. Further, because sexual orientation is not readily apparent, it is possible that a heterosexual person associating with a gay man or lesbian runs the risk of being labeled as a member of the stigmatized group. In fact, research has found that when a man whose sexual orientation is not explicitly identified is seen voluntarily associating with a gay man, prejudiced individuals perceive him as more likely to have homosexual tendencies and stereotypically homosexual traits (Sigelman et al., 1991). These findings suggest that when heterosexual people are seen associating with a gay or lesbian individual, they run the risk of being mislabeled as gay/lesbian themselves. Recent work by Dwyer, Snyder, and Omoto (2013) further indicates that if people anticipate stigma by association, it can have negative implications for their responses toward stigmatized individuals. Specifically, they demonstrated that concerns about being the target of stigma by association negatively impacted volunteerism with HIV/ AIDS patients among participants who were low in self-esteem.

Previous research has also provided some insight into the distress that may occur in response to potential misclassification. Bosson and colleagues (Bosson, Prewitt-Freilino, & Taylor, 2005; Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009) suggested that miscategorization into a stigmatized group can result in selfconscious discomfort, a decreased desire for personal growth, and in some cases even aggression. In their work, they found that when heterosexual men engaged in gender role violating behavior, they showed an increased degree of self-conscious discomfort. Importantly, this effect was mediated by their expectations of being misclassified as gay (Bosson et al., 2005). In this same work, they also showed that allowing male participants to publicly declare their sexual orientation mitigated the effects of engaging in the gender role violating behavior. Clearly, the potential for misclassification as gay/lesbian is threatening to some heterosexual people. Because lesbian/gay people are a stigmatized group, to be miscategorized as gay or lesbian is to run the risk of experiencing the prejudice and discrimination that the group faces.

Further work by Bosson, Taylor, and Prewitt-Freilino (2006) showed that concern over misclassification did not interact with sexual prejudice when predicting discomfort. That is, regardless of level of sexual prejudice, participants who expected to be misclassified as LG showed increased discomfort. This suggests that heterosexual people who might otherwise not be opposed to homosexuality could still respond in a potentially biased manner because of concerns that they will be incorrectly labeled by observers as gay/lesbian themselves. Moreover, it suggests that traditional measures of prejudice are unlikely to capture these social contagion concerns. We argue that this concern over self-image could lead even some low prejudiced heterosexual people to avoid contact and express negative attitudes toward lesbian/gay people.

¹ Although we suspect that similar processes may occur in response to bisexual people, the current work focuses on responses to gay men and lesbians. Therefore, when discussing the issues related to close contact and avoidance, we use the acronym LG to clarify the focus on lesbians and gay men. When appropriate or more accurate (e.g., when discussing a lesbian, gay, bisexual, and transgender college organization) more inclusive acronyms are used.

After all, avoiding a group and behaving negatively toward a group are two effective ways of establishing oneself to others as a nonmember.

Current Work

The current work tested the hypotheses that some people experience social contagion concerns regarding interacting with gay men and lesbians and that these concerns result in the avoidance of interorientation contact. Social and self-image concerns regarding one's own group membership have largely been neglected when looking at intergroup attitudes and behaviors and the current work directly explores these concerns. Across a series of studies, we test whether social contagion concerns independently predict anxious/ threatened affect and avoidance of LG individuals after controlling for traditional measures of sexual prejudice. In addition, we examine these issues with regard to measured individual differences in social contagion concerns (Studies 1–4) and manipulated contagion concerns (Study 5).

Study 1

As a preliminary examination into these issues, we were interested in whether people varied in the extent to which they experience social contagion concerns over contact with lesbian/gay individuals and if these concerns were distinct from more traditional moral condemnation of homosexuality. To this end, we created a measure with items designed to tap into contagion concerns regarding interacting with LG people. In order to distinguish these contagion concerns from more traditionally assessed concerns about morality, we also created a set of items to assess condemnation of homosexuality for moral reasons.

We predicted that social contagion concerns are distinct from moral condemnation and, thus, these two constructs should predict different responses to contact with LG individuals. Therefore, in this first study we explored the relationship between these two measures and the emotional response to imagined contact with an LG individual. Research has begun to examine the variety of distinct emotional responses toward different stigmatized groups (Cottrell & Neuberg, 2005). In considering responses to LG individuals, this previous work has tended to focus on disgust as the prominent affective response to LG people (e.g., Cottrell & Neuberg, 2005). In addition, disgust sensitivity has been shown to be related to both implicit and explicit sexual prejudice (Hodson & Costello, 2007; Inbar, Pizarro, Knobe, & Bloom, 2009). We argue, however, that anxiety may also play an important role for some individuals when considering interacting with LG people. In particular, to the degree that an individual is concerned with social contagion, contact with LG individuals should elicit feelings of anxiety.

Therefore, we predicted that the two components of sexual prejudice would be differentially related to distinct emotional responses to intergroup contact. Because disgust sensitivity is related to social conservatism (Inbar, Pizarro, & Bloom, 2009) and to moral hypervigilance (Jones & Fitness, 2008), we hypothesized that moral condemnation of homosexuality would be related to feelings of disgust. However, because social contagion concerns instead involve anxiety over being misclassified as gay/lesbian, we predicted that individuals who possess such concerns would respond to contact with anxiety.

Method

Participants. Participants were 88 introductory psychology students (57% female; 67% White; $M_{\rm age}=18.87$ years, SD=1.13) who completed the study in partial fulfillment of a course requirement. Data from two people identifying as gay and one person identifying as bisexual were omitted from the analyses, resulting in a final sample of 85.

Procedure and materials. Participants were brought into a classroom in small groups where they filled out a large question-naire packet containing a series of attitude measures. In order to heighten feelings of confidentiality, when participants completed the packet, they placed it in a drop box at the front of the room.

Components of sexual prejudice. In order to measure the different components of sexual prejudice, we created items specifically designed to tap into social contagion and moral condemnation. For social contagion, four items were created that assessed concerns about being misperceived as lesbian/gay as a result of interacting with a lesbian/gay individual (e.g., "If I was hanging out with a homosexual person, I would worry that other people would think I was a homosexual too"; "If I had to interact with a homosexual person of my same gender, I would worry that he or she would flirt with me"; see the Appendix for a complete list of items). Some of the contagion items focused on a general public perception and some of the items focused on how LG individuals would respond. As we address in more detail in Study 2b, we were open to the possibility that these two types of items reflected distinct responses, but our findings consistently indicated that these concerns reflected a single construct.

Four items were also created to measure moral condemnation (e.g., "According to my personal morals, homosexuality is wrong"). Participant agreement with the scale items was measured using a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). Individual item scores were averaged to create two scales with higher scores indicating more negative attitudes. Both of the scales showed solid internal reliability (e.g., social contagion $\alpha = .84$; moral condemnation $\alpha = .81$).

Emotional response. To assess the different affective responses to a hypothetical intergroup interaction, participants were instructed to imagine that they were interacting with a same-sex LG person. They were then asked to respond to a list of emotions by indicating to what degree each word would apply to how they would feel in that situation on a 7-point Likert-type scale (1 = does not apply at all, $7 = applies \ very \ much$). A measure of disgust was created by averaging scores for four words (e.g., disgusted, sick; $\alpha = .85$), and anxiety was created from six items (e.g., nervous, anxious; $\alpha = .88$).

Results

The items from the contagion and moral condemnation scales were submitted to a principal components factor analysis with an Oblimin rotation. Examination of the scree plot indicated the presence of two factors. The first factor (Eigenvalue = 4.09) accounted for 51% of the variance, and the second factor (Eigenvalue = 1.28) accounted for an additional 16% of the variance. The items from the contagion scale all loaded onto the first factor (loadings = .68-.85), and the items from the moral condemnation scale all loaded onto the second factor (loadings above .51 or below -.78). The correlation between the scales indicated that they

were moderately related to each other but assessed different constructs (r = .54).

Because previous research on sexual prejudice has consistently found a gender difference in prejudice, with men reporting higher levels of sexual prejudice than women (see Kite & Whitley, 1996), we examined whether there were gender differences in our two scales. Based on these previous findings and the strong degree of self-conscious discomfort that men experience when they engage in stereotypically feminine behaviors and fear misclassification as gay (Bosson et al., 2005), we anticipated that men would report higher levels of both contagion concerns and moral condemnation. Independent samples t-tests revealed that men reported higher levels of contagion concerns (M = 3.26, SD = 1.28) than women (M = 2.48, SD = 1.29), t(83) = 2.77, p = .007. Similarly men reported a stronger moral condemnation of homosexuality (M = 3.65, SD = 1.53) than did women (M = 2.59, SD = 1.56), t(83) = 3.13, p = .002.

To test the hypothesis that the different components of sexual prejudice would predict different emotional responses to interacting with a same-sex gay/lesbian person, linear multiple regressions were conducted on disgust and anxiety. For all regressions conducted in this article, the predictor variables were centered. Because of the potential overlap between different types of negative affect, the analysis predicting anxiety controlled for negative affect due to disgust, and the analysis predicting disgust controlled for the negative affect that could be attributed to anxiety. This method has been used successfully in the past to distinguish between different types of negative affect in response to intergroup interactions (e.g., Butz & Plant, 2006) and provides a particularly stringent test of our predictions. Because of the correlations between our various predictor variables, before interpreting the results we first examined the tolerance and the variance inflation factors (VIFs). For both analyses, these values were acceptable and indicated that there were not issues due to multicollinearity (i.e., for all predictors the tolerance was >.47, and the VIF was <2.1).

For the analysis of anxiety, anxiety was regressed onto the two components of sexual prejudice, participant gender, disgust, and the interaction between the two components of sexual prejudice. When the analysis was conducted including a Gender \times Contagion interaction, the interaction was not significant ($\beta = .10$, p = .19), so the simpler analysis is presented. Consistent with our predictions, even when controlling for the relationship between disgust and anxiety ($\beta = .70$, p < .001), social contagion concerns predicted anxiety ($\beta = .28$, p = .003). The more participants reported being concerned that they would be mistaken as LG if they were to interact with an LG individual, the more they reported such an interaction made them feel anxious. None of the other predictors reached significance (p > .30).

For the analysis of disgust, disgust was regressed onto the two components of sexual prejudice, participant gender, anxiety, the interaction between the two components of sexual prejudice, and the interaction between contagion and gender.² As in the analysis above, anxiety was strongly related to the disgust measure (β = .63, p < .001). However, moral condemnation of homosexuality also proved to be a significant, independent predictor of disgust (β = .28, p = .001). The more participants expressed that homosexuality was morally wrong, the more they said they would experience disgust when interacting with a lesbian or gay man. In addition, there was an interaction between gender and social con-

tagion concerns ($\beta = -.17$, p = .02). For men, social contagion concerns were unrelated to feelings of disgust ($\beta = .17$, p = .22), whereas for women higher social contagion concerns were related to participants expressing marginally less disgust ($\beta = -.22$, p = .05). None of the other predictors reached significance (ps > .30).

Discussion

Results from this study revealed that social contagion concerns and moral condemnation of homosexuality were separate factors and were differentially associated with distinct emotional responses to interacting with a same-sex lesbian/gay person. Participants who were highly concerned about social contagion reported that contact would result in anxiety, which is consistent with their concerns about the potential negative implications regarding the outcome of contact. In contrast, participants concerned about the morality of homosexuality responded with feelings of disgust, which is consistent with a concern of moral contamination.

Although the correlational design of this study precludes the inference of a causal path from these data, they do suggest that the reasons underlying people's negativity toward LG individuals (social contagion or morality concerns) have implications for the emotional responses to intergroup contact. In addition, although recent work has focused on the role of disgust in responses to homosexuality, these findings suggest that some people may respond with heightened anxiety when interacting with lesbian/gay individuals (see also Parrott, Zeichner, & Hoover, 2006). Intergroup anxiety has troubling implications for intergroup contact, including the avoidance of intergroup contact and outgroup hostility (e.g., Plant & Devine, 2003; Stephan & Stephan, 1985). As a result, we believe it is important for researchers examining interorientation interactions to assess anxiety as well as disgust when considering responses to such contact.

Given the moderate correlation between the social contagion measure and traditional prejudice as well as the relationship between contagion concerns and intergroup anxiety, some might wonder whether contagion concerns are simply a more socially acceptable way of expressing negative attitudes toward LG individuals. Despite the relative acceptability of sexual prejudice compared to other forms of prejudice, there are still social pressures that may discourage some participants from honestly reporting overt negative attitudes on the moral condemnation measure, and social contagion concerns could just be a more subtle or appropriate outlet for those attitudes.

To examine this possibility we ran a follow-up study in which we tested the relationship between the social contagion and moral condemnation scales with a measure of implicit attitudes toward LG individuals. If the social contagion measure simply represents a more circumspect outlet for participants to express sexual prejudice, which they might be suppressing on the moral condemnation measure, then we would expect social contagion concerns to predict implicit attitudes and likely more so than the moral condemnation measure.

² Throughout the article, we consistently examined the interactions between gender and social contagion concerns. However, these interactions are only reported in this analysis because it is the only analysis when the interaction reached significance.

Eighty-nine heterosexual students completed both of the explicit measures and an Implicit Associations Test (IAT; Greenwald, McGhee, & Schwartz, 1998) designed to assess automatic positivity or negativity toward gay/lesbian individuals compared to heterosexuals. This version of the IAT was modeled after a "Sexuality IAT" found on the project implicit website (https://implicit .harvard.edu) using images representing gay/lesbian or straight couples as the target stimuli. Participants' scores on the IAT were regressed on to explicit ratings of social contagion concerns, moral condemnation of homosexuality, participant gender, and the interaction between moral condemnation and social contagion concerns. The analysis only revealed a significant effect of moral condemnation of homosexuality being associated with greater implicit sexual prejudice ($\beta = .31$, p = .034; other β s between .20 and -.13, p > .31). These findings suggest that social contagion concerns assess something beyond subtle negativity toward lesbian/gay people.

Study 2a

Having demonstrated that people who expressed heightened concerns about social contagion tended to report higher levels of anxiety about interacting with a lesbian/gay individual, we wanted to explore whether contagion concerns would also result in the desire to avoid contact with LG individuals. Therefore, in the current study we asked participants to imagine a scenario wherein they had to interact with a lesbian/gay (or straight) student of their same gender for a class project. We then assessed participants' desire to avoid working with the student. We predicted that participants' contagion concerns would be a strong predictor of their desire to avoid interacting with the gay/lesbian but not heterosexual student. We further predicted that the effect of contagion on desire to avoid contact with the lesbian/gay student would be above and beyond any effect of traditional assessments of sexual prejudice.

We were also interested in whether the effect of contagion concerns on desire to avoid contact would be influenced by the degree to which the contact with the LG individual was public. It is possible that the greater the number of observers present during contact, the higher the risk of sexual-orientation miscategorization. Further, the presence of ingroup (i.e., heterosexual) observers could be particularly important if contagion concerns are focused on the potential for ingroup rejection. Alternatively, it is possible that contagion concerns are activated by any potential contact situation and are not sensitive to the number of observers. It may also be that the potential for miscategorization by the interaction partner would be enough to elicit an avoidance response for those with contagion concerns. To test these possibilities, the type of contact (public vs. private) in the scenario was manipulated.

Method

Participants and design. Participants were 127 undergraduate introductory psychology students (50% female; 72% White; $M_{\rm age} = 18.87$ years, SD = 1.31) who completed the study in partial fulfillment for a course requirement and who self-identified as heterosexual. The hypothetical scenario that participants responded to had a 2 (partner orientation: gay/lesbian or straight) \times 2 (type of interaction: public interaction or private interaction)

between subjects design. Scenarios were matched for gender, so male participants always had a scenario with a male partner, and female participants always had a female partner.

Procedure and materials. Participants were told that they were going to fill out a questionnaire packet designed to assess their attitudes and beliefs about other people. They were randomly assigned to one of the four scenario conditions.

Scenarios. Participants read a short one paragraph scenario that instructed them to imagine that they were going to be working on a class project with a same-sex student. For half of the participants, the first sentence of the scenario identified the partner as gay or lesbian. For the other participants, no information was given about the hypothetical student's sexual orientation. This served as the control condition. Though it was not explicitly stated in this condition that the student was straight, without any information or suggestion to the contrary, heterosexuality would most likely be participants' default assumption.

The description of the class project was also manipulated so that in one condition participants were asked to imagine it was an oral presentation that involved a significant amount of public collaboration. In the other condition the assignment was a paper that could be accomplished through private collaboration. The intent was to manipulate the amount of public contact the participant imagined having with the partner.

After reading the scenarios, the participants were asked to respond to four items assessing their willingness to work with the partner (e.g., "How likely are you to work with this student?"). Responses were made using 7-point Likert type scales ($1 = not \ at \ all \ likely$, $7 = very \ likely$). These items were averaged to create a general measure of desire to avoid contact, with higher values indicating a greater desire to avoid contact with the partner ($\alpha = .83$).

Components of sexual prejudice. Participants completed the measures of social contagion and moral condemnation of homosexuality from Study 1. As in Study 1, factor analyses indicated that the items loaded onto two factors, consistent with predictions (moral condemnation, $\alpha = .82$; social contagion concerns, $\alpha = .86$).

Attitudes toward lesbians and gay men. Attitudes toward gay men and lesbians were measured using the five-item versions of the attitudes toward gay men (ATG) and attitudes toward lesbians (ATL) scales (Herek, 1998; e.g., "Sex between two men is just plain wrong"; "Female homosexuality is a perversion"). Agreement with scale items was measured using a 7-point Likert-type scale ($1 = strongly\ disagree$, $7 = strongly\ agree$). Although these measures are highly correlated ($r = .80,\ p < .001$), they are generally regarded as two distinct constructs, with higher scores indicating more negative attitudes toward gay men ($\alpha = .87$) and lesbians ($\alpha = .84$). These measures have repeatedly demonstrated good reliability and validity (Herek, 1998).

Fear of negative evaluation. In order to distinguish the social contagion concerns from more general concerns over negative social evaluation, participants' fear of negative evaluation was measured using the Brief Fear of Negative Evaluation Scale (BFNE; Leary, 1983). Participants responded to 12 statements dealing with general concerns over being evaluated negatively by others (e.g., "I am afraid that others will not approve of me") by rating how characteristic each statement was of them. Responses

were made using a 5-point Likert-type scale (1 = not at all characteristic of me, 5 = extremely characteristic of me; $\alpha = .86$).

Results

We first examined the correlations between our measures of social contagion and moral condemnation with the ATG and ATL indices for our male and female participants separately. As can be seen in Table 1, there were no significant correlations between fear of negative evaluation and the social contagion measure, which provided some evidence of discriminant validity and indicates that people who are more concerned about being incorrectly identified as gay or lesbian are not more concerned about negative evaluation from others in general.

Examination of the correlations also revealed that moral condemnation of homosexuality was strongly correlated with both the ATG and ATL for both male and female participants. Social contagion was significantly correlated with the ATG for both the male and female participants (although the magnitude was larger for the male participants) but was only correlated with the ATL for the female participants. In addition when ATG and ATL were each regressed onto moral condemnation, social contagion, and participant gender, the morality component was a significant predictor of both attitudes toward gay men ($\beta = .75$, p < .001) and lesbians $(\beta = .80, p < .001)$. As would be expected, there was a gender effect on ATG scores with men reporting more prejudice toward gay men ($\beta = .14$, p = .009). However, when moral condemnation and gender were included in the analyses, contagion concerns did not predict ATG or ATL scores (β s between –.11 and .07, ps > .13). These findings are consistent with our argument that contagion concerns are distinct from traditional measures of sexual prejudice.

To examine the implications of sexual prejudice and social contagion on responses to the scenario with a gay/lesbian or heterosexual partner, we conducted a multiple regression analysis on participants' desire to avoid contact with the partner in the scenario. Because the gender of the partner was matched to participant gender, we used the ATG or ATL score that was relevant to the scenario (e.g., ATG for male participants). In addition, because gender is related to both sexual prejudice and social contagion, we included the participants' gender as a predictor. Thus, avoidance scores were regressed onto social contagion, sexual prejudice, participant gender, the scenario partner's sexual orientation (gay or straight), the type of interaction (public or

private), the interactions between the conditions and the individual difference measures (contagion and prejudice), and the interaction between contagion and prejudice with each other and jointly with the experimental conditions. When the lower and higher order interactions between gender, the experimental conditions, and social contagion concerns were included in the analysis, they did not approach significance (ps > .68), so they were not included in the reported analyses. In addition, the inclusion of BFNE as a covariate did not influence the results, so the analysis without BFNE included is reported. For all reported analyses in this study, tolerance was over .46, and the VIF was under 2.14 for all predictors, indicating that multicollinearity is not an issue.

The analysis revealed a marginal main effect of participant gender with men reporting more interest in avoiding the contact overall ($\beta = .15$, p = .07). In addition, there was a main effect of social contagion scores ($\beta = .32$, p = .002). This main effect was qualified by a two-way interaction between social contagion and the scenario partner's orientation ($\beta = .27$, p = .007). None of the other effects were significant (ps > .09).

Simple slopes analyses indicated that for the participants high in social contagion, there was a strong effect of partner sexual orientation ($\beta = .51, p < .001$). Specifically participants who were concerned about social contagion were far more interested in avoiding the gay/lesbian than the heterosexual partner. In contrast for the participants low in social contagion, the effect of partner sexual orientation showed a trend toward more avoidance in the heterosexual partner than the gay/lesbian partner condition (β = -.16, p = .10). For predicted values of this interaction representing 1 SD above and 1 SD below the mean for contagion, see Figure 1. Considered the other way, in the gay/lesbian condition, social contagion concerns were strongly predictive of avoidance (β = .84, p < .001). In contrast, in the straight condition the tendency for participants higher in contagion to report a greater interest in avoiding contact with the same-sex partner was only marginally significant ($\beta = .17$, p = .09).

It is worth noting that if the analyses were repeated using the moral condemnation scale scores instead of the ATG/ATL scores, the findings are virtually identical, and the key Contagion \times Sexual Orientation interaction is similar in significance and form ($\beta = .29, p = .001$). Similar findings were also found if the ATG and ATL scores were combined into an ATLG scale score (Contagion \times Sexual Orientation interaction, $\beta = .37, p < .001$).

Table 1
Means, Standard Deviations, and Correlations of Self-Report Measures for Study 2a for Male and Female Participants Separately

Measure	Male participants $M(SD)$	Female participants <i>M</i> (<i>SD</i>)	1	2	3	4	5
1. Morality	3.53 (1.68) _a	2.83 (1.60) _b	_	.48**	.86**	.68**	08
2. Contagion	$3.41(1.51)_{a}$	$2.18(1.60)_{\rm b}$.46**	_	.56**	.19	.14
3. ATG	4.06 (1.58) _a	$2.95(1.58)_{\rm b}$.77**	.28*	_	.73**	04
4. ATL	3.24 (1.35)	3.17 (1.61)	.78**	.35*	.94**	_	.05
5. BFNE	2.83 (0.87)	2.94 (0.89)	17	.11	18	14	_

Note. Men's correlations are above the diagonal, and women's correlations are below the diagonal. Means with different subscripts on the same row indicate significant gender differences in the mean levels on the variable. ATG = attitudes toward gay men; ATL = attitudes toward lesbians; BFNE = Brief Fear of Negative Evaluation Scale.

p < .05. ** p < .01.

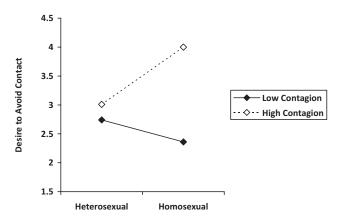


Figure 1. The effect of a sexual orientation on desire to avoid contact for participants with high and low levels of contagion concerns, Study 2a.

Discussion

Results from Study 2a provide support for the hypothesis that concern over being misclassified as lesbian or gay is an important contributor to the desire to avoid contact with LG people. Specifically, contagion concerns emerged as an important predictor of responses to imagined contact with a same-sex gay or lesbian individual. Whereas contagion concerns did not predict how participants responded to interacting with a (presumably) heterosexual same-sex partner, those who imagined interacting with a samesex lesbian or gay person had a greater desire to avoid the interaction if they possessed greater contagion concerns. This was the case even after controlling for traditional measures of sexual prejudice or our scale of moral condemnation of homosexuality. Further, the fact that sexual prejudice did not moderate the effect of contagion concerns indicates that whether or not individuals personally thought homosexuality was wrong, they wanted to avoid contact with the lesbian or gay man if they were concerned about being misidentified as gay or lesbian.

The current findings also indicated that the public nature of the interaction did not influence the avoidance response. These findings suggest that contagion concerns are elicited even in situations where contact with an LG individual is not highly public. Of course, working with another person can never truly be private because it is a social activity. The partner makes the interaction public simply by being a party to it, and participants run the risk of being misclassified by the interaction partner even if others would not be privy to the interaction. Therefore, these findings suggest that any type of contact with a same-sex LG person would elicit negative responses from those with existing contagion concerns.

It is also worth noting that the examination of the correlations between the variables revealed that contagion concerns were moderately related to traditional measures of prejudice against gay and lesbian people whereas moral condemnation was strongly correlated with these measures. In addition, after controlling for moral condemnation of homosexuality, social contagion did not predict scores on the traditional measures of sexual prejudice. These findings are consistent with our hypothesis that contagion concerns are distinct from traditional measures of sexual prejudice.

Study 2b

The first two studies showed that contagion concerns predict both anxiety in response to imagined contact with a same-sex LG person and a desire to avoid such contact. However, in both cases, contagion concerns were measured following the outcome variables. In order to rule out the possibility that contagion concerns represent an after-the-fact rationale for avoidance, we conducted a follow-up study in which contagion concerns and moral condemnation of homosexuality were assessed in a different setting, prior to other responses. We predicted that social contagion concerns assessed in a previous session would predict participants' subsequent responses to hypothetical contact with a same-sex gay or lesbian individual. The previous studies also focused solely on how contagion concerns are related to imagined or hypothetical contact. It stands to reason, though, that if these concerns are related to a desire to avoid contact, then people who possess such concerns should also have less actual contact with LG people. To test this, Study 2b also included a measure of participants' past contact with lesbian/gay people.

The findings from Study 2a also indicated that contagion concerns predicted a desire to avoid contact with a same-sex LG classmate regardless of whether that contact would be primarily private or public. These findings suggest that contagion concerns reflect a general apprehension over being miscategorized as gay/lesbian, without regard to who is doing the categorizing. However, it is possible that heterosexuals' concerns over being incorrectly identified as gay or lesbian could vary depending on the sexual orientation of the perceiver. That is, concerns over being miscategorized by a gay or lesbian person might be distinct from concerns over being miscategorized by other heterosexuals.

To test whether contagion concerns differ depending on whether the miscategorization is made by a heterosexual or LG audience, a modified version of the contagion measure was administered during the experimental session. In this measure, new items were combined with those from the original scale to create two conceptually distinct measures, one assessing ingroup contagion concerns (concerns over being misperceived by other heterosexuals) and the other assessing outgroup contagion concerns (concerns over being misperceived by LG people). We examined whether these items loaded onto separate factors and whether they differentially predicted responses to LG contact.

Method

Participants and design. Participants were 59 heterosexual undergraduate introductory psychology students (70% female; 64% White; $M_{\rm age} = 20.37$ years, SD = 5.68) who completed the study in partial fulfillment of a course requirement. Six additional participants who identified as LG were not included in the analyses. Forty of the participants also took part in a pretest assessment of both contagion concerns and moral condemnation of homosexuality.

Procedure and materials. Several weeks prior to participating in the study, participants had the opportunity to complete an online survey as part of a larger mass prescreening. The social contagion and moral condemnation measures were included in this survey. Where available, participants' data from this pretest measure were matched to their responses in the laboratory session.

Participants were brought to the lab and were given a questionnaire packet, which they were told was designed to assess their attitudes toward other people and groups. This questionnaire began with a hypothetical scenario that described contact with a same-sex LG individual. After responding to the scenario, participants filled out a revised version of the social contagion measure, the moral condemnation measure, and items assessing actual positive past contact with LG individuals. The last page of the questionnaire packet asked for demographic information, including participant sexual orientation. After they finished filling out the questionnaire packet, participants were debriefed and dismissed.

Hypothetical scenario. Participants were asked to imagine a hypothetical scenario in which they moved into a new apartment and found out that their roommate was gay or lesbian (scenarios and follow up questions were matched to the participant's gender). They were then asked to respond to five items designed to assess their desire to avoid their new roommate (e.g., "How likely are you to become friends with your roommate?"; "You don't have anything to do one night, and s/he invites you to go out with her/him and some of her/his friends. How likely are you to take her/him up on her/his offer?"). Responses were provided on a 7-point Likert-type scale. Item scores were averaged to create a measure of participants' general desire to avoid contact, with higher scores indicating a greater desire to avoid ($\alpha = .85$).

Components of sexual prejudice. Social contagion concerns and moral condemnation of homosexuality were assessed prior to the study in the mass screening and again in the questionnaire packet at the end of the study. The items used in the mass screening were the same as in the previous studies (contagion $\alpha = .81$; moral condemnation $\alpha = .70$). The items used to assess moral condemnation in the study session were also the same as in the previous studies ($\alpha = .83$). However, additional items were included in the contagion measure assessed in the study session (see description below).

New items were added to the contagion measure that was administered at the end of the study to distinguish between contagion concerns involving ingroup members (concerns over being misperceived by other heterosexuals) and concerns involving outgroup members (i.e., concerns over being misperceived by LG people). This approach allowed us to examine whether these two different concerns reflected an overarching contagion concern or if they reflected distinct constructs. Three additional items were included to assess contagion concerns where the target audience of concern was unspecified but presumably heterosexual,³ and three additional items were included to assess concerns when the target audience of concern was the outgroup (i.e., LG individuals).

Past contact. Positive past contact with LG individuals was assessed using a four-item self-report measure (e.g., "Over the course of my life, I have had many homosexual friends"; "In the past, my experiences with homosexual people have been pleasant"; $\alpha = .82$). Participants rated their agreement on a 7-point Likert-type scale. Items were averaged to create an index of positive past contact, with higher values indicating more agreement with the statement.

Fear of negative evaluation. As in Study 2a, participants completed the Brief Fear of Negative Evaluation Scale (BFNE; Leary, 1983) in order to distinguish concerns about social contagion from social concerns more generally ($\alpha = .90$).

Results

To test whether contagion concerns measured at an earlier session would predict responses to the hypothetical interorientation contact scenario, participants' desire to avoid the LG roommate was regressed on to the pretest measures of social contagion, moral condemnation, and participant gender (for all analyses, tolerance was over .75, and the VIF was under 1.5). For this and all other analyses in this study, a Gender × Contagion interaction was also included in the analysis to explore whether social contagion concerns had similar associations with avoidance for men and women. However, because the interaction term was not significant in any of the analyses (ps > .44), the more streamlined analyses are reported. Including participants' fear of negative evaluation as a covariate did not influence the results, so the analyses without BFNE are presented. As in the previous study, contagion concerns were the only significant predictor of participants' responses. Greater contagion concerns at the pretest assessment predicted greater desire to avoid the gay or lesbian roommate ($\beta = .65, p <$.001). None of the other predictors were significant (ps > .19).

To test whether contagion concerns also predicted participants' actual contact with LG people, the measure of past contact assessed in the lab was similarly regressed onto the pretest contagion and moral condemnation measures, participant gender, and the interaction between gender and social contagion. Once again, contagion concerns were the only significant predictor of past contact with LG people ($\beta = -.51$, p = .006), with greater contagion concerns predicting less frequent past contact with LG individuals. None of the other predictors were significant (ps > .78).

Ingroup and outgroup contagion concerns. In order to determine whether contagion concerns are best defined as general concerns over being misclassified as gay or lesbian or if they are unique to different audiences, an exploratory factor analysis was conducted on the expanded version of the contagion measure that was assessed at the end of the study session. Examination of the scree plot suggested only one meaningful factor (Eigenvalue = 5.60). Further, when a two factor structure was forced, the second factor was comprised of only two items, one ingroup and one outgroup, that were syntactically similar. Additionally, comparison of the reliability analyses for the ingroup ($\alpha = .88$), outgroup ($\alpha = .77$), and combined contagion ($\alpha = .91$) measures suggests that combining the two measures results in the highest level of internal reliability.

When the analysis of the desire to avoid the roommate was repeated with each of the three versions of the contagion measure,

³ Because the items assessing the responses of heterosexual people did not explicitly mention the sexual orientation of the presumed audience (e.g., "It would bother me if other people mistakenly thought I was homosexual"), we wanted to confirm that participants interpreted the items as referring to a heterosexual audience. Therefore, 45 heterosexual participants (76% female) completed this 10-item version of the contagion scale and then were asked to indicate for each item of the scale whether they were thinking of other heterosexuals, lesbians and gay men, or both groups when they originally completed the questionnaire. For all but one of the items assessing concerns involving ingroup members, 96%–98% of the participants indicated that they were only thinking of heterosexuals when completing the item. For the remaining item, 91% indicated they were only thinking of heterosexuals. These findings confirmed that the items were being interpreted as we intended.

in all three equations, the measure of contagion was the only significant predictor of desire to avoid contact with the same-sex LG roommate, and in all cases, the measure explained similar levels of variance (Outgroup, β = .65; Ingroup, β = .61; Combined, β = .67; ps < .001). Regardless of how contagion was assessed, participants who possessed greater contagion concerns felt a greater desire to avoid the same-sex LG roommate.

Discussion

The results of Study 2b provide further evidence that social contagion concerns are an important element of responses toward contact with sexual minorities. Results replicated earlier findings that greater contagion concerns predicted more negative responses to hypothetical contact with a same-sex LG individual when participants reported their contagion concerns several weeks prior at a mass screening pretest session. In addition, contagion concerns predicted actual past positive contact with LG people. Participants expressing greater contagion concerns reported less positive past contact with LG individuals.

Analysis of the contagion construct itself also suggests that contagion concerns are not necessarily directed toward a particular audience. A factor analysis and reliability analyses both suggested that contagion concerns are best conceptualized as global concerns. That is, contagion concerns appear to reflect concerns about misclassification in a general sense rather than distinct concerns about responses from either ingroup or outgroup members. Therefore, people who tend to possess concerns about being misclassified by ingroup members also possess concerns about being misclassified by outgroup members. A series of regression analyses using expanded measures of contagion, which addressed ingroup and outgroup concerns separately, further showed that, regardless of the target of the concerns, contagion similarly predicted desire to avoid a hypothetical gay or lesbian roommate.

Study 3

Thus far, we have established that contagion concerns are associated with anxiety and avoidance in response to hypothetical interactions with LG people. Study 3 expands upon these findings by testing how contagion concerns predict participants' responses when they believe they are about to take part in an interorientation interaction. Participants in Study 3 were told that they would engage in an interaction with a same-sex lesbian or gay man. After finding out about the interaction, they completed questionnaires assessing their contagion concerns, anxiety, desire to avoid the upcoming interaction, and levels of traditional sexual prejudice. We predicted that contagion concerns would predict anxiety about interacting with a lesbian or gay interaction partner and the desire to avoid the interaction. In the current study, we also examined whether the impact of contagion concerns on the desire to avoid interorientation contact was via the experience of anxiety about such contact. We hypothesized that concerns about being misclassified as LG create anxiety about the implications of contact and that this anxiety contributes directly to the desire to avoid contact.

In the present study, we also assessed participants' specific concerns that their gay/lesbian partner would try to make sexual advances toward them. We predicted that participants who were concerned about being misidentified as gay/lesbian by their interaction partner would be more concerned about sexual advances from their partner. However, we did not expect these concerns to be the key predictor of their desire to avoid the interorientation contact. That is, although sexual advances may be one outcome of misclassification, we do not believe the avoidance of LG contact we have seen in the previous studies by people high in contagion concerns was simply due to concerns about sexual advances. By assessing concerns about sexual advances in the present study, we were able to determine the degree to which they underlie the desire to avoid contact.

Method

Participants. Respondents were 56 heterosexual introductory psychology students (64% female; 75% White; $M_{\rm age}=19.63$ years, SD=1.65) who participated in exchange for course credit. One participant who identified as bisexual and three participants who did not report sexual orientation completed the procedure but were not included in any analyses. Eight additional participants completed the procedure but were excluded from analyses because they either incorrectly recalled their partner's sexual orientation (n=6) or did not believe they were going to have an interaction (n=2). However, inclusion of these participants did not influence the results of the analyses.

Procedure. Participants came to the lab individually and were greeted by a female experimenter who explained that the research project examined interactions between people who differed in their sexual orientation. They were then told that they would engage in an interaction with a same-sex lesbian or gay student. Participants were told that before having the interaction, they would complete a series of questionnaires. After completing the questionnaires, participants were probed for suspicion about the upcoming interaction, informed that no interaction would take place, thanked for their time, and dismissed.

Materials. Participants first completed a series of questions about their thoughts and feelings regarding the upcoming interaction. Responses were made on a rating scale ranging from 1 (strongly disagree) to 7 (strongly agree). Ten of these items tapped into the participants' contagion concerns about being misperceived as gay or lesbian during the interaction with higher scores indicating greater contagion concerns (e.g., "I am concerned that my interaction partner will think that I am a lesbian/gay man"; "If other people see me interacting with my interaction partner, I worry they will think I'm a lesbian/gay man"; $\alpha = .71$). Participants were also asked to evaluate the degree to which they were experiencing different emotions in response to the upcoming interaction (e.g., happy, anxious) on a scale ranging from 1 (doesn't apply at all) to 7 (applies very much). Ten of these items assessed anxiety (e.g., uneasy, anxious; $\alpha = .80$) and were combined to create an index with higher scores indicating greater levels of anxiety. Also included were four items assessing participants' concerns that their interaction partner would flirt or make sexual advances toward them (e.g., "I am concerned that my partner will flirt with me"; "I worry that my interaction partner is going to make sexual advances toward me"; $\alpha = .80$). Higher scores indicate more concerns about sexual advances. Participants' desire to avoid the interaction was assessed via six items (e.g., "If given the option, I would avoid having this interaction"; $\alpha = .84$) that were rated on a scale ranging from 1 (strongly disagree) to 7 (strongly agree) and averaged so that higher scores indicated a greater desire to avoid the interaction.

Participants next completed the five-item versions of Herek's (1998) ATG and ATL scales to assess their levels of sexual prejudice as in Study 2a. Of key interest were the female participants' scores on the ATL ($\alpha=.66$) and male participants' scores on the ATG ($\alpha=.81$). Participants then responded to two items asking them to recall the gender and sexual orientation of their interaction partner. Finally, participants completed a basic demographics form that asked about their age, gender, sexual orientation, and race/ethnicity.

Results

Participants' responses were examined using regression analyses. Of interest was whether contagion concerns would predict anxiety about and the desire to avoid the upcoming interaction above and beyond gender and sexual prejudice (across analyses, tolerance was over 0.65 and VIF under 1.5). We were also interested in the possible role of anxiety as a mediator in the relationship between contagion concerns and the desire to avoid the interaction.

Since all participants expected to have an interaction with a same-gender lesbian or gay man, as in Study 2a, in all analyses we used the participants' sexual prejudice scores that assessed attitudes toward same-sex lesbian or gay individuals. In addition, all analyses were repeated including a Participant Gender \times Contagion interaction, but because the interaction term was not significant in any of the analyses, the more streamlined analyses are reported. Across the analyses, effects that are not explicitly mentioned did not approach significance.

Anxiety. Linear regression was used to examine the roles of contagion concerns, gender, sexual prejudice, and the interaction between contagion and prejudice in predicting participants' anxiety about their upcoming interaction. Results indicated that contagion was a significant predictor of anxiety ($\beta = .55$, p < .001), such that participants with greater contagion concerns expressed increased anxiety about the upcoming interaction relative to participants with lower contagion concerns.

Concern with sexual advances. In order to examine participants' concerns about being the target of sexual advances from their partner, a linear regression was conducted on the concerns about sexual advances scores with contagion concerns, gender, sexual prejudice, and the interaction between contagion and prejudice as predictors. Results indicated that contagion was a significant predictor of concerns over sexual advances ($\beta = .56$, p < .001), such that participants with greater contagion concerns expressed increased concerns that their interaction partner would make sexual advances.

Avoidance. To examine the effects of contagion concerns on avoidance, participants' desire to avoid the upcoming interaction was regressed on contagion, gender, sexual prejudice, and the interaction between contagion and prejudice. Contagion was a significant predictor of the desire to avoid the interaction ($\beta = .42$, p = .001), with participants higher in contagion concerns expressing a greater desire to avoid the interaction than participants lower in contagion concerns. Sexual prejudice emerged as a marginally significant predictor of the desire to avoid ($\beta = .23$, p = .06), indicating that participants with higher levels of sexual prejudice

tended to express a greater desire to avoid the upcoming interaction than participants with lower levels of sexual prejudice.

Mediation analyses. Finally, we explored whether anxiety mediated the relationship between contagion and the desire to avoid the upcoming interaction. The linear regression analysis of avoidance was repeated with anxiety as an additional predictor. In this analysis, anxiety significantly predicted avoidance ($\beta = .50$, p < .001), indicating that as anxiety increased so did the desire to avoid the interaction. Further, when anxiety was included in the regression, contagion no longer predicted participants' desire to avoid the interaction ($\beta = .14$, p = .26). Mediation using the bootstrapping method (Preacher & Hayes, 2008) indicated that the indirect effect differed significantly from zero (CI [0.16, 0.68], p < .05), suggesting that anxiety significantly mediated the relationship between contagion concerns and the desire to avoid the upcoming interaction.

When parallel analyses were conducted to examine whether avoidance mediated the effect of contagion on anxiety, contagion continued to be a strong predictor of anxiety ($\beta = .35$, p = .005) when avoidance was included in the regression equation ($\beta = .49$, p < .001). Further, if concern with sexual advances was included in analyses predicting avoidance instead of anxiety, sexual advances did not predict avoidance over and above social contagion concerns ($\beta = -.04$, p = .80). Similarly, sexual advances did not predict anxiety over and above social contagion concerns ($\beta = .17$, p = .24).

Discussion

The results from Study 3 provide further evidence that contagion concerns play an important role in interorientation interactions. Above and beyond traditional sexual prejudice, contagion concerns predicted anxiety and the desire to avoid an interaction with a same-sex lesbian or gay man. Specifically, participants with greater contagion concerns reported more anxiety and a greater desire to avoid the upcoming interaction than did participants with lower contagion concerns. In contrast, when contagion concerns were entered into analyses, traditional sexual prejudice did not significantly predict anxiety and only marginally predicted the desire to avoid the interaction.

Study 3 also shed light onto the role that contagion concerns play in the desire to avoid LG people. Results from the mediation analyses indicate that the influence of contagion concerns on avoidance is through anxiety. Specifically, participants with heightened contagion concerns experience increased anxiety about interorientation interactions and this anxiety is related to an increased desire to avoid LG people.

In the current study, we also found that people who were concerned about being misidentified as gay or lesbian were also more concerned about being the target of sexual advances by their same-sex gay or lesbian interaction partner. Although we had anticipated that concerns about sexual advances would be one implication of contagion concerns, we did not expect that it would be the sole concern precipitating the avoidance of LG individuals. Consistent with our predictions, concern with sexual advances did not account for the effect of social contagion concerns on either avoidance or anxiety.

Study 4

The results of Study 3 demonstrated that social contagion concerns play an important role in anticipated interorientation interactions. Specifically, the results indicate that contagion concerns contribute to both heterosexuals' anxiety about and desire to avoid interacting with lesbians and gay men. These findings suggest that social contagion concerns might interfere with pleasant and productive interactions between heterosexual and LG individuals. However, Study 3 did not directly examine the role that contagion concerns play in actual behaviors regarding interorientation interactions. Thus, Study 4 examined how contagion concerns manifest in actual behaviors.

As in Study 2B, we assessed contagion concerns and general sexual prejudice prior to the experimental session to further illustrate that contagion concerns are not a post hoc justification for the desire to avoid lesbians and gay men. During the experimental session, participants in Study 4 exchanged video greetings with a same-sex interaction partner (actually a confederate) who indicated that he/she was heterosexual or gay/lesbian. Independent coders then rated participants' video greetings for avoidant and unpleasant behavior. We included unpleasant as well as avoidant responses because one effective way of demonstrating that one is not a member of a group is to behave negatively toward the group's members. We predicted that participants' contagion concerns would uniquely predict avoidant and unpleasant behavior during the video greeting if their partner was a lesbian or gay man, but that contagion concerns would be unrelated to responding to the straight partner.

Method

Participants. Respondents were 49 heterosexual introductory psychology students (65% female; 82% White; $M_{\rm age}=18.57$ years, SD=1.00) who participated in exchange for course credit. Eight additional participants completed the procedure but were excluded from analyses because they incorrectly recalled their partner's sexual orientation on the manipulation check.

Procedure and materials. Up to 3 months prior to participating in the study, participants completed an online survey as part of a larger mass prescreening. Included in this survey were the four-item version of the contagion scale ($\alpha=.88$) and the six-item version of Herek's (1998) Attitudes Toward Lesbians and Gay Men scales (ATL and ATG). Of key interest were female participants' scores on the ATL ($\alpha=.85$) and male participants' scores on the ATG ($\alpha=.87$). Space constraints in the mass screening precluded using longer versions of the contagion or ATL and ATG scales.

During the experimental session, participants were told that the study examined interactions between people who had not previously met and that prior to meeting with another research participant, they would exchange video greetings. The partner was in reality a confederate whose gender was always matched to the participant's gender. Participants were randomly assigned to the heterosexual or gay/lesbian partner condition.

The video greetings consisted of basic, getting-acquainted information (e.g., favorite class). Participants were told that since they had arrived to the lab after their partner, their partner had already made his or her video. Therefore, the participant would first watch the partner's video and then make a video to exchange.

Included in the getting-acquainted questions was an item asking about favorite activities. In the answer to this question, the confederate revealed that he or she was either heterosexual or gay/lesbian by stating that he or she liked doing things with his or her boyfriend or girlfriend. Participants then made a video greeting for the partner.

After making the video for their partner, participants responded to two items asking them to recall the gender and sexual orientation of their interaction partner. Participants also completed a measure of general social anxiety, Mattick and Clarke's (1998) social interaction anxiety scale, so that we could distinguish behavior arising from social contagion concerns from that due to general social anxiety. Participants indicated across 19 items (e.g., "When mixing socially, I am uncomfortable"; $\alpha = .87$) the degree to which each statement was characteristic of them on a scale ranging from 0 (not at all characteristic or true of me) to 4 (extremely characteristic or true of me). Participants also provided demographic information regarding their age, gender, sexual orientation, and race/ethnicity. Finally, participants were probed for suspicion about the upcoming interaction, informed that no interaction would take place, debriefed, and dismissed.

Video rating. Two coders independently watched and rated the participants' video greetings. Coders were blind to the participants' experimental condition and the purpose of the study. Participants' video greetings were coded on a series of items to assess avoidant/unpleasant behavior (e.g., discomfort, expressiveness, friendliness, engagement, speech flow, and self-disclosure). The raters had good agreement in their initial item ratings (rs = .70-.90) and for the full scale combined (r = .88). Discrepancies in ratings were discussed by raters until a consensus was reached. If a consensus could not be reached, scores from raters were averaged (3% of ratings). Video rating items were reverse scored where necessary and averaged so that higher scores indicated more uncomfortable and unpleasant responses ($\alpha = .83$).

Results

In the current study, we sought to examine the effect of contagion concerns on the degree to which participants displayed avoidant and unpleasant responses in the video greetings they made for their partner as a function of the partner's sexual orientation. We regressed ratings of participants' videos on participant's gender, contagion concerns, general social anxiety, and partner's sexual orientation as well as the interaction between contagion concerns and partner's sexual orientation. When all possible interactions with gender and contagion and partner's sexual orientation were included in the analyses, there were no effects involving gender (ps > .10). Thus, these interactions were removed for the reported analyses. As in the previous studies, the tolerance and VIF scores for all predictors (over 0.93 and under 1.07, respectively) indicated that multicollinearity is unlikely to be an issue.

The analysis revealed no significant main effects of participants' gender, contagion concerns, general social anxiety, or partner's sexual orientation on video ratings (ts < 0.48, ps > .63). However, as predicted, there was a significant interaction between contagion concerns and partner's sexual orientation ($\beta = .38, p = .01$; see Figure 2). Simple slopes analyses indicated that contagion concerns were a significant predictor of responses to the gay/lesbian interaction partner such that participants who were higher in con-

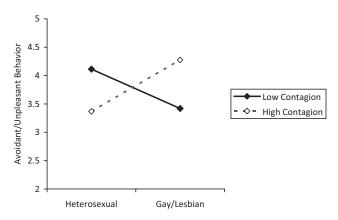


Figure 2. Avoidant and unpleasant behavior toward the interaction partner as a function of social contagion concerns and sexual orientation of partner, Study 4.

tagion concerns were rated as more avoidant and uncomfortable than participants who were lower in contagion concerns (β = .41, p = .05). However, contagion concerns were not a significant predictor of avoidant and uncomfortable behaviors toward a heterosexual partner (β = -.35, p = .09). Considered the other way, for participants with high levels of contagion concerns (1 *SD* above the mean), participants who made a video for a gay/lesbian partner were rated as more avoidant and unpleasant than participants who made a video for a heterosexual partner (β = .44, p = .04). However, for participants with low levels of contagion concerns (1 *SD* below the mean), there was no difference in ratings based on whether the video was made for a gay/lesbian or heterosexual partner (β = -.31, p = .13).

Analyses using sexual prejudice. We also wanted to examine the extent to which contagion concerns specifically, and not sexual prejudice generally, predicted more avoidant and uncomfortable responses to a lesbian/gay interaction partner. To this end, we repeated the analyses but replaced the social contagion concerns with attitudes toward same-gender lesbian or gay individuals. Results indicated, as with the analyses examining the role of contagion concerns, there were no significant main effects of gender, social anxiety, or partner's sexual orientation on the video responses (ts < 0.45, ps > .65). There was a marginal main effect of general sexual prejudice such that higher self-reported sexual prejudice was related to more avoidant video responses ($\beta = .28$, p = .07), but general sexual prejudice did not interact with partner's sexual orientation ($\beta = .06$, p = .67).

Discussion

Results from Study 4 provide evidence that contagion concerns play an important role not only in imagined and anticipated interactions with lesbians and gay men, but also in behavioral responses to lesbians and gay men. When making a video greeting for a same-sex lesbian or gay interaction partner, participants higher in contagion concerns were rated as more avoidant and unpleasant than participants lower in contagion concerns. Results from Study 3 indicated that heterosexuals high in contagion concerns report more anxiety about and a greater desire to avoid contact with lesbians and gay men than did those low in contagion concerns.

The findings from Study 4 suggest that when contact with lesbians and gay men cannot be avoided, heterosexuals high in contagion concerns act in avoidant and unpleasant ways toward lesbians and gay men. The findings from the current study further indicate that these behavioral responses could not be attributed to general social anxiety on the part of the participants. Also noteworthy, the analyses examining the role of general sexual prejudice also revealed that it is contagion concerns specifically, and not sexual prejudice more generally, that predict avoidant and uncomfortable responses to a gay/lesbian interaction partner.

Study 5

Thus far all of our findings have focused on self-reported individual differences in social contagion concerns. Although we anticipate that people differ in the degree to which they experience these concerns, we also anticipate that situational factors are likely to influence the degree of social contagion concerns. We wanted to demonstrate the implications of manipulating social contagion concerns on people's actual behavior when interacting with a lesbian or gay man. To this end, we conducted an experiment in which we manipulated whether participants felt publicly (high contagion) or privately (low contagion) associated with their college's lesbian, gay, bisexual, and transgender (LGBT) organization (S.O.U.L.). Following the manipulation, all participants interacted with the vice president of S.O.U.L., a gay male college student.

We predicted that the experience of social contagion concerns about being misidentified as gay or lesbian would heighten people's motivation to avoid behaviors or situations that could contribute to the misclassification of their sexual orientation. As a result, the high contagion condition participants were expected to feel more anxious while interacting with the S.O.U.L. representative, have a greater desire to avoid the interaction, and be more likely to physically distance themselves from the S.O.U.L. representative compared to the low contagion condition participants.

We anticipated that the avoidant responses of our participants in the high contagion condition would influence their behaviors during the interaction and be identifiable by the confederate. Previous work examining intergroup interactions found that people who engage in an interaction with an avoidance-focus (i.e., the desire to avoid the interaction) behave in a more anxious, avoidant, and less friendly manner that is apparent to their interaction partner (Plant & Butz, 2006). Therefore, we predicted that the confederate would perceive individuals in the high contagion condition to be more anxious and avoidant and less friendly than those in the low contagion condition. In addition, we predicted that the S.O.U.L. representative would feel more anxious when interacting with individuals high in social contagion concerns relative to those who were low in social contagion concerns.

Because the representative of the club was always a gay man, it was possible that when social contagion concerns were heightened our male participants in the current study would respond more strongly than our female participants. However, in the present study we targeted concerns over misidentification through associ-

 $^{^4}$ The analyses were also repeated including contagion, attitudes toward lesbians and gay men (ATLG), partner sexual orientation, and all possible interactions. Although this analysis was a bit underpowered, there was no indication of a three-way interaction ($\beta = .03$, p = .88).

ation with the LGBT organization, and the young man was serving as a representative of that organization as a whole. In addition, contagion concerns have to do with an overall threat of misclassification, rather than simply concerns regarding sexual advances (as illustrated in Study 3). As a result, we expected male and female participants in the high contagion condition would both respond to the confederate with heightened anxiety and avoidance (i.e., to disassociate with the organization).

In this final study we also examined the role that social contagion concerns play in willingness to engage in public support of lesbian, gay, and bisexual (LGB) rights (e.g., sign a petition, attend a rally) as well as private support for LGB rights (e.g., voting behavior, writing an anonymous letter). We argue that in addition to leading people to want to avoid contact with gay men and lesbians, concerns with being misidentified as gay would also lead people to shy away from any behavior they perceive as increasing the likelihood of misidentification, including publicly supporting LGB rights. However, social contagion concerns were not hypothesized to influence willingness to engage in more private support.

Method

Participants and design. Participants were 40 undergraduate college students (50% female) who completed the study in partial fulfillment of a requirement for their introductory psychology course. Participants were at least 18 years of age and self-identified as heterosexual. Contagion concerns were manipulated by asking participants to create a poster publicizing the S.O.U.L. club that would be displayed in the student union and to write their name on the poster (high contagion) or to complete the same poster without their name on it (low contagion). Participants were randomly assigned to contagion condition.

Procedure. Participants came to the lab individually to complete a study that they believed focused on the role of personality in creativity. Upon entering the lab, participants were led into a room containing materials to construct a poster for a campus club. Participants were instructed that they would have 10 min to utilize the materials provided to create a poster for one of the campus clubs, and that they had been assigned to create a poster for the S.O.U.L. LGBT club. Half of the participants were instructed to write their name on their poster, and half were not instructed to write their name on their poster. The experimenter explained that the poster would be displayed with others in the student union to be judged by a panel of their student body peers to determine the most creative. They were further informed that if their poster was chosen, it would be utilized in the creation of actual advertising posters across campus. Participants were then informed that the clubs participating in the experiment had representatives present who would like to talk with them and that they would meet with the vice president of S.O.U.L. to discuss the club.

Participants were then led to an adjacent room in the lab that contained two chairs facing one another that were placed 18 in. (45.72 cm) apart. Participants were told that they would meet with the S.O.U.L. representative next and that they could move their chair so that they would be comfortable during the interaction. The experimenter then left the lab to retrieve the vice president of S.O.U.L., who was blind to the experimental condition. After introducing the participant to the representative, the experimenter left the room, and the representative initiated a scripted conversa-

tion with each participant that included information about S.O.U.L., some questions for the participant, and an opportunity for participants to ask questions.

At the conclusion of the interaction, which took about 5 min on average, the experimenter led participants back to the first room to complete a series of questionnaires on a computer. The questionnaire included assessments of their experience during the interaction, some filler questionnaires related to personality, and measures of proactive behavior supporting LGB rights. During this time, the confederate also completed a questionnaire regarding his experience during the interaction and his impressions of the participant's reactions, and the experimenter measured the distance between the chairs from the interaction portion of the experiment. After completion of the questionnaires, participants were debriefed and given an opportunity to ask questions.

Materials.

Poster materials. Poster materials included a magnetic white board, four colored markers, a variety of magnetic pictures depicting gay themed images, and an instruction sheet providing information regarding the club information that should be included on the poster. In the high contagion condition, the instruction sheet also indicated that participants should write their name on the poster.

State contagion concerns. To assess whether the poster manipulation influenced participants' contagion concerns specifically regarding their interaction with the S.O.U.L. representative, an eight-item situational measure of state social contagion concerns was created (e.g., "If my poster is chosen, I will worry that others may think that I am gay"; "I am glad other participants are not present, because I would worry that they would think I am gay"). Responses were made using a 9-point Likert type scale ranging from 1 (strongly disagree) to 9 (strongly agree). These items were then averaged to create a measure of social contagion concerns, with higher values indicating greater concern ($\alpha = .80$).

Sexual prejudice. Our manipulation was designed to influence contagion concerns but not general attitudes toward gay men or lesbians. Thus, participants also completed the attitudes toward gay men and lesbians scale ($\alpha = .94$) to confirm that this was the case.

Participant interaction questionnaire. Participants' level of anxiety during the interaction and their desire to avoid the interaction were assessed via an adapted version of the Social Interaction Questionnaire (Plant & Butz, 2006). Participants responded to five items related to anxiety (e.g., "During the interaction I felt anxious"; $\alpha = .80$) and six items related to avoidance (e.g., "I wish I could have avoided this specific interaction"; $\alpha = .82$) on a scale ranging from 1 (strongly disagree) to 9 (strongly agree). Items were reverse scored where necessary and averaged so that higher scores indicated more anxiety and a greater desire to avoid the interaction, respectively.

Support for LGB rights. We anticipated that the contagion manipulation would influence participants' willingness to publicly support LGB rights but not their willingness to privately support LGB rights. Therefore, participants were asked to indicate how likely they would be to engage in each of a series of behaviors supporting LGB rights on a scale from 1 (strongly disagree) to 9 (strongly agree). Seven of these behaviors clearly involved public support (e.g., "Attend a gay pride parade"; "Volunteer at a straight/ gay alliance booth at a community festival"; $\alpha = .95$). Six of these

items clearly involved private support (e.g., "Vote for a political candidate who is pro gay marriage"; "Write an anonymous letter to a local paper in support of a gay cause"; $\alpha = .88$). Finally, participants were offered an opportunity to sign a petition to support the creation of an LGBT center on campus. Participants viewed a petition on the computer that included fictional signatures, and then they were offered an opportunity to sign the petition. Presumably, if the participants chose to sign the petition, future participants would see their names on the list and know they had supported the LGBT center. Participants indicated whether they wished to sign the petition or if they wished to decline.

Confederate interaction questionnaire. To assess the confederate's perception of the participant's reactions, he rated each participant on a scale ranging from 1 to 9 in terms of the participant's level of anxiety, desire to avoid the interaction, and overall friendliness. The confederate also rated his own level of anxiety during the interaction. Higher scores indicated greater levels of each variable.

Results

Initial analyses were conducted on all participant responses to the interaction using analysis of variance (ANOVA), with experimental condition and participant gender as factors. However, the results revealed that the only effect of gender was a main effect for avoidance such that male participants reported more of a desire to avoid the interaction (M = 4.55, SD = 1.34) across conditions than the female participants (M = 3.09, SD = 1.24), F(1, 36) = 10.20, p < .01. Therefore, to simplify presentation, simple t-test results of condition are presented.

Participant responses. Examination of participants' current social contagion concerns (i.e., state contagion scores) revealed that individuals in the high contagion condition expressed greater contagion concerns than did those in the low contagion condition, t(38) = 4.25, p < .001, d = 1.47 (see Table 2 for means and standard deviations). Examination of the ATLG scores both combined and separately for attitudes toward gay

Table 2
Means and Standard Deviations for Participant and Confederate
Dependent Variables as a Function of Contagion Condition in
Study 5

	Contagion condition					
	High co	ntagion	Low contagion			
Dependent measure	M	SD	M	SD		
Participant						
Contagion concerns	2.49	1.17	1.31	0.43		
Interaction anxiety	3.08	1.47	1.86	0.90		
Avoidance	4.39	1.45	3.25	1.29		
Physical distancing [†]	28.83	7.70	24.92	6.22		
Confederate						
Personal anxiety	1.98	1.25	1.23	0.62		
Participant anxiety [†]	2.25	1.51	1.53	0.80		
Participant avoidance	2.65	2.20	1.43	1.17		
Participant friendliness	5.00	2.21	6.27	1.48		

Note. Means for all dependent variables are significantly different across condition at p < .05 unless noted with a superscript dagger.

men and lesbians revealed that there was no effect of the manipulation on general attitudes toward gay men or lesbians (ts < 1.45, ps > .16). Thus, as intended, the manipulation influenced contagion concerns but not general sexual prejudice.

As predicted, individuals in the high contagion condition expressed greater anxiety during the interaction than did those in the low contagion condition, t(38) = 3.16, p = .003, d = 1.03. Also consistent with predictions, individuals in the high contagion condition expressed a greater desire to avoid the interaction than did those in the low contagion condition, t(38) = 2.63, p = .01, d = 0.84. Similarly, there was a trend for individuals in the high contagion condition to actually physically distance themselves from the confederate by sitting further away from him than did those in the low contagion condition, t(38) = 1.77, p = .09, d = 0.57.

In order to examine public and private support for LGB rights as a function of condition, we conducted a mixed-model analysis of variance with public versus private support as the repeated measure and contagion condition as the between subjects factor. We also conducted these analyses with gender as an additional between-subjects factor in the analysis, but the only effect involving gender was a tendency for the female participants to report greater support for gay rights (M = 5.76, SD =1.82) across conditions than the male participants (M = 4.51, SD = 2.24), F(1, 36) = 5.72, p = .02, partial $\eta^2 = .14$, so the simplified analyses are presented. The analysis revealed a main effect of public versus private support, F(1, 38) = 7.82, p =.008, partial $\eta^2 = .17$, which was qualified by the predicted Condition \times Public Versus Private interaction, F(1, 38) = 6.97, p = .01, partial $\eta^2 = .16$ (see Figure 3). Whereas participants in the low contagion condition reported similar levels of public (M = 5.22, SD = 2.51) and private (M = 5.26, SD = 1.89)support for LGB rights and causes, t(38) = -0.37, p = .71, participants in the high contagion condition reported more private (M = 5.01, SD = 2.36) than public (M = 3.73, SD = 3.76)2.51) support for LGB causes, t(38) = -2.09, p = .04. Considered the other way, the high contagion condition resulted in less public support than the low contagion condition, t(19) = -3.40, p = .003, but the conditions did not result in different levels of private support, t(38) = -0.13, p = .90.

In order to examine the role of contagion in proactive behavior supporting sexual minorities, the petition data were subjected to a chi square analysis. Results revealed that a higher proportion of individuals in the low contagion condition signed the petition (75%) than did those in the high contagion condition (45%), $\chi^2(1, N = 40) = 3.75$, p = .05.

Confederate responses. Consistent with the participants' ratings of their own anxiety, there was a marginal effect of contagion condition on the confederate's ratings of participants' anxiety, such that the confederate tended to perceive more anxiety in participants in the high contagion condition than in those in the low contagion condition, t(38) = 1.90, p = .07, d = 0.62. Similarly, the confederate perceived a greater desire to avoid the interaction among participants in the high contagion condition than in those in the low contagion condition, t(38) = 2.20, p = .03, d = 0.71. Finally, the confederate also rated participants in the high contagion condition as less friendly than

p < .10.

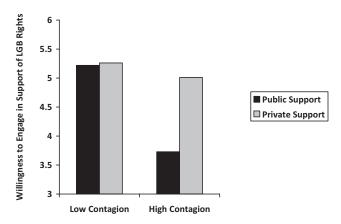


Figure 3. Willingness to engage in behaviors supporting lesbian, gay, and bisexual (LGB) rights as a function of contagion condition and the publicity of the behavior.

those individuals in the low contagion condition, t(38) = -2.13, p = .04, d = 0.69.

Examination of the confederate's personal experience of anxiety during the interaction revealed that the confederate experienced more anxiety during interactions with individuals in the high contagion condition than during those with individuals in the low contagion condition, t(38) = 2.40, p = .02, d = 0.78.

Mediation analyses. We hypothesized that the reason our participants in the contagion condition responded with anxiety and avoidance to interacting with the S.O.U.L. representative and were less publicly supportive of LGB rights compared to participants in the low contagion condition was because they were concerned about being misidentified as gay or lesbian. In order to explore this possibility, we examined whether experimental condition continued to significantly predict the participants responses when we controlled for self-reported state contagion concerns.

Supporting mediation, when we conducted regression analyses predicting participants' anxiety and avoidance during the interaction and included state contagion concerns as a predictor, the previously significant effect of experimental condition dropped below significance (ps > .55) and state social contagion was a significant predictor (for anxiety, $\beta = .69$, p < .001; for avoidance, $\beta = .52$, p = .003). Similarly, social contagion concerns were a strong predictor of participants' public support of LGB rights ($\beta = -.66$, p < .001), but contagion condition was not a predictor when self-reported contagion concerns were included in the same regression equation (p = .73).

In order to examine whether or not state social contagion concerns influenced participants' decision to sign the petition supporting the LGBT center, we conducted a parallel analysis using logistic regression. Self-reported contagion concerns predicted signing the petition (odds ratio [OR] = 2.80, p = .03) but experimental condition did not (OR = 0.82, p = .81) when both were included in the analysis. It is important to note that experimental condition continued to significantly predict self-reported social contagion concerns (ps < .016) when each of these analyses were reversed and state contagion was the dependent variable.

We followed up our regression analyses with the bootstrapping procedure outlined by Preacher and Hayes (2008) in order to

examine whether the indirect effect of condition through state social contagion concerns was significant. In each case, the analysis indicated that the indirect effect was significant (anxiety CI [-0.86, -0.27]; avoidance CI [-0.80, -0.15]; public support CI [0.47, 1.47]; agreeing to sign petition CI [-1.85, -0.07]).

Having explored mediation in the participants' responses, we next moved to examine the confederate's responses. However, initial examination of the confederate's responses to the interaction did not support the idea that self-reported state social contagion on the part of the participants was accounting for the effect of condition on the confederate's experiences. That is, the confederate did not appear to be picking up directly on the participants' degree of social contagion concerns. Previous work by Plant and Butz (2006) suggested that the degree of avoidance-focus of the participants may have influenced the confederate's experiences. Specifically, Plant and Butz demonstrated that when White participants engaged in an interracial interaction with strong interest in avoiding the interaction, their Black interaction partners rated them as more avoidant and the interaction as less pleasant than if the White participants were less avoidant-focused. Based on this work, we wondered whether the confederate in the present study was sensitive to the degree to which the participants had an avoidance-focus during the interaction. If so, then the effect of the contagion condition on the confederates' ratings may be mediated by the participants' motivation to avoid the interaction. Initial analyses confirmed that participants' avoidance-focus was correlated with the confederate rating the participant as less friendly (r = -.54, p < .001) and more anxious (r = .39, p = .01) and avoidant (r = .39) .39, p = .01) and reporting he personally experienced more anxiety during the interaction (r = .37, p = .02).

Next, we conducted regression analyses on the confederate's ratings with experimental condition and participants' avoidance as the predictors. For confederate's personal anxiety, perceptions of participants' avoidance, and participant friendliness the experimental condition was not a significant predictor when participant's avoidance was included as a predictor (ps > .11 with the betas dropping by .10 or more). In addition, the marginal effect of condition on the confederate's ratings of the participants' anxiety dropped (from $\beta = -.29$, p = .07, without participant avoidance to $\beta = -.17$, p = .31, with avoidance included). In each of these analyses participants' avoidance was a significant or marginal predictor above and beyond experimental condition (participant avoidance, $\beta = .31$, p = .06; friendliness, $\beta = -.49$, p = .02; anxiety, $\beta = .33$, p = .05; and confederate anxiety, $\beta = .27$, p = .10).

Bootstrapping analyses indicated that there was a significant indirect effect of condition through the participant's motivation to avoid the interaction for each of the confederate's evaluations of the interaction (confederate anxiety CI [-0.34, -0.003]; participant friendliness CI [0.11, 0.86]; participant avoidance CI [-0.63, -0.04]; and participant anxiety CI [-0.43, -0.03]).

⁵ It could be argued that outside coder ratings to verify the confederate's assessments would bolster confidence in his ratings. However, we would argue that the current method is directly assessing the reactions and emotions of a sexual minority in an ecologically valid manner, and his subjective experiences in these interactions would not likely be accurately assessed by outside raters who were not sexual minorities directly in his situation (see Gilbert, 2006).

It was also possible that the confederate was picking up on the participants' anxiety as opposed to their avoidance and this anxiety was accounting for his evaluations. However, based on Plant and Butz's (2006) findings, we did not predict that the participant's anxiety would contribute negatively to the confederate's experience. Specifically, Plant and Butz found that after controlling for an avoidance-focus, heightened anxiety regarding interracial interactions among White participants actually led to somewhat more positive interaction experiences for the Black interaction partners. Consistent with our predictions, when the above analyses were repeated with participant anxiety as the mediator, it did not indicate that there was a significant indirect effect of condition through the participant's anxiety (i.e., the confidence intervals in each case included 0).

Discussion

The findings from the current study reveal that situations that increase the concerns about being misidentified as gay or lesbian lead to heightened anxiety about and avoidant responses to interorientation interactions. These avoidant responses were not only acknowledged by the participants after the interaction but also apparent to the gay interaction partner. These findings are important because they provide experimental evidence that factors that increase concerns about being misclassified as gay or lesbian influence people's emotional experiences and actual behavioral responses when interacting with a gay man.

Specifically, individuals induced to feel high contagion concerns reported greater anxiety and avoidance motivation following an interaction with a sexual minority than did individuals low in contagion concerns. There was also a trend for participants in the high contagion condition to physically distance themselves more from the S.O.U.L. representative than did those individuals in the low contagion condition. In addition, the heightening of the social contagion concerns lead to less public support of LGB rights by the participants but had no concomitant impact on private support for LGB rights. Mediation analyses revealed that the participants' anxious and avoidant responses during the interaction and relative lack of support for LGB rights in the high contagion condition were due to their heightened concerns that they would be misidentified as gay or lesbian compared to the control condition participants.

Examination of the S.O.U.L. representative's data revealed that he detected greater avoidance motivation in the participants in the high contagion condition relative to those in the low contagion condition. There was also a trend for the representative to notice more anxiety in participants in the high contagion condition than in those who were in the low contagion condition. Correspondingly, the representative reported greater personal anxiety following interactions with high contagion participants than following interactions with low contagion participants. Mediation analyses confirmed that it was the confederate's sensitivity to the heightened avoidance focus on the participants in the high relative to low contagion condition that contributed to his ratings of the participants' anxiety, friendliness, and avoidance and the confederate's own anxiety during the interaction. Taken together, these results suggest that situational factors that induce high contagion concerns negatively impact the individual experiencing the contagion concerns as well as the LG people with whom they interact.

In the current study, participants interacted with a gay male confederate who was the vice president of the LGBT organization. Because he was male, it was possible that our male participants would respond more negatively in the high contagion condition than our female participants. However, we had anticipated that because the manipulation threatened public association with an LGBT organization, both our male and female participants would respond with avoidant reactions to the gay man affiliated with the organization. Consistent with this prediction, in the current study, gender did not interact with the contagion condition and increasing concerns about being associated with the LGBT organization led to anxious and avoidant responses for both our male and female participants. It will be interesting in future work to examine whether contagion concerns lead to the avoidance of cross-gender interorientation interactions in general. We had anticipated that, in more typical interaction settings, these concerns would be highest in interactions with a gay man or lesbian who matched the participant's gender, which is why we chose these types of interactions for our initial studies. However, it would be interesting to test this possibility directly in future work.

Finally, the results from Study 5 suggest that contagion concerns lead individuals to be less willing to engage in proactive support of sexual minorities. Specifically, individuals in the high contagion condition were less likely than their low contagion counterparts to publically sign a petition supporting LGBT campus initiatives or to anticipate publicly supporting LGB rights. Given that majority group members have more power to affect social change than do minority group members, due to their relative status and greater numbers (van Zomeren, Postmes, & Spears, 2008), the finding that contagion concerns inhibit heterosexual individuals' willingness to engage in such support is alarming. The fact that social contagion concerns did not influence willingness to privately support LGB rights is wholly consistent with the conceptualization of the experience of social contagion. It is not that the heterosexual people who experience social contagion concerns are unwilling to support LGB rights, it is that they fear such support will result in being labeled as gay or lesbian themselves.

General Discussion

As noted at the outset of this article, this work addresses a gap in the literature on intergroup relations concerning the role of social and self-image concerns related to group membership. We proposed that when group membership is not clearly identifiable, concerns over being misclassified as a member of a stigmatized group, or social contagion concerns, influence responses toward outgroup members. In the current article, we were particularly interested in the implications of these social contagion concerns with regard to concerns over being misidentified as a sexual minority. We believe that social contagion concerns are an important and previously unexplored factor in the avoidance of gay men and lesbians. As we conceptualize it, social contagion concerns reflect the fear that others will misidentify an important aspect of one's identity. Just as people are motivated to maintain the dominance, prestige, and favorable evaluation of their ingroup (Jost & Banaji, 1994; Jost et al., 2004; Sidanius & Pratto, 1999; Tajfel & Turner, 1986), we believe that people may be sensitive to any threat that would exclude them from their social group and, even worse, result in being miscategorized as an outgroup member.

Across a series of studies, we demonstrated the importance of these social contagion concerns on responses to contact with LG people. Heterosexual participants' concerns over being incorrectly identified as a sexual minority, whether such concerns were measured or manipulated, predicted their anxiety about and desire to avoid contact with lesbian and gay individuals. More specifically, Study 1 revealed that whereas moral condemnation of homosexuality predicted disgust in response to imagined contact with a same-sex LG person, contagion concerns uniquely predicted anxiety. In Studies 2a and 2b, contagion concerns uniquely predicted avoidant responses to hypothetical contact with a same-sex LG person regardless of whether that contact was private or public (Study 2a). Further, contagion concerns independently predicted actual past contact with LG individuals (Study 2b). In Study 3, we demonstrated that contagion concerns predicted both anxiety about and the desire to avoid an anticipated interaction with a same-sex LG person. Study 4 revealed that contagion concerns resulted in actual avoidant and unpleasant behavior when sharing a video greeting with a same-sex gay or lesbian prior to an anticipated interaction.

Finally, Study 5 demonstrated that situational factors that increase the threat of misidentification as gay or lesbian increase social contagion concerns and lead to heightened avoidant responses toward a gay man and less willingness to publicly support LGB rights or proactively support an LGBT center on campus. Mediation analyses showed that the experimental manipulation led participants to become concerned about being misidentified as gay or lesbian, which in turn, predicted increased anxiety, a motivation to avoid contact with the gay head of the LGBT club, and a lack of willingness to publicly support LGB rights. This avoidance motivation on the part of the participants was apparent to the confederate and was associated with a heightening of the confederate's anxiety and his perception that the participants were less friendly, more avoidant, and marginally more anxious.

Across our studies, we repeatedly demonstrated that contagion concerns predicted avoidance above and beyond more traditional assessments of sexual prejudice. In fact, social contagion concerns consistently emerged as the strongest and sometimes as the sole predictor of anxiety and avoidance. These findings underscore the importance of these previously unexamined social contagion concerns in predicting negativity toward lesbians and gay men. In addition, sexual prejudice did not moderate the effects of contagion concerns across our studies, indicating that whether or not individuals possess negative attitudes toward lesbians and gay men, they responded in a more avoidant and unpleasant manner to lesbian/gay people if they were concerned about being misidentified as gay or lesbian.

Analysis of the contagion construct further showed that contagion concerns are not dependent on the sexual orientation of the person potentially doing the misclassifying. For instance, in Study 2a, responses to imagined public and private contact with a same-sex LG person were both predicted by participants' contagion concerns. Study 2b provided further evidence that contagion concerns are not tethered exclusively to ingroup or outgroup members. Separate contagion items that specifically addressed the nature of the audience (ingroup or outgroup) did not show up as distinct factors in an exploratory factor analysis and did not differently predict responding to hypothetical contact with a same-sex LG person. Thus, although the implications of misclassification for an

individual likely vary depending on the audience doing the misclassification, our findings suggest that people who possess contagion concerns tend to possess concerns about both ingroup and outgroup members misidentifying their sexual orientation.

Expanding our examination of sexual prejudice to include these social contagion concerns is critical because these concerns have the potential to limit the likelihood of positive contact with LG people. Across the reported studies, participants who had strong social contagion concerns were anxious about interacting with LG individuals, reported the desire to avoid contact, and reported having engaged in less intergroup contact in the past. Such avoidance of intergroup contact is highly problematic because positive contact is an effective way of reducing negative outgroup attitudes, reducing intergroup anxiety, and promoting positive future intergroup contact (e.g., Pettigrew & Tropp, 2006; Plant, 2004; Plant & Devine, 2003). Further, it is possible that the effect of social contagion concerns on the likelihood of expressing public support for an outgroup could, through the absence of such support, contribute to a perceived social norm of intolerance toward the outgroup being acceptable.

Limitations and Future Directions

In the present work, we tested how concerns over misidentification might uniquely predict responses to contact with members of a stigmatized outgroup. Although across all the reported studies, the contact was with a sexual minority, we believe that these concerns could influence behavior toward other social groups for which membership could be misconstrued. Future work should address social contagion concerns as they apply to other groups where group membership is concealable or not easily identified (e.g., groups based on religion, mental health, political beliefs). For example, because religious beliefs are internal and hard to prove, religious group membership is not always readily apparent, and miscategorization is possible. Concerns about being misidentified as a member of a religious outgroup might then be one reason why some individuals avoid interfaith contact. Similarly, some may choose to avoid interacting with people who possess mental illness for fear of being misclassified as mentally ill.

In future work, we would also like to explore other implications of social contagion concerns for proactive egalitarian behavior. For example, the findings from Study 5 indicate that when people are concerned about being misclassified as gay/lesbian they are more hesitant to publicly support gay rights (e.g., sign a petition, post a sign supporting a marriage equality act, attend a rally). It is possible that confronting prejudice or social injustice might itself be threatening for some people. Individuals high in social contagion concerns may be unwilling to confront perpetrators of prejudice for fear that such public responses would arouse accusations of belonging to the outgroup. For example, if someone were to witness a classmate bullying a fellow student for (presumably) being gay, social contagion concerns may stop the observer from stepping in and putting an end to the cruelty.

Because contagion concerns are important predictors of negative responses to contact with outgroup members and public support of LGB rights, future work should explore how concerns might be mitigated and whether interventions designed to reduce contagion concerns can increase the likelihood and positivity of intergroup contact. For instance, giving people the opportunity to

express their group membership while they are engaging in intergroup contact might reduce concerns about misclassification. Similarly, observing known ingroup members showing support for outgroups or participating in intergroup contact might serve as a model for behavior and signal that such behavior is "safe." If an ingroup member can engage in intergroup contact without being misclassified, then concerns about misclassification might be alleviated.

Conclusion

The results of the above studies highlight the importance of contagion concerns for interorientation contact. Social contagion concerns repeatedly stood out as a unique predictor of negative responses to contact with LG people. The role of contagion concerns in predicting biased responding is particularly important because these concerns might lead people who are not necessarily opposed to homosexuality to respond with bias toward LG people. In addition to reducing the likelihood of positive interorientation contact, such avoidant behaviors have the potential to impact the attitudes and behaviors of others. Specifically, in as much as we can learn about the norms of an environment by observing the behaviors of others around us, avoidant behaviors expressed by individuals with chronic contagion concerns along with their decreased likelihood of public support could also have the negative effect of perpetuating an environment in which the stigmatization of LG people is normalized.

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Appendix

Social Contagion and Moral Condemnation Items

Ingroup Contagion Concerns

- If I was hanging out with a homosexual person, I would worry that other people would think I was a homosexual too.*
- I would worry that others would think I was homosexual if they knew I was friends with a homosexual person.*
- It would bother me if other people mistakenly thought I was homosexual.
- If I went out to dinner with a gay/lesbian person of my same gender, I would worry that people would think we were on a date
- 5. If I had a gay or lesbian friend, I would *not* be concerned that other people would think I was gay. (reverse scored)

Outgroup Contagion Concerns

- If I had to interact with a homosexual person of my same gender, I would worry that he or she would flirt with me.*
- If I were friendly toward a homosexual person of my same gender, he or she would likely mistake my friendliness for flirtation.*
- If I were to become friends with a gay or lesbian person of my own gender, I would be concerned that he or she might think I was homosexual too.
- If I was working closely with a same-sex gay or lesbian person, I would want him or her to know that I was straight.

(Appendix continues)

5. It wouldn't bother me if a gay person thought I was gay too. (reverse scored)

Moral Condemnation

- According to my personal morals, homosexuality is wrong.
- The growing acceptance of homosexuality indicates a decline in American morals.

- Homosexuals can be moral and ethical people. (reverse scored)
- 4. Homosexuality is unnatural.

Note. Items with an asterisk are from the original contagion measure. Additional items were added in Study 2b.

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