Why Not Both? Assessing Bias Toward Bisexuality

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Abstract

While visibility of the queer community has increased in recent years, the bisexual community continues to lack the publicity their lesbian, gay, and transgender counterparts see (Seidman, 2010). This lack of visibility, in part, leads many to propagate myths about bisexuality and its various forms of non-existence (Denizet-Lewis, 2014; Diamond, 2008; Schwartz & Kempner, 2015). While some research has found that those in the queer community hold ambivalent views toward bisexual individuals (Burke & LaFrance, 2015), few studies have examined the mechanisms that generate such ambivalent impressions. Drawing inspiration from the stereotype content model (SCM; Cuddy, Fiske, & Glick, 2008), we predicted and found that warmth mediated the relationship between participants' sexuality and how likable they found a bisexual target to be, such that bisexual participants held more positive attitudes toward bisexual targets than did non-bisexual participants due in part to participants' impressions of the bisexual target's warmth.

Keywords: Bisexuality, sexual orientation, bias, warmth, impression formation

From the Comstock laws in the 1870s to modern legislation regarding same-sex marriage, sexuality has been a prevalent topic in both politics and public discourse. This fact is especially true regarding the queer community in recent years. Much of the research into the community has generalized results among the different segments of the LGBT+ spectrum (Worthen, 2013). However, though all members fall within the umbrella of the queer community, the groups do hold disparate identities that the LGBT+ categorization sometimes fails to capture. Research has shown that this statement holds true especially for bisexual individuals (Diamond, 2014).

Definitions of bisexuality differ among individuals and generations (Blumstein & Schwartz, 1977; Diamond, 2008), though most definitions revolve around the concept of attraction to both men and women or to more than one sex. Recently, more individuals are extending the definition of the term to include not only sexual activity but also attractions and friendship preferences (Schwartz & Kempner, 2015). Further, longitudinal studies and qualitative research regard sexuality as a fluid construct that tends to lean toward more bisexual or non-binary orientations (Diamond, 2008, 2014). Despite this finding of natural sexual fluidity, prejudice against bisexual individuals has permeated (Vernacchio, 2014) even within the queer community (Rubin & McClelland, 2015), with myths including promiscuity (Donley, Lee, & Pirlott, 2016), indecisiveness, and sexual greediness arising as bisexual visibility has increased (Burke & LaFrance, 2015; Denizet-Lewis, 2014; Pulley, 2011; Schwartz & Kempner, 2015; Seidman, 2010). These misconceptions manifest into a number of mental health complications (Almeida et al., 2009) in addition to the stress that comes with membership in a minority community (Meyer, 2003).

One way of potentially combating these adverse conceptions involves gaining further understanding of the biases involved in these stereotypes. There are a number of different ways to understand stereotype bias such as that seen toward the bisexual community. One possible way is provided by the stereotype content model (SCM) and the behavior from intergroup affect and stereotypes (BIAS) map (Cuddy et al., 2009; Cuddy, Fiske, & Glick, 2008).

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The model provides a clearer understanding of the underpinnings of bias in terms of group members' perceptions of group conflict and the subsequent impressions of out-group members' individual characteristics (e.g., warmth and competence).

However, little research has examined *bisexuality* in terms of warmth or competence. Although both warmth and competence play important roles in understanding bias, the present study focused on the role of warmth in the relationship between participant sexuality and perceptions of a bisexual target.

Bisexuality Defined

The definition of bisexuality can vary widely. Blumstein and Schwartz (1977) noted that there is no typical identifier for bisexuality, nor is there one set "path" toward earning the bisexual label. In fact, they noted that there is no real uniform consistency of identity when it comes to the label. In essence, there is no set standard for what a bisexual individual is or looks like.

This concept runs counter to public perception. Previous research and lay theories have held that bisexuality is, in simple terms, a pattern of erotic response to individuals of more than one sex (Rust, 2002). Other views of bisexuality, however, refer to it as "just a phase" or the result of identity confusion (Mohr & Rochlen, 1999; Rust, 2002; Worthen, 2013). However, Diamond (2008) asserted that there was more to the definition and to public perception than what is stated. Results from longitudinal research showed an emerging pattern of bisexuality in women as more than a lay-conceived transitional period or temporary state, emphasizing its status as another facet of the sexuality spectrum. Other research has shown that similar effects occur in men (Diamond, 2014).

Current perceptions of the label of bisexuality follow in line with this model of fluidity along the sexuality spectrum. More individuals are realizing that sexual identity encompasses more than with whom one has sexual relations (Schwartz & Kempner, 2015). Descriptors of sexual identity delve into one's fantasies, attractions, and friendship preferences, as well. Similar research has shown that the context of initial attraction – especially in same-sex scenarios – helps foster one's development toward bisexual or fluid sexual identities by encouraging openness and discussion of queer awareness in a typically heteronormative society (McClelland, Rubin, & Bauermeister, 2015). Despite similarities between bisexual individuals and other members of the queer community, there is enough differentiation of bisexuality from the rest of the community to warrant research beyond that with blanketed results across the queer spectrum (Worthen, 2013).

Prejudice Involving Bisexual Individuals

Labels such as "bisexual" that started as a form of nomenclature based on sexual orientation now serve a dual purpose: Identifying label and demarcating factor of a sub-community within the queer domain. As with any group, there will be stereotypes among those different sub-communities. Indeed, non-bisexual members of the LBGT+ community report a number of stereotypes they have of bisexual individuals (Pulley, 2011). Events in the history of the queer community highlight these stereotypes of, and prejudices against, bisexual individuals. Burke and LaFrance (2015) have found that individuals from within and outside of the queer community evaluated bisexual individuals more negatively than, and distinctly different from, gay men and lesbian women. Gay rights activists in the 1970s held biases against bisexual individuals because they felt as if they were taking advantage of the privileges of heterosexuality and not associating fully with the gay movement (Seidman, 2010). The prejudice runs deep enough that many individuals socially exclude or closet bisexual individuals (Rubin & McClelland, 2015) or outright deny the existence of bisexuality as a whole (Denizet-Lewis, 2014; Schwartz & Kempner, 2015).

Group Membership, Bias, and Warmth

This seemingly universal bias could be due to gay and straight individuals' perceptions of bisexuality as an outgroup. Given bisexuality's intermediary nature between heterosexuality and homosexuality (Burke & LaFrance, 2015), bisexual individuals theoretically come under negative scrutiny from both ends of the traditional gender binary. Research suggests that non-bisexual individuals have an inherent preference for a simpler form of duality in sexuality that potentially explains negative views of bisexuality (Burke & LaFrance, 2015). Quantitative research has revealed similar prejudice toward groups that fall between other traditionally recognized groups, particularly transgender individuals (Tate, Youssef, & Bettergarcia, 2014) and biracial individuals (Sanchez & Bonam, 2009; Sanchez, Young, & Pauker, 2014).

The working mechanism behind the biracial prejudice is elaborated using the SCM (Cuddy, Fiske, & Glick, 2008). Just as warmth and competence are heavily weighted in people's impressions of others (Fiske, Cuddy, & Glick, 2007), the model addresses bias in terms of an outgroup's perceived intention to harm (warmth) and the outgroup's capability of inflicting harm (competence). The SCM asserts the basic tenet that warmth and competence are at the foundation of group stereotypes. These differences in stereotype content emerge from perceptions of competition and status, wherein groups perceive non-competitive others as warm and high-status others as competent, while competitive and low-status others are less warm and incompetent, respectively. A further extension of the SCM, the BIAS map, elaborates on the subsequent behaviors toward stereotyped group members based on these perceptions of their warmth and competence. Perceived warmth predicts active facilitation or harm, while competence predicts passive facilitation or harm. For example, outgroups regarded as low in both competence and warmth dimensions would experience active attacks and passive neglect from a judging group.

The present study focused on the role of warmth because, of the two traits, warmth judgments have been shown to be more impactful (Fiske, Cuddy, & Glick, 2007). From an evolutionary perspective, the perception of one's amicable or malicious intents precedes and typically outweighs impressions of that person's capability to act accordingly. Other research has shown that warmth plays an unconscious role in person perception, affecting the perception of a wide variety of positive traits (Asch, 1946; Nisbett & Wilson, 1977). The dimension of warmth is so powerful that it can shape people's first impressions of strangers' trustworthiness after exposures as brief as 100 milliseconds (Willis & Todorov, 2006). Moreover, warmth judgments even occur when the primary trait of study is competence (Cikara & Fisk, 2009).

Present Research

The present study examined individuals' attitudes toward bisexual individuals from the perspective of the SCM and the BIAS map (Cuddy, Fiske, & Glick, 2008), with participant sexuality serving as a natural groups variable. The SCM would hold that the underlying mechanism leading individuals to hold negative attitudes toward bisexual individuals would be the bisexual individual's perceived level of warmth. In this sense, non-bisexual individuals may hold a prejudiced viewpoint toward a bisexual target based on their perception of the target's lack of warmth. These impressions of bisexual individuals as being cold could, therefore, lead non-bisexual people to form more negative attitudes of bisexual individuals.

Based on these assumptions, there are four working hypotheses. First, (H_1) we predicted that non-bisexual individuals would hold more negative attitudes toward a bisexual target than would participants who identify as bisexual. Additionally, (H_2) participant sexuality would influence feelings of warmth such that non-bisexual individuals would view a bisexual individual as less warm than would a bisexual participant. In turn, (H_3) we predicted that these lowered impressions of warmth would lead to negative attitudes toward said bisexual individuals. Therefore, (H_4) we propose a mediation model of group membership bias. That is, the relationship between participant sexuality on attitudes toward bisexual individuals would be mediated by perceptions of the bisexual individuals' warmth (see Figure 1).

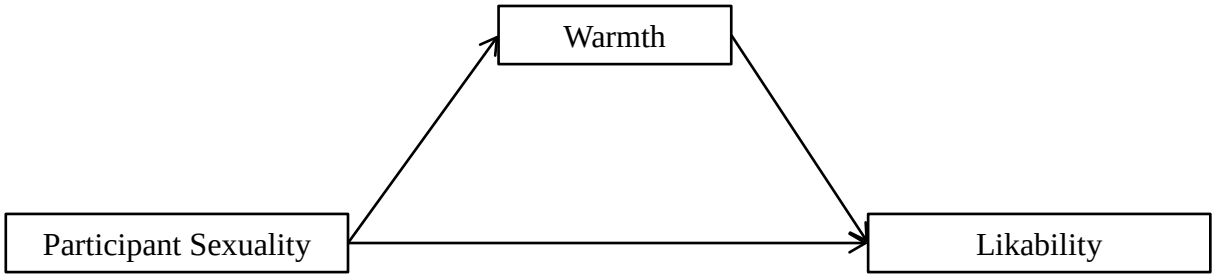

Figure 1: The proposed mediation model of attitudes toward bisexual individuals, based on the stereotype content model (SCM; Cuddy, Fiske, & Glick, 2008), with warmth mediating the relationship between participant sexuality and likeability.

Method

Participants

A total of 193 participants completed the survey by way of Amazon.com's Mechanical Turk. We removed the data of 33 participants who did not correctly identify the target as bisexual. That is, only those who accurately recognized the sexuality of the person in the target profile, a necessary aspect of the design, were retained in the data set. Thus, the final participant count was 160. Of the participants, 64.4% (n = 103) identified as straight, while 13.8% (n = 22) identified as lesbian or gay and 21.9% (n = 35) identified as bisexual. Each participant participated voluntarily with compensation of $0.50.[1]

Materials and Procedure

Participants took a survey administered using an online survey service provided by Qualtrics.com. The first part of the survey obtained informed consent and participant demographics. Participants took part in the survey under the impression that they were doing a study on social media and person perception.

For the next part of the survey, participants viewed three different profiles and answered questions concerning each. Each profile contained a photo of a white man and various bits of information commonly seen on a social media profile, such as birthday, interests, relationships, and sexuality. We chose to use a white man to control for potential race-based prejudice (Gaertner, S. L., & Dovidio, J. F., 1986) or sex-based prejudice (Ferguson, 2014; Bearman, Korobov, & Thorn, 2009). Of these profiles, two contained men listed as interested only in women, while one was listed as interested in both men and women. We randomized which of the three targets participants saw as being bisexual and the order in which the bisexual target appeared. After studying each profile, participants received a set of questions assessing whether they remembered the subject's age, race, and hometown. These questions provided a basis for filtering inattentive participants from our data for reasons listed above.

Participants then completed a questionnaire to assess their impressions of the degree to which each individual portrayed in each profile possessed various attributes. Of note were questions pertaining to how likable the participant thought each person was and how warm they thought the person might be. Other items included distracters for future research (questions pertaining to status and competence) as well as general distracters not pertaining to the current research question. All items were measured using a seven-point Likert scale (1 = negative, 7 = positive) response format. Upon completion, participants were debriefed, thanked for their time, and given a code with which they could be compensated for their participation. To see the impressions questionnaire and sample profiles, see Appendix A and Appendix B, respectively.

Results

Multiple regression analyses were conducted to assess the relationship between participant sexuality and likeability by way of warmth (i.e., $H_1 – H_3$). We dummy coded the categorical variable of participant sexuality as suggested by Cohen, Cohen, West, and Aiken (2003) using straight as our reference participant sexuality condition. Preliminary analyses showed that target profile (i.e., which of the three profiles was identified as the bisexual target) was not a significant covariate, nor were there significant effects of participant sex or the interaction between participant sexuality and sex.[2] Therefore, these variables were not reported below. However, for a list of all statistical results, see Table 1.

Table 1
Summary of Results

Significance Measure	R^2 or β	*b*	*SE*	*t* or *F*	*p*	CI
Target profile	.023	4.356	.164	1.853	.160	[4.033, 4.679]
Participant sexuality	.070	4.177	.175	3.943	.021*	[3.831, 4.523]
Participant sex	.075	3.906	.350	.795	.374	[3.215, 4.598]

[1] One participant was compensated $0.75 after I addressed a typographical error in the informed consent page that listed compensation as $0.75.

[2] Target profile, $R^2 = .023$, $F(2,157) = 1.853$, $p = .160$; participant sex, $R^2 = .075$, $F(5,154) = 2.502$, $p = .033$; interaction between participant sexuality and sex, $R^2 = .077$, $F(7,152) = 1.802$, $p = .091$

Interaction between participant sexuality and sex	.077	3.854	.415	.124	.883	[.3034, 4.675]
Effect of participant sexuality on likeability	.050	4.408	.122	4.133	.018*	[4.166, 4.649]
Likeability (bisexual versus straight)	.222	.678	.243	2.794	.006*	[.199, 1.157]
Likeability (lesbian and gay versus straight)	.100	.365	.291	1.253	.212	[-.210, .940]
Likeability (bisexual versus lesbian and gay)	-.086	-.313	.337	-.928	.355	[-.979, .354]
Effect of warmth on likeability	.619	.601	.061	9.884	.000***	[.481, .722]
Effect of participant sexuality on warmth	.044	4.466	1.285	3.580	.030*	[4.216, 4.716]
Warmth (bisexual versus straight)	.187	.593	.254	2.333	.021*	[.091, 1.095]
Warmth (lesbian and gay versus straight)	.142	.534	.302	1.770	.079	[-.062, 1.130]
Warmth (bisexual versus lesbian and gay)	-.016	-.059	.352	-.167	.867	[-.753, .636]
Participant sexuality on likeability through warmth (bisexual versus straight)		.346	.151			[.035, .725]
Participant sexuality on likeability through warmth (lesbian and gay versus straight)		.312	.162			[-.022, .725]
Participant sexuality on likeability	.006	4.557	.100	.756	.000***	[4..448, 4.758]
Warmth on likeability	.560	.544	.066	8.272	.000***	[.414, .674]

Note. *p < .05. ***p < .001

Participant Sexuality and Likability: Total Effect (H_1)

We first examined the total relationship between participant sexuality and likeability. Results showed a significant relationship, R^2 = .050, $F(2, 157)$ = 4.133, p = .018. Bisexual participants found the target individual to be significantly more likable than did straight participants, β = .222, b = .678, $t(159)$ = 2.794, p = .006, 95% CI [.199, 1.157].[3] Lesbian and gay participants did not think the target was more likable than did straight participants, nor did bisexual participants think the target was more likable than did lesbian and gay participants (p's > .05; see Figure 2).

[3] Effects are considered significant as long as the confidence interval does not contain zero (Hayes & Preacher, 2014)

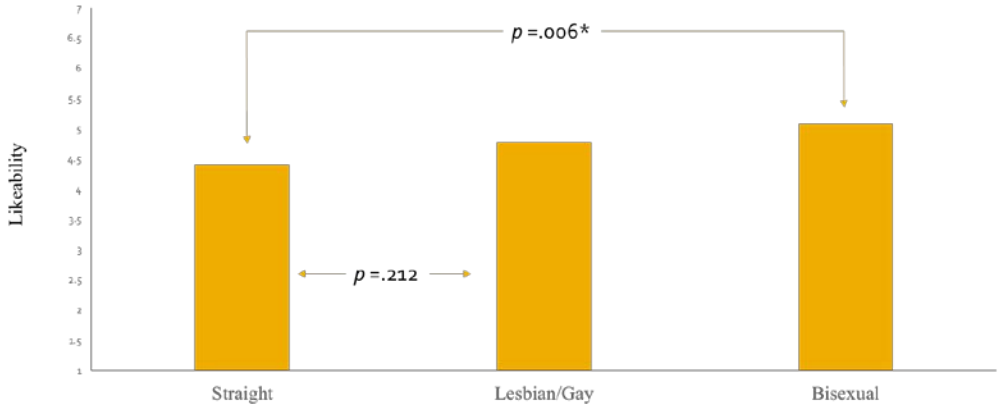

Figure 2: The effect of participant sexuality on likeability.

Participant Sexuality and Warmth (H_2)

Next, we examined the relationship between participant sexuality and perceptions of the bisexual target's warmth. Again, results revealed a significant relationship, $R^2 = .044$, $F(2, 156) = 3.580$, $p = .030$. Bisexual participants found the target individual to be significantly warmer than did straight participants, $\beta = .187$, $b = .593$, $t(158) = 2.333$, $p = .021$, 95% CI [.091, 1.095]. Lesbian and gay participants also found the target to be warmer than did straight participants, albeit marginally so, $\beta = .142$, $b = .534$, $t(158) = 1.770$, $p = .079$, 95% CI [-.062, 1.130]. As with likeability, there was no significant difference between bisexual individuals' perceptions and lesbian and gay participants' perceptions, (see Figure 3).

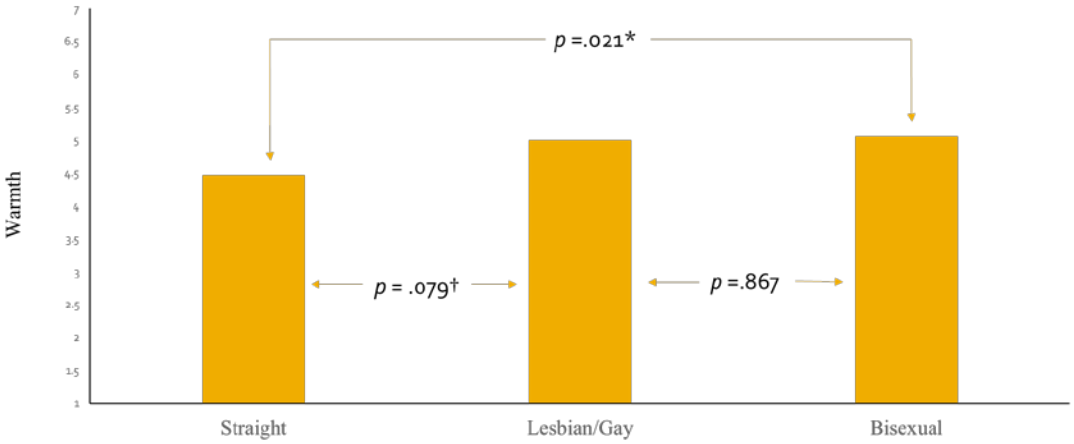

Figure 3: The effect of participant sexuality and warmth.

Warmth and Likability (H_3)

We then examined the relationship between participants' perceptions of the bisexual target's warmth and likability. Warmth was mean-centered as suggested by Cohen, Cohen, West, and Aiken (2003).[4] Warmth significantly predicted likability, $R^2 = .384$, $F(1, 157) = 97.691$, $p < .001$. Participants thought the target was more likable the warmer they thought they were, $\beta = .619$, $b = .601$, $t(158) = 9.884$, $p < .001$, 95% CI [.481, .722] (see Figure 4).

[4] Mean-centering is a coding practice that facilitates interpretation whereby the mean of a continuous variable is subtracted from all scores of that variable.

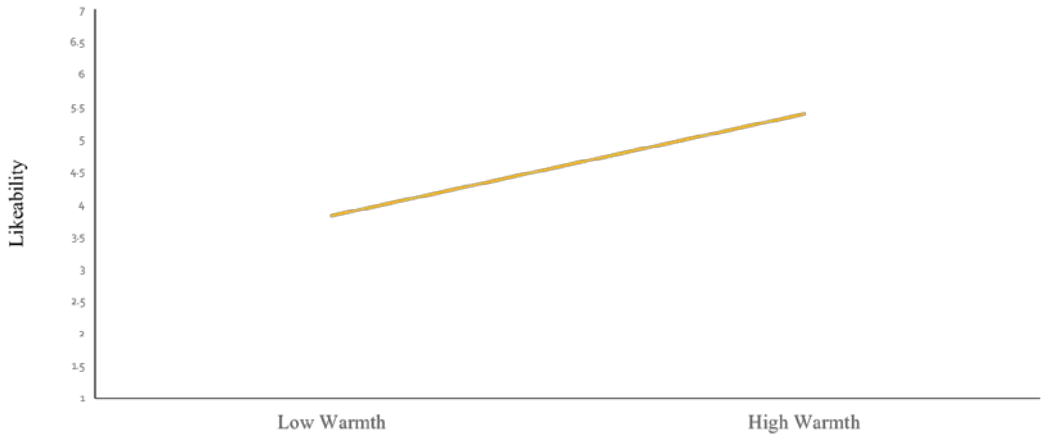

Figure 4: The effect of warmth on likeability.

Participant Sexuality and Likability Mediated by Warmth (H_4)

Our next step was to examine the role of warmth as a mediator in the relationship between participant sexuality and likeability. We examined the mediating role of warmth in the relationship between participant sexuality and likeability using a bootstrapping method (Preacher & Hayes, 2004) to assess the final hypothesis. Bootstrapping repeatedly takes samples equivalent to the size of the original sample and estimates all the coefficients of the mediation model and calculates the relative indirect effects 5,000 or more times to construct a point estimate of the indirect effect and the upper and lower limits of the confidence interval. As indicated by a confidence interval that does not include zero, this analysis revealed that relative to straight participants, bisexual participants felt the bisexual participants were more likable as a result of the positive relationship between participant sexuality and participants' perceptions of the bisexual target's warmth, b = .346, SE = .151, 97.5% CI [.035, .725]. We chose to use a 97.5% confidence interval as recommended by Hayes and Preacher (2014) when examining mediation with multi-categorical independent variables. Comparatively, however, lesbian and gay participants did not feel that the bisexual target was any warmer than did straight participants as a result of the relationship between participants' sexuality and participants' perceptions of the bisexual target's warmth. Thus, there was an indirect relationship of participant sexuality and likeability through the mediator of warmth but only when comparing the responses of bisexual participants with the responses of straight participants (see Figure 5).

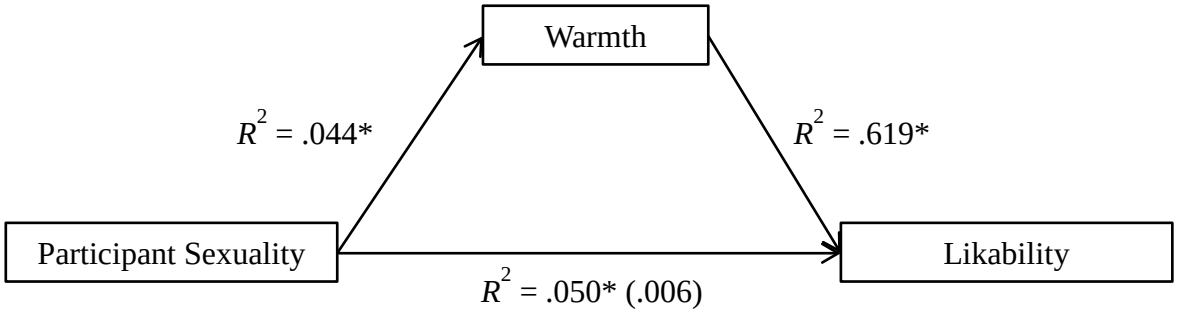

Figure 5: The final mediation model with reported R^2 and β values.

Discussion

Our study looked into one facet of the prejudice felt toward bisexual individuals relating to feelings of warmth. We hypothesized and found that non-bisexual individuals would perceive a bisexual target individual as less likable than would a bisexual participant. Following from the BIAS map and SCM (Cuddy, Fiske, & Glick, 2008), we also expected and found that this perception would stem from lower feelings of warmth. That is, that this perception of target warmth would then mediate any relationship between participant sexuality and likeability.

All hypotheses were largely, though partially, confirmed, with bisexual individuals viewing the bisexual target more positively than did non-bisexual individuals (particularly straight participants, since there were no significant differences between bisexual and lesbian/gay participants). Hypothesis two was also partially confirmed as bisexual individuals perceived the target as warmer than some did non-bisexual participants. Specifically, bisexual individuals perceive the target as warmer than did straight participants. As with hypothesis one, there was no significant difference between lesbian/gay and bisexual individuals' perceptions of target warmth. In support of hypothesis three, there was a significant and positive relationship between how warm and how likable the participants found the target to be. Finally, in line with hypothesis four, warmth acted as the mediating factor in the relationship between participant sexuality and likeability, such that there was a significant relative indirect effect regarding the difference between bisexual individuals' perceptions and straight individuals' perceptions and no significant relative indirect effect for the difference between lesbian and gay participants' responses and straight participants' responses.

Limitations and Future Research

The most notable limitation in the present research was the small representation of the lesbian, gay and bisexual populations, which may have affected our results. In fact, we conducted a second recruitment effort to collect data from only lesbian, gay, and bisexual individuals after our first round of participant collection provided us with fewer than 20 non-straight participants. As such, our sample of queer community participants may be proportionately high compared to the most recent data that state 2.4% of the population, or approximately 5,640 individuals, identifies as lesbian, gay, or bisexual (Centers for Disease Control and Prevention, 2015). Regardless, the low number of lesbian/gay and bisexual individuals may not have provided us with enough statistical power to properly detect an effect with them. Further, it stands to reason that one potential reason for lack of queer representation in the sample involves self-disclosure (Rubin & McClelland, 2015). In many cases, identifying as bisexual or as a member of the queer community in general could put individuals at risk of discrimination or other forms of danger. Even though confidentiality is ensured, there could be a self-imposed need to inaccurately report sexuality as a form of self-protection. Future studies could examine whether results replicate when comparing lesbian and gay participant responses to those of bisexual participants in samples with larger proportions of lesbian, gay and bisexual individuals. However, a hesitance to self-disclose could act as a hindrance in obtaining samples exclusively from within the queer community, even if no other form of identifying information is collected, since there is still an inherent standing bias against those who identify within a subsection of the community not as widely accepted (Friedman et al., 2014; Rubin & McClelland, 2015).

Another limitation of the present research was its primary emphasis on warmth. While this variable is arguably the more important of the two (Fiske, Cuddy, & Glick, 2007), the BIAS map would be incomplete without measurements of competence and status (Cuddy, Fiske, & Glick, 2008). As such, future studies could examine discrimination in terms of the other half of the SCM. Examining this other component of the model in relation to bisexuality bias could open up further avenues of research into the bias. Furthermore, exploring potential interactions or the relative impact of each variable (e.g., whether status or warmth is more important in certain contexts) could be another direction for future research.

Moreover, the present study only included participants from the United States. Including individuals from outside the country could also show the cultural variance of said effects. For example, India is perceived as morally traditional in terms of its' approach to sexuality (Lambert & Wood, 2005; Kalra, Gupta, & Bhugra, 2010; Henry, 2010). However, the Indian culture also exhibits a sort of sexual fluidity distinct from many western cultures (Ramakrishnan, 2006), thus creating a similar ambivalence amid a dissimilar context. The SCM itself applies across cultures (Cuddy et al., 2009), but future research could examine whether these sexuality-based biases replicate across cultures as an extension of research examining the intersections of racial and ethnic identity (Friedman et al., 2014).

One further limitation is that this study is correlational in nature. As such, we cannot assume that the relationships we found were causal in nature. However, our findings are consistent with expectations based on the stereotype content model (Cuddy, Fiske, & Glick, 2008). Further, as a person's sexuality and any social identity that might result from those preferences serve as the basis for individual differences, and therefore, likely existed prior in

our participants to being exposed to the targets. Therefore, our principle predictor (i.e., participant sexuality) likely has temporal precedence over our mediator (i.e., warmth) and our principle dependent variable (i.e., likability of the target). Further, although our proposed mediator was measured after our dependent variable, it stands to reason and holds with theory that perceptions of warmth would be a causal mediator in the relationship between sexuality and likeability, since past research with the SCM has shown it to be an underlying mechanism in other forms of bias (Cuddy, Fiske, & Glick, 2008; Cuddy et al., 2009). However, our results concerning the mediation of the relationship between participant sexuality and likability by warmth should be taken with caution as the directionality of this relationship cannot be firmly established with the current methods. Future studies are necessary to bolster the validity of the proposed relationship pathway.

Implications

The findings could potentially have some implications regarding bisexual individuals in the context of queer community organizations (e.g., pride groups and gay-straight alliances). Though research has shown that these programs provide positive outcomes in the queer community as a whole (Walls, Kane, & Wisneski, 2010), little research has been done regarding their effects on bisexual individuals or their effects on potential biases toward members of the queer community who may not be as equally accepted among the queer community – whether malicious or otherwise. This research could also help to further research examining bisexuality as a distinct identity within the queer community, which Worthen (2013) contends would help reduce sexuality- and gender-based stigma.

Conclusion

The current research aimed to apply the SCM (Cuddy, Fisk, & Glick, 2008) and provide insight into the underpinnings of bias toward bisexuality – particularly the bias seen within the queer community itself (see also Seidman, 2010). The results confirmed many of our hypotheses, including our expectation that warmth would serve as the primary mediating mediator in the proposed model. Further studies can examine the validity of these results and possible mechanisms behind them.

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Appendix A: Impressions Questionnaire

What is the current age of the person in the profile?

What is the sexuality of the person in the profile?

What is the hometown of the person in the profile?

How likeable do you find this person?
- ❍ 1 - Not at all likeable
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very likeable

How warm do you think this person is?
- ❍ 1 - Not at all warm
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very warm

How creative do you think this person is?
- ❍ 1 - Not at all creative
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very creative

How similar to you do you think this person is?
- ❍ 1 - Not at all similar
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very similar

How intelligent do you think this person is?
- ❍ 1 - Not at all intelligent
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very intelligent

How much do you think you this person would be in competition with you for friends?
- ❍ 1 - Not at all in competition
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very much in competition

How high do you think this person's social status is?
- ❍ 1 - Not at all high
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very high

How competent do you think this person is?
- ❍ 1 - Not at all competent
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very competent

How much do you think this person would be in competition with you for romantic partners?
- ❍ 1 - Not at all in competition
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very much in competition

How sociable do you think this individual is?
- ❍ 1 - Not at all sociable
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very sociable

How kind do you think this person is?
- ❍ 1 - Not at all kind
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very kind

How much do you think this person would be in competition with you for jobs?

- ❍ 1 - Not at all in competition
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very much in competition

Appendix B: Sample Profiles

About	
Overview	***Birthday:*** January 28, 1988 ***Hometown:*** Huntsville, Alabama ***Lives in:*** Boise, Idaho ***Education:*** Huntsville High School (c/o 2006) University of Idaho (c/o 2015) B.S., Food & Nutrition: Nutrition ***Employment:*** Personal Trainer & Instructor Anytime Fitness ***Relationship Status:*** Single ***Interested in:*** Men & Women

Timeline **About** **Photos**

About	
Overview	***Birthday:*** May 7, 1991 ***Hometown:*** Seattle, Washington ***Lives in:*** Pullman, Washington ***Education:*** West Seattle High School (c/o 2009) Washington State University (c/o 2014) B.S., Chemistry (Organic Chemistry) ***Employment:*** Pharmacy Technician, Whitman Pharmacy ***Relationship Status:*** Single ***Interested in:*** Women

Timeline **About** **Photos**

About	
Overview	***Birthday:*** August 5, 1990 ***Hometown:*** Cape Coral, Florida ***Lives in:*** Radford Virginia ***Education:*** Radford University (c/o 2012) Virginia Tech University M.S., History ***Employment:*** Assistant Curator, Glencoe Museum ***Relationship Status:*** Single ***Interested in:*** Women