2014

Judged by the Company You Keep?: Nonprejudiced Norms Reduce Concerns About Being Misidentified as Gay/Lesbian

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JUDGED BY THE COMPANY YOU KEEP? NONPREJUDICED NORMS REDUCE
CONCERNS ABOUT BEING MISIDENTIFIED AS GAY/LESBIAN

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A Thesis submitted to the
Department of Psychology
in partial fulfillment of the
requirements for the degree of
Master of Science

Degree Awarded:
Summer Semester, 2014
Jessica Cascio defended this thesis on June 19, 2014.
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ACKNOWLEDGMENTS

Thank you Ashby for directing this thesis and being an excellent mentor! Thank you to the many undergraduate students who assisted with data collection.
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ABSTRACT

Social contagion concerns, heterosexuals’ fears about being misidentified as gay/lesbian, can lead to anxiety about and avoidance of interacting with gay men/lesbians and even public derogation of gay men/lesbians. Due to the risk of becoming the target of prejudice if misidentified, we argued that perceptions of others’ prejudice would directly affect contagion concerns. Specifically, we hypothesized that exposing people to others’ nonprejudiced attitudes can significantly reduce heterosexuals’ contagion concerns as well as their anxiety about and avoidance of gay men/lesbians. In the first study, we demonstrated that perceptions of peer prejudice significantly contributed to contagion concerns, over and above one’s own level of prejudice. In the second study, participants who were exposed to a nonprejudiced norm expressed significantly lower contagion concerns, anxiety about, and desire to avoid gay men/lesbians than participants exposed to a high prejudice norm. These results provide evidence that changing perceptions of others’ prejudice can reduce individual contagion concerns.
INTRODUCTION

Social contagion concerns are people’s heightened concerns that having contact with an individual from a stigmatized outgroup will result in being misidentified as a member of that outgroup (Buck, Plant, Ratcliff, Zielaskowski, & Boerner, 2013). Being misidentified as a member of an outgroup, particularly a devalued or stigmatized outgroup (e.g. gay men and lesbians), puts one at risk for being the target of prejudice and discrimination typically faced by that outgroup. For the individual being misidentified, the misidentification can also result in discomfort, shame, depression, a decreased desire for personal growth and, aggressive behavior (Bosson, Prewitt-Freilino, & Taylor, 2005; Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009; Grimmell, 1998; Higgins, Klein, & Strauman, 1985). Additionally, when people fear being misidentified as gay/lesbian, they respond by avoiding and derogating gay men and lesbians (Buck, et al., 2013; Cascio, Beck, & Plant, 2014; Plant, Zielaskowski, & Buck, 2014). Therefore, these contagion concerns not only have implications for heterosexuals who may be misidentified as gay/lesbian, but they also have negative repercussions for gay men and lesbians who are avoided and derogated as a result.

In the current work, we examine the factors that contribute to heterosexuals’ social contagion concerns about being misidentified as gay/lesbian with the goal of reducing these concerns and their negative implications. We argue that reducing the negative implications of being misidentified as gay/lesbian will alleviate the concerns about such misidentification. Specifically, being misidentified as an outgroup member is more threatening to the extent that other people are prejudiced against that outgroup. If the social audience is low in prejudice, then misidentification as an member of the outgroup has fewer negative consequences than if the audience is highly prejudiced. Therefore, we explored whether perceptions of other peoples’
sexual prejudice affects social contagion concerns. We posit that the costs associated with being misidentified as gay/lesbian are substantially reduced when those who could do the misidentification are low in sexual prejudice. Individuals should thus be less worried about such misidentification when in the presence of a low-prejudice audience compared to high-prejudice audience. As a result, we argue that exposing people to others’ nonprejudiced attitudes can significantly reduce heterosexuals’ contagion concerns as well as their anxiety about and desire to avoid gay men/lesbians. Additionally, we propose that perceptions of others’ prejudice will predict contagion concerns, over and above an individual’s own level of prejudice. Although people are likely to be more concerned about misidentification as gay/lesbian if they are highly prejudiced, the attitudes of those doing the misidentification will directly determine the consequences of being misidentified.

**Social Contagion Concerns**

Traditionally, sexual prejudice has been conceptualized as a moral condemnation of homosexuality, homosexual behavior, and gay men and lesbians (see Kite and Whitley, 1996). When measuring sexual prejudice, items frequently assess whether individuals feel that homosexuality is “unnatural” or “wrong” (Herek, 1998). However, recent research has shown that just measuring moral condemnation of homosexuality does not capture the entire picture. Buck and colleagues (2013) argued that some individuals avoid gay men and lesbians, not due to dislike or moral condemnation, but for fear of being misidentified as gay/lesbian themselves. Buck and colleagues (2013) demonstrated that some people are highly concerned about being misclassified as gay or lesbian, which leads to greater anxiety about and desire to avoid interacting with gay men and lesbians. Additionally, when interacting with a gay-identified confederate, participants high in contagion concerns responded with more avoidant and
unpleasant reactions, including expressing discomfort, being less friendly, and physically distancing themselves from their interaction partner as compared to participants with lower levels of contagion concerns. Furthermore, contagion concerns predicted these outcomes above and beyond traditional sexual prejudice. Presumably, avoiding contact with gay men and lesbians would reduce the opportunity for being misidentified as a member of that group. However, such avoidance of outgroup members is particularly problematic because numerous studies have shown that positive intergroup contact is an effective way of reducing negative outgroup attitudes, reducing intergroup anxiety, and promoting positive future intergroup contact (e.g., Pettigrew & Tropp, Wagner, & Christ, 2011; Plant, 2004; Plant & Devine, 2003).

In addition to avoiding gay men and lesbians, people high in contagion concerns take other steps to avoid being misidentified. For example, heightened contagion concerns lead people to avoid publicly supporting lesbian, gay, bisexual and transgender (LGBT) rights and display a reluctance to sign a petition to support the creation of an LGBT center on campus (Buck, et al., 2013). Furthermore, contagion concerns result in public derogation of gay men/lesbians in an attempt to establish one’s heterosexuality to others (Cascio et al., 2014; Plant et al., 2014). For example, Plant and colleagues (2014) told participants that they were going to have an interaction with an attractive opposite-sex partner. Before the interaction, participants filled out feeling thermometers assessing how positively they felt toward a variety of different activities and groups of people, including gay men and lesbians to be shared with their interaction partner. Participants who were high in contagion concerns rated gay men and lesbians much lower on the thermometers than participants lower in contagion concerns. This response was particularly pronounced if participants’ social contagion concerns were experimentally heightened. The authors concluded that participants high in contagion concerns were denigrating gay men and
lesbians in order to display to their partner that they did not belong to that group. Additional work has shown that, when sharing their opinions with a partner, participants high versus low in contagion concerns rated a story more negatively if they believed it was written by a gay/lesbian compared to heterosexual author (Cascio, et al. 2014).

Finally, contagion concerns also reduce people’s willingness to intervene when someone is being derogated for being gay/lesbian (Beck, Cascio, & Plant, 2014). For example, in one study, participants were told they were going to interact with a partner. Before the interaction, the participants heard a “funny” story from their partner. In this story, the partner reveals that he/she bullied a fellow classmate for being gay/lesbian or for being a nerd. Participants were then given the opportunity to rate the story on several aspects (creative, funny, clever, mean, offensive, humorous) and allowed to make comments about the story which were then given to the partner. Participants high in contagion concerns rated the gay bullying story as funnier, less offensive, and more creative than participants low in contagion concerns. Additionally, they provided comments that indicated they found the story funny and generally approved of the partner’s behavior. The researchers concluded that participants higher in contagion concerns were less willing to rate the story negatively or comment negatively on the partner’s behavior because they were worried such defense of gay men/lesbians would put them at risk of misidentification. Given the numerous negative implications of contagion concerns, it is important to identify factors that may contribute to contagion concerns in order to determine how to reduce these concerns.

**Reducing Contagion Concerns**

In considering how to decrease social contagion concerns, it is helpful to consider the costs associated with being misidentified as a gay man or lesbian. One such cost, which is
particularly relevant to the present work, is that being misidentified as gay/lesbian may make one the target of prejudice and discrimination from other heterosexuals. That is, if other heterosexuals are prejudiced toward gay men and lesbians, these heterosexuals may act out against individuals that they perceive to be gay/lesbian, regardless of the individual’s actual orientation. Therefore, being misclassified as gay/lesbian may put an individual at a real risk for derogation, discrimination, and even physical harm from others.

Although attitudes toward LGB individuals been steadily improving (Yang, 1997), they still remain relatively mixed. In a recent national poll by Gallup (2013), about half of Americans still believe that homosexuality is morally wrong. Furthermore, according to the Gay, Lesbian and Straight Education Network 2011 National School Climate Survey of more than 6,000 students, nearly 82% of LGBT youth reported being verbally harassed at school in the past year because of their sexual orientation, with 38% reporting being physically harassed. Another survey of adults indicated that 84% of gay men and 73% of lesbians indicated they experienced some form of discrimination because they were or were perceived to be (emphasis added) gay/lesbian (Pew Research Center, 2013). Clearly, prejudice and discrimination against gay men and lesbians is still prevalent in our society and therefore a valid concern for anyone who is identified as gay or lesbian.

Due to the risk of becoming the target of prejudice if misidentified, we hypothesize that perceptions of others’ prejudice would directly affect contagion concerns. That is, the more prejudiced others are against gay men and lesbians, the greater the risk of prejudice and discrimination if one is misidentified say gay/lesbian. Therefore I predict that people should be more concerned about being misidentified (i.e., possess higher contagion concerns) the more prejudice that is present in their social environment. Conversely, if people are around others
who are low in prejudice, they are relatively less likely to become the target of discrimination, even if they are misidentified as gay/lesbian. Therefore, we hypothesized that decreasing perceptions of others’ sexual prejudice would reduce contagion concerns because it would reduce the negative consequences of misidentification as gay/lesbian.

However, it may be important to consider which others are important to contagion concerns. Because perceptions of others’ prejudice are believed to affect contagion concerns via the consequences that can result from being misidentified, the prejudice level of one’s immediate peer group should be most relevant to one’s contagion concerns. After all, these are the people with whom one most often interacts and thus, would be most likely to misidentify one’s sexual orientation. Consequently, the perceptions of peers’ prejudice level should have a particularly strong effect on contagion concerns. Other broader or more distant groups, such as society in general, are less likely to have a direct effect on the misidentified individual; therefore, perceptions of society’s prejudice should be a weaker predictor of contagion concerns than perceptions of peer prejudice.

The Present Work

Across two studies, the current work examines the factors that contribute to contagion concerns and how to reduce these concerns. We hypothesize that, due to the potential negative consequences of misidentification, perceptions of other people’s sexual prejudice will affect an individual’s contagion concerns. Specifically, we argue that perceiving others as nonprejudiced should reduce contagion concerns.

In an initial examination, we looked at several factors that should affect contagion concerns, including perceptions of others’ prejudice, fear of negative evaluation, and one’s own level of sexual prejudice, to see which factors would strongly and independently predict
contagion concerns. Then, we experimentally manipulated participants’ perceptions other students’ sexual prejudice to see how this would affect their anxiety about and desire to avoid gay men and lesbians as well as general fears of misclassification. We predicted that being exposed to others’ nonprejudiced attitudes would reduce the participants’ contagion concerns, anxiety about, and desire to avoid gay men/lesbians.
STUDY 1

As a first step to understand the factors that influence people’s level of social contagion concerns, we conducted a questionnaire study to examine the relationship between contagion concerns and other potentially related variables. We predicted that, due to the potential negative consequences of being misidentified as gay/lesbian by other heterosexuals, perceptions of other people’s level of sexual prejudice would predict an individual’s contagion concerns. Furthermore, we argue that the prejudice level of one’s peers should be particularly important. Because individuals interact with their peers more than any other group, their peers are the people most likely to potentially misidentify them.

In addition to examining the role of perceptions of peer’s level of prejudice, we also explored other factors that we anticipated would be related to people’s level of social contagion concerns. This approach allowed us to examine if perceptions of others’ prejudiced predicts contagion concerns above and beyond other theoretically related variables. One factor that may contribute to contagion concerns is fear of negative evaluation. Fear of negative evaluation consists of “apprehension about others’ evaluations, distress over their negative evaluations, and the expectation that others will evaluate oneself negatively” (Watson & Friend, 1969, p.449). Individuals high in fear of negative evaluation tend to seek social approval from others and actively avoid disapproval. As such, individuals high in fear of negative evaluation are likely to be particularly concerned about being misidentified as a member of a stigmatized group (i.e. gay men and lesbians). Therefore, we expected that fear of negative evaluation will be positively correlated with contagion concerns.

Another factor that we anticipated would likely affect contagion concerns is one’s own level of sexual prejudice. Contagion concerns are related to, but distinct from traditional sexual
prejudice (Buck, et al., 2013). Whereas contagion concerns are centered mainly on feelings of anxiety about gay men and lesbians, traditional sexual prejudice focuses on feeling of disgust toward homosexuals (Cottrell & Neuberg, 2005; Hodson & Costello, 2007; Inbar, Pizarro, Knobe, & Bloom, 2009). Additionally, contagion concerns predict behaviors such as desire to avoid gay men and lesbians while sexual prejudice does not when both are included simultaneously as predictors (Buck, et al., 2013). However, it is reasonable that people who feel strong moral condemnation towards gay men and lesbians would also object to being identified as gay/lesbian themselves. They may even be especially worried that other heterosexuals will feel negatively towards them if they are misidentified as gay/lesbians, because they themselves espouse these negative feelings. Therefore, we propose that one’s own level of sexual prejudice will also be associated with one’s contagion concerns.

As part of a study on the correlates of contagion concerns, participants completed a questionnaire packet that included their contagion concerns and a range of traits, attitudes, and beliefs that we thought may be related to contagion concerns. Included in this packet were perceptions of others’ prejudice, fear of negative evaluation, and the participant’s own prejudice level. We expected that each of these factors would have an independent relationship with contagion concerns. Of particular interest was whether perceptions of peers’ level of sexual prejudice would predict social contagion concerns over and above participants’ own attitudes and their fear of negative evaluation.
Method

Participants

Participants were 128 Introductory Psychology students (86.7% female, 71.9% White, 13.3% Black, 8.6% more than one race, 6.3% other) who completed the study in partial fulfillment of a requirement for their introductory psychology course. Participants ranged in age from 18 to 58 \((M = 19.98, SD = 4.153)\). Because this study was focused on heterosexuals’ attitudes toward homosexuals, data from two people identifying as gay/lesbian and one person identifying as bisexual were omitted from the final analyses, resulting in a final sample of 125 participants.

Procedure and Materials

Participants were brought into the lab individually where they filled a series of questionnaires on the computer. Of key interest for this study were the relationships between social contagion concerns, perceptions of others’ prejudice, fear of negative evaluation, and participant’s own level of prejudice.

Social contagion concerns. Participants completed a 26-item questionnaire adapted from Buck et al. (2013) that measures the different components of sexual prejudice. Ten of those items assessed participants’ social contagion concerns (e.g., “If I was hanging out with a homosexual person, I would worry that other people would think I was a homosexual, too,” \(\alpha = .87\)). Responses were made on a rating scale from 1 (strongly disagree) to 7 (strongly agree), reverse scored where necessary, so that higher scores indicated greater contagion concerns.

Perceptions of others’ prejudice. To assess perceptions of others’ prejudice, we drew upon items from the Attitudes toward Lesbians and Gay Men scale (Herek, 1998) and revised them for our purpose. We assessed both perceptions of peer’s prejudice and perceptions of
prejudice in society more generally. Perceptions of peers’ prejudice levels were assessed using six items. Three of the items looked at the participant’s immediate friend group (e.g. “My friends would say that homosexuality is a perversion”) and three items examined their peers at their university (e.g. “Generally, students at my university feel sex between two men is just plain wrong”). An additional three items assessed perceptions of society’s level of prejudice (e.g. “Most people in our society think homosexuals are disgusting”). All of the items were measured on a 1 (strongly disagree) to 9 (strongly agree) Likert scale. The friend and university items were highly correlated with each other, $r = .42$, $p < .001$, and an exploratory factor analysis indicated that they loaded onto the one factor with the society items loading onto a separate factor. Therefore, the friend and university items were combined to make one scale measuring perceptions of peer prejudice, $\alpha = .80$. The society items were combined onto a separate perceptions of society prejudice scale, $\alpha = .68$. For both scales, higher scores indicated that participants perceived that group to be higher on prejudice.

**Fear of negative evaluation.** Fear of negative evaluation (FNE) was assessed using the brief 12-item Fear of Negative Evaluation test (Leary, 1983). The questionnaire measures participants concerned about being judged negatively (e.g. “I am frequently afraid of other people noticing my shortcomings,” “I am usually worried about what kind of impression I make,” $a = .93$). Responses were given on a 1 (Not at all characteristic of me) to 5 (Extremely characteristic of me) scale. Higher scores indicated higher fear of negative evaluation.

**Attitudes toward lesbians and gay men.** Participants’ own sexual prejudice was measured using ten-item Attitudes toward Lesbians and Gay Men scale (ATLG-S; Herek, 1998). This scale can be considered a measure of tradition sexual prejudice/moral condemnation (e.g., “Sex between two men is just plain wrong”; “Female homosexuality is a perversion”). Agreement
with scale items was measured using a 9-point Likert-type scale (1 = strongly disagree, 9 = strongly agree) with higher scores indicating more negative attitudes toward lesbians and gay men, $\alpha = .90$).

**Results**

We first examined the correlations between social contagion concerns and perceptions of peer prejudice, perceptions of society’s prejudice, ATLG scores, and FNE scores (See Table 1). Contagion concerns were strongly correlated with perceptions of peer prejudice ($r = .61$), ATLG scores ($r = .52$), and FNE scores ($r = .40$), $p < .001$ for all. Contagion concerns were not significantly correlated with perceptions of society’s prejudice ($r = .122$, $p = .183$). These findings are consistent with our argument that perceptions of peer’s attitudes are more important than more general societal attitudes for predicting social contagion concerns.

Table 1

*Correlations between Contagion Concerns, Peer Prejudice, Society Prejudice, Own Prejudice and Fear of Negative Evaluation*

<table>
<thead>
<tr>
<th></th>
<th>Contagion</th>
<th>Peer Prejudice</th>
<th>Society Prejudice</th>
<th>ATLG</th>
<th>FNE</th>
</tr>
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<tbody>
<tr>
<td>Contagion</td>
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<tr>
<td>Peer prejudice</td>
<td>.61*</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Society prejudice</td>
<td>.122</td>
<td>.144</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATLG</td>
<td>.52*</td>
<td>.584*</td>
<td>-.058</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>FNE</td>
<td>.40*</td>
<td>.089</td>
<td>.003</td>
<td>.065</td>
<td>--</td>
</tr>
</tbody>
</table>

* $p < .001$
To determine which factors would independently predict contagion concerns, perceptions of peer prejudice, perceptions of society’s prejudice, fear of negative evaluation, ATLG scores, and participant gender were entered into a multiple regression with participants’ general contagion scores as the dependent variable. There was a significant effect of perceptions of peer prejudice on contagion scores, $\beta = .381, p < .001$, with perceptions of greater peer prejudice being associated with greater contagion concerns for the individual. In addition, there was a significant effect of participants’ own prejudice level, $\beta = .294, p < .001$, and a significant effect of fear of negative evaluation, $\beta = .327, p < .001$, with higher scores on either factor relating to higher levels of contagion concerns. However, there was no effect of perceptions of society’s prejudice or gender on contagion concerns, $p = .264$ and .608, respectively.

**Discussion**

Results from our first study indicate that people’s perceptions of their peers’ sexual prejudice, along with their fear of negative evaluation and own level of sexual prejudice, are each independently related to contagion concerns. Perceiving one’s peer group as more prejudiced toward gay men and lesbians is associated with people being more worried about misidentification as gay/lesbian. Similarly, having more negative feelings toward gay men and lesbians and being more worried about negative social judgment both also relate to higher contagion concerns. Furthermore, these data show that perceptions of peer’s prejudice have a robust relationship with contagion concerns about gay men and lesbians, even over and above the participants’ own level of sexual prejudice. It appears that the potential negative consequences of being misidentified as gay/lesbian by highly prejudiced people are a strong contributor to contagion concerns. Additionally, we were able to distinguish that it is not merely anyone’s prejudice that effects contagion concerns, but rather the prejudice of one’s peer group.
that has a direct effect on contagion concerns. These findings are consistent with the idea that perceptions of others’ prejudice predict contagion because individuals are worried about becoming the target of others’ prejudice and discrimination if misidentified. Thus, the group that they are most likely to have contact with (and therefore be the target of) is their own immediate peer group.
STUDY 2

Study 1 revealed that perceptions of others’ prejudice were significantly related to contagion concerns, even when controlling for participants’ own level of prejudice and fear of negative evaluation. In the current study we examined the potential causal role of perceptions of peer prejudice in social contagion concerns. We predicted that social contagions concerns should be higher when people perceive that their peers are highly prejudiced rather than low in prejudice. Misidentification as gay/lesbian would carry a potential greater cost when around others who are highly sexually prejudiced (i.e., becoming the target of prejudice and discrimination) compared to those less prejudiced. Thus, in Study 2, we experimentally manipulated perceptions of peer prejudice to examine the effect of these perceptions on contagion concerns. We predicted that participants who perceived that their peers were relatively low in prejudice would have lower contagion concerns than participants who perceived their peer were highly prejudiced.

Additionally, we examined how perceptions of peer prejudice affect responses toward gay men and lesbians. Specifically, previous research has shown that those high in contagion concerns exhibit more anxiety about interacting with and a greater desire to avoid gay men and lesbians than those lower in contagion concerns (Buck, et al., 2013). Therefore, we hypothesized that participants who perceived their peers as nonprejudiced would respond with less anxiety and lower interest in avoiding contact with gay men and lesbians. In addition, we expected that the effect of peer prejudice on anxiety and avoidance would be mediated by reduced contagion concerns.
Method

Participants

Participants were 133 Introductory Psychology students (74.4% female, 76.7% White, 11.3% Black, 6.8% more than one race, 5.4% other) who completed the study in partial fulfillment of a requirement for their introductory psychology course. Participants ranged in age from 18 to 35 ($M = 20.17$, $SD = 1.925$). Because this study was focused on heterosexuals’ attitudes toward homosexuals, data from two people identifying as gay/lesbian were omitted from the final analyses. Additionally, 17 participants (5 high-prejudice, 12 low-prejudice peer group condition) failed the manipulation check so their data were also excluded from analyses. This left a total of 114 participants in the primary analyses.

Procedure and Materials

Participants were brought into the lab individually where they completed the procedures on a computer. First, participants were told that researchers were interested in their perceptions of how students at the university feel and think about important topics. Drawing from addiction literature that focuses on changing norm perceptions (e.g. Agostinelli, Brown, & Miller, 1995; Neighbors, Brown, Dibello, Rodriguez, & Foster, 2013; Rinker, & Neighbors, 2013) participants were then asked to estimate what percent of students at their university they thought agreed with the following statement: “I believe that prejudice against gay men and lesbians is wrong.” Participants’ estimates were recorded. Then participants were randomly assigned to a peer prejudice condition and presented with one of two norms designed to manipulate their perceptions of others’ prejudice. For the high-prejudice peer group, participants were told that only 27% of current students believe that prejudice against gay men and lesbians is wrong, thus indicating that a majority of the peer group was prejudiced against gay men and
lesbians. For the low-prejudice peer group, participants were told that 85% of current students believe such prejudice is wrong.

After the manipulation, participants were presented with a brief scenario asking them to imagine they were working on a group project with a classmate. The gender of the classmate was always matched to the participant’s gender and the classmate was always gay/lesbian. After reading the scenario, participants completed 13 items assessing their desire to avoid public contact with their imagined classmate (e.g., “If I saw my classmate on campus, I would avoid him/her,” “If I saw my classmate sitting alone on campus, I would ask him/her to come sit with me and my friends;” \( \alpha = .94 \)). In addition, participants completed five items asking how anxious they would feel about interacting with their classmate (e.g., “I would be anxious about interacting with my class partner.” \( \alpha = .90 \)). All responses were given on a scale from 1 (strongly disagree) to 7 (strongly agree), reverse scored where necessary. Higher scores indicate more public avoidance and anxiety.

Participants also completed the same 10 item version of Buck et al.’s (2013) scale assessing general social contagion concerns as in Study 1. Responses were given on a scale from 1 (strongly disagree) to 7 (strongly agree). Items were reverse scored where necessary such that higher scores indicated higher levels of social contagion concerns (\( \alpha = .88 \)). To assess general sexual prejudice, participants completed Herek’s (1998) ten-item Attitudes toward Gay Men and Lesbians Scale (ATLG; \( \alpha = .89 \)).

Finally, as a manipulation check, participants were asked to estimate the prejudice level of their fellow students, using the three items that measured prejudice of their peers at their university from Study 1 (e.g. “Generally, students at my university feel sex between two men is just plain wrong”). These items, measured on a 1 (strongly disagree) to 9 (strongly agree) Likert
scale, $\alpha = .73$, with higher scores indicated more perceived prejudice. This allowed us to
determine if the manipulation had successfully influenced participants’ perceptions of the
campus norm regarding sexual prejudice. Participants were excluded from analyses if they
reported peer prejudice scores that were highly inconsistent with the norm they were presented
(above a 5 for the low prejudice norm or below a 3 for the high prejudice norm)$^1$. Participants
then provided demographic information and were debriefed, thanked, and dismissed.

**Results**

We first examined the participants’ initial guess of how many of their fellow students
agreed with the nondiscrimination statement. This was done to ensure that the norms presented
during the manipulation were sufficiently higher or lower than expected. Across both conditions,
the average response was 67.27% ($SD = 18.30$) which fell in between the 27% and 85% used in
the two peer prejudice conditions. Additionally, the estimates did not vary significantly across
condition, $p = .15$ indicating that our experimental groups did not differ in their initial
perceptions of the campus level of sexual prejudice.

Next, we conducted a $t$-test to determine if the manipulation of perceptions of peer
prejudice affected participants’ general contagion concerns$^2$. Consistent with predictions,
participants in the low prejudice norm group reported significantly lower contagion concerns ($M$
= 2.94, $SE = .15$) than participants in the high prejudice norm group ($M = 3.46, SE = .17$), $t(112)$
= 2.265, $p = .027$, $d = .42$. Condition, however, did not affect participants’ self-reported sexual
prejudice ($p = .285$), indicating that the impact of manipulation of the peer’s prejudice

We also predicted that perceptions of peer prejudice would affect participants’ anxiety
about interacting with gay men and lesbians and their desire to avoid gay men and lesbians
because these responses are important implications of possessing contagion concerns. For both
analyses, Leven’s Test for Equality of Variances was significant ($p’s < .05$), so all statistics reported are equal variances not assumed. As expected, participants exposed to the low prejudice norm reported significantly less anxiety about interacting with gay men and lesbians ($M = 1.94, SE = .13$) than participants exposed to the high prejudice norm ($M = 2.38, SE = .17$), $t(105.24) = 2.031, p = .045, d = .40$. Similarly, low prejudice norm participants expressed marginally less avoidance of gay men and lesbians ($M = 2.16, SE = .13$) than high prejudice norm participants ($M = 2.57, SE = .17$), $t(109.088) = 1.89, p = .061, d = .36$.

Mediation Analyses

We were also interested in the role of contagion concerns as a mediator of the relationship between peer prejudice condition and anxiety toward gay men and lesbians. To examine this, we used Baron and Kenny’s (1986) procedure for estimating mediational effects using a series of regression analyses (See Figure 1). First, peer prejudice condition predicted anxiety about interacting with the gay/lesbian classmate as well as contagion concerns, as previously reported. Next, when peer prejudice condition and contagion concerns were both entered in the model, contagion concerns continued to predict anxiety, $\beta = .722, t(111) = 10.90, p < .001$, while the effect of peer prejudice condition was no longer significant, $\beta = .035, t(111) = .54, p = .593$. Using the bootstrapping procedure outlined by Preacher and Hayes (2008), mediation analyses indicated that contagion concerns significantly mediated the relationship between peer prejudice condition and anxiety (indirect effect = .36, $SE = .16$, 95% CI: .06 to .70). Thus it appears that contagion concerns fully mediated the relationship between perceptions of peer prejudice and anxiety about interacting with gay men and lesbians, such that perceiving others are nonprejudiced decreases an individual’s contagion concerns, which in turn leads to less anxiety about interacting with gay men and lesbians.
We also expected contagion concerns to mediate the relationship between perceptions of peer prejudice and desire to avoid interacting with gay men and lesbians (See Figure 2). Similar to the procedure above, perceptions of peer prejudice predicted desire to avoid gay men and lesbians, and contagion concerns. When both perceptions of peer prejudice and contagion concerns were entered into the model, contagion concerns continued to predict anxiety, $\beta = .695$, $t(111) = 10.05$, $p < .001$, while perceptions of peer prejudice did not, $\beta = .03$, $t(111) = .43$, $p = .667$. Again, using the Preacher and Hayes (2008) bootstrapping method, analyses indicated that contagion concerns significantly mediated the relationship between perceptions of peer prejudice and avoidance (indirect effect = .33, $SE = .15$, 95% CI: .05 to .64). Therefore, contagion concerns also fully mediated the relationship between perceptions of peer prejudice and desire to avoid interacting with gay men and lesbians; that is, perceiving others are nonprejudiced
decreases an individual’s contagion concerns, and this decrease in contagion concerns leads to less desire to avoid gay men and lesbians.

\[ \beta = .21^* \]
\[ \beta = .70^* \]
\[ \beta = .17^+ \]
\[ \beta = .03 \]

\[ ^+p = .065 \quad ^* p < .05 \]

**Figure 2.** Social contagion concerns mediate the effect of peer prejudice condition on the desire to avoid contact with a gay man/lesbian.

**Discussion**

We hypothesized that perceptions of peer prejudice would reduce contagion concerns. Results from our second study showed that manipulating perceptions of peer prejudice significantly affected contagion concerns. Participants who were told a majority of their peers were against discrimination based on sexual orientation, and therefore relatively low in prejudice, reported significantly lower contagion concerns than participants who were led to believe their peers were high in prejudice. Furthermore, we anticipated that perceptions of peer
prejudice would also change some of the negative responses toward gay men and lesbians that result from contagion concerns, such as anxiety about and desire to avoid gay men and lesbians. As predicted, participants exposed to the low prejudice norm expressed significantly lower anxiety and avoidance of gay men and lesbians that participants exposed to the high prejudice norm. It is also worth noting that the manipulation did not affect the participants’ own level of prejudice. The specificity of the effect is important indicating that the results were not due to a demand characteristic and that influencing peer prejudice has a specific effect on contagion concerns and the implications of these concerns for anxiety and avoidance.

Further analyses indicated that contagion concerns mediated the relationship between perceptions of peer prejudice and both anxiety about and the desire to avoid of gay men and lesbians. Specifically, the decreased anxiety about gay men and lesbians reported by participants who were exposed to the low prejudice norm was explained by the decreased concerns about being misidentified as gay/lesbian. Similarly, leading participants to believe their peers were low in prejudice reduced avoidance of gay men and lesbians via reduced contagion concerns. These findings clarify that perceptions of peer prejudice have implications for responses toward gay men and lesbians because they decrease contagion concerns regarding gay men and lesbians.
GENERAL DISCUSSION

Social contagion concerns, people’s heightened fears of being misidentified as gay/lesbian, have many negative implications, including increasing the avoidance and derogation of gay men and lesbians (Buck, et al., 2013; Cascio, et al.; Plant et al., 2014). The purpose of the present work was to explore the factors that contribute to contagion concerns and approaches to the reduce these concerns. We hypothesized that, due to the potential negative consequences of misidentification, perceptions of other people’s sexual prejudice affect an individual’s level of contagion concerns. Additionally, we argued that exposing people to others’ nonprejudiced attitudes can significantly reduce heterosexuals’ contagion concerns, anxiety about and desire to avoid gay men/lesbians. Consistent with our hypothesis, we found evidence that participants’ perception of their peer’s level of sexual prejudice has a robust relationship with contagion concerns about gay men and lesbians, even over and above the participants’ own level of sexual prejudice (Study 1). Also, we found that manipulating perceptions of peer prejudice reduced participants’ contagion concerns, anxiety, and avoidance of gay men and lesbians (Study 2). That is, participants who were exposed to a nonprejudiced norm expressed significantly lower contagion, anxiety, and avoidance compared to participants exposed to a prejudiced norm. Furthermore, contagion concerns significantly mediated both the relationship between perceptions of peer prejudice and anxiety about gay men and lesbians and the relationship between perceptions of peer prejudice and avoidance of gay men and lesbians. Taken together, these findings indicate that perceptions of peer prejudice play an important role in individuals’ responses to gay men and lesbians.

The present work adds to the recent literature indicating that lesbians and gay men face avoidance, antipathy, and denigration when heterosexuals fear misclassification as gay or lesbian
(Buck et al., 2013). These negative responses could lead to feelings of social isolation and social rejection among lesbians and gay men, and they could contribute to the further marginalization and discrimination these individuals face. However, by looking at what factors can reduce these concerns, we may be better equipped to combat these responses. The current work provides us with one factor that can change contagion concerns, perceptions of others’ prejudice. Exposing people to nonprejudiced norms reduced not only contagion concerns but also anxiety and avoidance of gay men and lesbians. This work also highlights the importance of reducing the costs associated with being identified as gay/lesbian. We posit that changing people’s perceptions of others’ prejudice was effective because it reduced the potential for becoming the target of discrimination. By focusing on why people would be fearful of being misidentified as gay/lesbian, we were able to come up with an effective solution to reduce these fears. Reducing contagion concerns then have a positive effect on the heterosexuals who may be misidentified by decreasing their anxiety. Additionally, reductions in contagion concerns are beneficial to gay men and lesbians who may have been stigmatized. People lower in contagion concerns exhibit less anxiety about interacting with and desire to avoid gay men and lesbians than people higher in contagion concerns. Given that contact has consistently demonstrated to be the more effective way to reduce prejudice (see Pettigrew et al., 2011), decreasing contagion concerns may lead to decreased prejudice as well. By reducing the costs of being misidentified as gay/lesbian, it may also reduce the costs of actually being gay/lesbian.

**Limitations and Future Directions**

Because this was the first examination of reducing contagion concerns, there are many exciting avenues for future research. For example, these findings highlight the role that other people can play in reducing an individual’s contagion concerns. Knowing that other people are
not prejudiced, and therefore unlikely to discriminate based on sexual orientation, helps alleviate an individual’s fear of being misidentified. Therefore, it is important that individuals make their nonprejudiced attitudes known to their friends and peers. This should lead to less contagion concerns, resulting in less avoidance and derogation of gay men and lesbians. This effect was specific to their friends and peer group’s perceived prejudice. Thus, it is not enough for individuals to passively rely on changing social tides to help reduce contagion; they must each personally take the responsibility for publicly espousing their nonprejudiced views.

In future work, it will be important to explore how reducing contagion concerns leads to behavioral changes in individuals. In the current studies, we measured these decrease contagion concerns, anxiety and avoidance of gay men and lesbians through self-report. However, changes in self-reported attitudes do not mean there will be behavioral changes also. There are many other negative behaviors that people high in contagion concerns may exhibit. For example, these individuals may not be willing to publicly endorse pro-LGBT policies or may even bully a gay man/lesbian to avoid misidentification. In future work, it will be important to explore whether reducing contagion concerns via perceptions of peer prejudice also reduces the likelihood of performing these and other negative behaviors.

It is important to note that our manipulation did not successfully influence every participant’s perceptions of the campus norm regarding sexual prejudice. That is, some participants did not accept the feedback based on their response to the manipulation check. Therefore, future efforts should focus on finding a more convincing manipulation. It is possible that merely presenting statistics is not enough to sway some people. However, a more compelling experience, such as seeing testimonials from actual students, may be more broadly convincing. It should also be noted that we compared a low prejudice norm to a high prejudice
norm rather than a neutral group. Perhaps, instead of reducing contagion with the low prejudice norm, we actually increased contagion with the high prejudice norm. This would then account for the differences between the groups. It would be worthwhile to compare the low prejudice norm group to a group who has received no norm information in order to ensure it is the low norm driving the effect.

It will also be valuable to examine other ways to change the costs of being misidentified as gay/lesbian. In our studies, we focused on potentially becoming the target of prejudice if misidentified as gay/lesbian. We reduced this cost by demonstrating to participants that it would be unlikely they would be discriminated against because their peers were relatively nonprejudiced. It may also be possible to change how bad this cost is perceived to be. As seen in Study 1, fear of negative evaluation is significantly related to contagion concerns. Therefore, if fear of negative evaluation is reduced, individuals should express less contagion concerns simply because they aren’t as worried about people judging them. Even if they do end up being judged or discriminated against, it will not have as damaging an effect of them as it would for someone high in fear of negative evaluation; thus, they should not be as concerned about being misidentified.

Another way to reduce contagion concerns is to change how likely people think misidentification is. If people think they are unlikely to be misidentified even when they are around gay men and lesbians, then they should not express as much contagion concerns. One way to manipulate this involves the concept of entitativity, or the degree to which a collection of persons are perceived as being bonded together in a coherent unit (Campbell, 1958). Contagion concerns are due to the fear that other people will judge us based on those around us. If a group is perceived as highly cohesive, then all the individuals in that group will be seen as having the
same trait. Therefore, if one or more of those members is gay/lesbian, it may be assumed that all members are gay/lesbian. People who perceive groups as highly cohesive may then be more worried about being misidentified. However, if someone does not see a group as cohesive, they would be less likely to assume that all group members are the same, and would likely express relatively lower contagion concerns.

Finally, becoming the target of prejudice is not the only cost associated with being misidentified as gay/lesbian. For example, loss of a potential mating opportunity is another cost of contagion concerns as misidentification as gay/lesbian could essentially remove them from the heterosexual mating pool. Indeed, in past work participants whose mating motives were primed expressed higher contagion concerns, more avoidance, and even derogation of gay men and lesbians compared to control participants (Plant et al., 2014). Alleviating the concern about missing out of mating opportunities may also serve to reduce contagion concerns. Future research should examine how changing the costs and likelihood of misidentification reduces contagion concerns.

Conclusions

Social contagion concerns can have many negative effects, both for the individual being misidentified and the stigmatized outgroup. One reason people may express these concerns is that they fear becoming the target of prejudice and discrimination from other heterosexuals if misidentified. The current work provides evidence that perceptions of others’ prejudice can affect an individual’s contagion concerns. Perceiving that others are relatively nonprejudiced reduces an individual’s contagion concerns and as a result, leads to reduced anxiety, and avoidance of gay men and lesbians. Thus, changing perceptions of others’ prejudice, thereby reducing the associated costs of being misidentified as gay/lesbian, helps alleviate social
contagion concerns. Hopefully, as more individuals publicly espouse nonprejudiced attitudes and sexual prejudice and discrimination becomes less common, social contagion concerns will decrease.
ENDNOTES

1 Participants who were excluded from analyses did not differ significantly from included participants on contagion concerns, $t(129) = -1.622, p = .12$, or own level of prejudice, $t(129) = -.459, p = .647$.

2 Including gender in the analysis showed no interactive effects, $p=.483$, and only revealed marginal main effects with male participants tending to respond with more negative responses (e.g., more anxiety in the scenario), $p = .065$. 

APPENDIX

IRB APPROVAL FOR HUMAN SUBJECTS

The Florida State University
Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673, FAX (850) 644-4392

RE-APPROVAL MEMORANDUM

Date: 4/2/2013

To: Jessica Cascio [***@***]

Address: ***
Dept.: PSYCHOLOGY DEPARTMENT

From: Thomas L. Jacobson, Chair

Re: Re-approval of Use of Human subjects in Research
Attitudes toward Gay Men

Your request to continue the research project listed above involving human subjects has been approved by the Human Subjects Committee. If your project has not been completed by 3/12/2014, you are must request renewed approval by the Committee.

If you submitted a proposed consent form with your renewal request, the approved stamped consent form is attached to this re-approval notice. Only the stamped version of the consent form may be used in recruiting of research subjects. You are reminded that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report in writing, any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the Chair of your department and/or your major professor are reminded of their responsibility for being informed concerning research projects involving human subjects in their department. They are advised to review the protocols as often as necessary to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

Cc: HSC No. 2013.9918
RE-APPROVAL MEMORANDUM

Date: 3/3/2014

To: Jessica Cascio [***@***]

Address: ***
Dept.: PSYCHOLOGY DEPARTMENT

From: Thomas L. Jacobson, Chair

Re: Re-approval of Use of Human subjects in Research
Attitudes toward Gay Men

Your request to continue the research project listed above involving human subjects has been approved by the Human Subjects Committee. If your project has not been completed by 2/11/2015, you must request renewed approval by the Committee.

If you submitted a proposed consent form with your renewal request, the approved stamped consent form is attached to this re-approval notice. Only the stamped version of the consent form may be used in recruiting of research subjects. You are reminded that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report in writing, any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the Chair of your department and/or your major professor are reminded of their responsibility for being informed concerning research projects involving human subjects in their department. They are advised to review the protocols as often as necessary to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

Cc:
HSC No. 2014.12066
Sample consent form

Content Form

I freely and voluntarily and without element of force or coercion, consent to be a participant in the research project entitled “Impressions of Others.” This research is being conducted by Jessica Cascio, psychology graduate student, under the supervision of Ashby Plant, Professor of Psychology at Florida State University. I understand the purpose of his research is to better understand the way people form impressions of other people. I understand that if I participate in the project, I may be asked to evaluate people who differ from me in their social group membership (i.e., age, racial group, religious affiliation, sexual orientation, national origin, mental health status). In addition, I will report my attitudes and beliefs about different social issues and groups. The total time commitment will be about 30 minutes and I will be compensated by receiving a half of a research credit for my time.

I understand that my participation is totally voluntary and I may stop participation at any time. If I decided to stop participation, I will still be entitled to the credit. At all times my responses will remain confidential to the extent allowed by law. Although my name is recorded on this informed consent form and the website under which I signed up for this experiment, neither of these will be linked to my responses keeping them anonymous. Also, no individual responses will be reported. Only group findings will be reported. The data will be stored in which is a locked room in the new psychology building. In addition, all paper materials will be destroyed by March 2020 and all electronic data will be destroyed by March 2022. I understand there is a minimal level of risk involved with participating in this research project. I understand that there are benefits for participating in this research project. I will be providing researchers with valuable insight into people’s perceptions of others. I understand that this consent may be withdrawn at any time without prejudice, penalty, or loss of benefits to which I am otherwise entitled. I have been given the right to ask and have answered any inquiry concerning the study.

Questions, if any, have been answered to my satisfaction. I understand that I may contact Jessica Cascio, Florida State University, Department of Psychology, or Dr. Ashby Plant, Florida State University, for answers to questions about this research or my rights. Group results will be sent to me upon request. If I have questions about my rights as a participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research, at...

I have read and understand this consent form

(Subject) (Date)

FSU Human Subjects Committee approved on 2/24/2014 and reaffirmed 2/11/2015 HSC # 2014.120866
REFERENCES


BIOGRAPHICAL SKETCH

Jessica Cascio received her B.S. in Psychology in 2008 and her M.S. in Industrial/Organizational Psychology in 2010 from Lamar University. She enrolled in the Social Psychology doctoral program at Florida State University in Fall 2011. Her advisor is Dr. E. Ashby Plant and her work focuses on prejudice toward gay men and lesbians from a social contagion standpoint, morality and prejudice, and stereotypes and prejudice more broadly.