Effects of Sexual Orientation on Reactive Empathy Expression in Women
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ABSTRACT. The majority of previous social psychological research regarding interpersonal reactions with lesbian, gay, bisexual, and transgender (LGBT) individuals has examined interpersonal prejudice toward members of the LGBT community (Blashill & Powlishta, 2009; Herek & Capitanio, 1999; Snyder & Uranowitz, 1978). To expand and diversify the research knowledge base, we focused on reactive empathy. One hundred and sixteen college women read a short vignette of a heterosexual, gay/lesbian, or unspecified man or woman who was having a bad day. Participants then completed a reactive empathy scale and a general empathy scale. Results show that college women report more reactive empathy toward heterosexual characters than toward gay men or lesbian characters, $F(2, 109) = 8.01$, $p < .001$, $n^2 = .13$, and participants reported significantly higher reactive empathy scores for the lesbian character than the gay male character, $t(47) = 1.84$, $p = .037$ (one-tailed), $r^2 = .08$. Findings indicate that gay men or lesbians experiencing negative circumstances may be viewed with less empathy than heterosexual men and women experiencing similar circumstances.

Until the American Psychiatric Association removed homosexuality from the Diagnostic and Statistical Manual of Mental Disorders (DSM) in 1973, being a gay man or a lesbian was seen as a psychological disorder which required diagnosis and treatment (Melton, 1989). After the removal of homosexuality as a diagnosis from the DSM-III, the stigma of being a lesbian or gay man did not just disappear. The majority of research shows that members of the lesbian, gay, bisexual, and transgender (LGBT) community continue to encounter prejudice and discrimination from all types of individuals, including mental health professionals (Blashill & Powlishta, 2009; Hayes & Erkis, 2000). Hayes and Erkis (2000) demonstrated that licensed psychologists reported less reactive empathy and were less willing to work with an HIV-positive male client when the client self-identified as gay as opposed to heterosexual.

The purpose of this study is to add to the research base and show how discrimination toward LGBT individuals can be seen through lower amounts of reactive empathy expression. Understanding reactive empathy expression toward LGBT individuals is vital as psychologists are urged by the American Psychological Association (APA; 2012) to understand that stigma, prejudice, and discrimination can be immense sources of stress; therefore, creating a sense of safety in the therapeutic environment is of primary importance. Furthermore, research shows that in addition to the mental health setting, LGBT individuals continue to undergo discrimination in several environments due to prejudice, learned gender roles, and lack of reactive empathy (Blashill & Powlishta, 2009; Hayes & Erkis, 2000).

Prejudice and Sexual Orientation
Prejudice and sexual orientation have been linked
in the literature for decades. In 1978, Snyder and Uranowitz demonstrated how prejudice and stereotyped beliefs affected an individual’s memory and interpretation of past events. Participants read an extensive narrative about the life of a woman. Afterward, some participants learned that she self-identifies as lesbian, and others learned that she self-identifies as heterosexual. Information about her sexual orientation was completely withheld from a third group of participants. Participants were next asked to answer 36 multiple choice questions based on factual details of the narrative. Participants reconstructed narrative events to support their newly learned understanding of the woman’s sexual orientation; subsequently, participants who learned the woman was a lesbian were more likely to give answers deemed stereotypical of lesbians (Snyder & Uranowitz, 1978).

More recently, Blashill and Powlishta (2009) examined prejudice based on sexual orientation and gender role. The researchers asked men to read a vignette depicting a heterosexual, gay, or unspecified man acting in either traditionally masculine or feminine ways. To create empirically derived masculine and feminine vignettes, items were selected from the Occupations, Activities, and Traits Measures (Liben & Bigler, 2002). For example, the male character had plans of becoming an engineer and enjoyed riding his motorcycle, whereas, the female character had plans of becoming a dietician and enjoyed baking. After reading the vignette, participants assessed the vignette character.

Results showed that male participants rated the character that was acting in a traditionally feminine manner more negatively than the character that was acting in a more traditionally masculine way; in addition, the lowest rating was given to the gay male character acting in a traditionally feminine manner. Results like these are particularly troubling, as Haas et al. (2011) describe prejudice and stigma, along with discrimination, unsupportive home environments, mental illness, and HIV/AIDS as risk factors for LGBT suicidality.

Gender is important in understanding the intensity of prejudicial attitudes toward persons who identify as LGBT. Herek and Capitanio (1999) demonstrated that prejudice is reported more often toward gay men than toward lesbians. In a telephone survey, participants completed measures assessing their positive and negative feelings toward gay men and lesbians. Results indicated that participants gave more favorable ratings of lesbians and less favorable ratings of gay men. Additionally, participants tended to report more positive feelings toward lesbians when they evaluated them independently from gay men; in contrast, participants tended to report more negative feelings toward lesbians when the evaluation was implicitly associated with attitudes toward gay men. These findings may be explained using gender schema theory, as conceptualized by Bem (1981).

Gender Schema Theory
According to gender schema theory, children are taught gender-based schematic processing that makes them assess further information based on gender roles and sex typing. When these gender-based roles are reinforced, children simultaneously learn which attributes should be linked with their own sex and thus, with themselves (Bem, 1981). As a result, most people view masculinity and femininity as opposing gender roles, and erroneously assume that biological sex, and not cultural patterns, determines gender.

Subsequently, society predominantly views the socially constructed categories of “gay man” and “lesbian” in opposition to socially prescribed gender roles. The fact that men “face stronger social pressures than do women to conform to conventional gender roles and behaviors” (Keiller, 2010, p. 39) may explain why gay men experience more discrimination than lesbians. In particular, Keiller (2010) argued that men who do not conform to conventional gender roles, regardless of their sexual orientation, are more often subjected to prejudice, ridicule, and rejection. While research has demonstrated that gay men and lesbians typically experience higher levels of negative constructs, such as prejudice, ridicule, and rejection (Herek & Capitanio, 1999; Keiller, 2010), research has also hinted that these groups concurrently experience lower levels of positive constructs, such as reactive empathy, than their heterosexual counterparts.

Reactive Empathy and Sexual Orientation
Bäckström and Björklund (2007) demonstrated a link between prejudice and empathy. Using participants’ scores on empathy and social dominance orientation scales, Bäckström and Björklund found that empathy was negatively correlated with general prejudice, such that a lack of understanding of another person’s situation corresponded with personal beliefs of social dominance and prejudice.
Although the relation between prejudice and sexual orientation is clearly a salient theme in research, few researchers have examined a possible link between sexual orientation and reactive empathy. However, one research study has demonstrated that a lack of reactive empathy can lead to discrimination and prejudice amongst licensed psychologists. Hayes and Erkis (2000) performed a study in which licensed and practicing psychologists completed Daly’s Homophobia Scale and read a vignette about a client who recently discovered he was HIV-positive. The character alluded to having a long-term relationship with either a woman or a man.

After reading the vignette, each participating psychologist completed the Interpersonal Reactivity Index, a reactive empathy scale. Psychologists reported less reactive empathy, assessed functioning as worse, and were less willing to work with the client in the vignette when the client was in a same-sex relationship, and when the psychologists’ self-ratings were homophobic rather than non-homophobic (Hayes & Erkis, 2000).

Reactive empathy can be vital to the therapeutic relationship and to the treatment of LGBT individuals. In 1975, APA stated that homosexuality does not explicitly imply impairment in judgment, reliability, or stability; at the same time, the APA urged all mental health professionals to take the lead in removing the stigma of mental illness that has long been associated with LGBT individuals (American Psychological Association, 2012). Unfortunately, over 35 years later the field of psychology is still experiencing the effects of prejudice and the lack of reactive empathy toward the LGBT population, as seen in Hayes and Erkis’ (2000) study. Subsequently, it is important to understand how psychologists’ lack of reactive empathy may be affecting LGBT clients as it may result in inappropriate therapy and even refusing to treat clients due to their sexual orientation.

**Purpose of the Study**

Due to the limitations of Hayes and Erkis’ (2000) study, and lack of research in this area, it is unknown if this lessened amount of reactive empathy expressed toward LGBT individuals compared to self-identifying heterosexual individuals extends to the general population. If this link does extend to the general population, its effects on interpersonal interactions with LGBT individuals remain unclear. Our study was conducted as a means to bridge the research gap concerning sexual orientation and reactive empathy. We utilized Davis’ (1980) Interpersonal Reactivity Scale to measure reactive empathy, as it adequately measures four components of reactive empathy using a 5-point scale for each item: perspective-taking, fantasy, empathic concern, and personal distress. Use of a multi-dimensional approach allowed us to fully measure the multi-faceted nature of reactive empathy.

We designed our experiment to determine if college women report less reactive empathy for a gay man or lesbian vignette character than an otherwise identical heterosexual character, while examining the impact of character sex on resulting reactive empathy. We hypothesized that participants would demonstrate greater reactive empathy for the heterosexual characters than the gay male and lesbian characters. We also hypothesized that the amount of reactive empathy participants would report for the heterosexual and unspecified characters of each sex would be similar due to perceived heteronormativity, as participants would assume the unspecified characters were heterosexual. Lastly, we hypothesized that participants would report higher reactive empathy scores for the lesbian character than the gay male character due to the perception of acceptable gender roles.

**Method**

**Participants**

Participants were undergraduate students at a small liberal arts college in the Northeastern United States. The initial sample consisted of 116 women and 29 men; however, we decided to only use data from the female participants to make the results more specific. By having only women in the study, we were able to rule out the occurrence of sex bias; this eliminated the possibility that the mean reactive empathy score of the underrepresented male sample could be heavily altered by the female mean reactive empathy score due to sample size. Additionally, we eliminated the possibility that the mean reactive empathy score of the female participants could be skewed due to “heterosexual men’s attitudes toward homosexual men, which are consistently more negative than both their attitudes toward lesbians and heterosexual women’s attitudes toward either lesbians or gay men” (Herek & Capitanio, 1999, p. 348).

Our final sample consisted of 116 women, all of whom were 18 to 23 years old ($M = 19.0$, $SD = 3.0$), with the exception of one participant who was 49 years old. Participant ethnicity and sexual orientation was not collected, and there...
were no specific criteria for selecting participants. Participants were recruited from introductory psychology classes and additional lower-level psychology and human services courses and received extra credit for their participation. We informed participants they were taking a test on emotional reactance and purposely did not mention we were studying empathy, in order to minimize participant bias.

Procedure
We began each session by giving participants an informed consent form to read and sign. In order to reduce potential participant answer bias we presented the study to the participants as measuring “emotional reactance.” If participants were aware of the true purpose of the study, it is possible they would have expressed more reactive empathy for the gay male and lesbian characters to appear more socially desirable. After collecting the consent forms, we gave each participant a packet and instructed them to complete each page in order from front to back. Each packet began with one of six possible vignettes, which featured either a man or woman who was heterosexual, gay or lesbian, or of unspecified sexual orientation. After reading the vignette, participants completed the adapted version of Davis’ (1980) Interpersonal Reactivity Scale and Caruso and Mayer’s (1998) Multi-Dimensional Emotional Empathy Scale.

To verify that each participant read the vignette accurately, the packets also contained a set of three questions regarding facts presented in the vignettes. Participants completed a short demographic questionnaire at the end of the experiment which lasted approximately 10 to 15 min per session. The presentation and order of packet contents remained the same throughout the study. Following completion of data collection, participants were informed of the true nature of the study via email, without consequence.

Materials
In each of the six conditions, participants received a different vignette to read. Each vignette was identical except for the sexual orientation and sex of the character. The vignettes described a bad day for a college student, either a man or woman, involving three events: the death of the character’s childhood dog, failure to be accepted to the graduate school of choice, and the character’s significant other breaking up with him or her (see Appendix). The sexual orientation of the character was indicated in the experimental conditions by stating the name of the character’s significant other and whether the person was a boyfriend or a girlfriend. The boyfriend or girlfriend of the character with the unspecified sexual orientation was referred to only as the “significant other.”

Reactive empathy. To measure participants’ reactive empathy, we adapted Davis’ (1980) Interpersonal Reactivity Scale to ensure the items were relevant to the vignettes. The adapted scale consisted of 14 items which asked participants to rate how they felt when reading the vignette. For example, one item states: “I don’t feel very sorry for the main character when they are having problems.” The reactive empathy ratings ranged from 1 (does not describe me well) to 5 (describes me very well). The scale has a possible range of 14 to 70, in which higher scores represent greater amounts of reactive empathy directed toward the vignette character. With a sample of 221 men and 206 women, Davis (1980) found consistent internal reliability for all four of the Interpersonal Reactivity Scale components. Cronbach’s alpha for the men (women) were .78 (.79), .71 (.75), .68 (.73), and .77 (.75) for the fantasy scale, perspective-taking scale, empathic concern scale, and the personal distress scale, respectively (Davis, 1980).

General empathy. We used Caruso and Mayer’s (1998) Multi-Dimensional Emotional Empathy Scale to measure the general empathy score for each participant. The scale consists of 30 items, measured on a 5-point scale, from 1 (strongly disagree) to 5 (strongly agree). Two such items include: “If someone is upset, I get upset too” and “I feel good when I help someone out or do something nice for someone” (Caruso & Mayer, 1998). The scale has a possible range of 30 to 150, where higher scores represent higher levels of general empathy. The scale has adequate internal consistency (α = .88; Caruso & Mayer, 1998). Using the scale allowed us to compare participants’ reactive empathy scores in response to the vignette characters after controlling for levels of general empathy.

Design
We used an experimental design to examine the effects of character sex and sexual orientation on participant reactive empathy ratings. The manipulated variables were the sexual orientation of the vignette character (heterosexual, lesbian or gay male, or unspecified), as well as the sex of the character (either a woman or a man). In total there were six conditions in this study: a heterosexual,
Results

Using a 3 (character sexual orientation) x 2 (character sex) ANCOVA, with reactive empathy as the dependent variable and general empathy as the covariate, results indicated significant differences in reactive empathy based on the sexual orientation of the vignette character, but not based on the sex of the character (see Figure 1). General empathy was controlled for because it was found to be positively correlated with the dependent variable (reactive empathy), $r(114) = .23, p = .015$. Results showed a significant main effect of sexual orientation, $F(2, 109) = 8.01, p < .001, n^2 = .13$. However, the main effect of sex was not significant, $F(1, 109) = 1.09, p = .299, n^2 = .01$, nor was the interaction between sexual orientation and sex, $F(2, 109) = 1.03, p = .360, n^2 = .02$.

The main effect of sexual orientation was reflected by the heterosexual vignette characters receiving the highest reactive empathy scores, regardless of whether the character was a woman ($M = 54.00, SD = 7.45$) or a man ($M = 56.00, SD = 8.27$). Similarly, the reactive empathy scores for the characters in the second condition, the lesbian ($M = 50.25, SD = 7.36$) and the gay man ($M = 45.05, SD = 10.14$), were the lowest. For the characters with the unspecified sexual orientation, reactive empathy scores were intermediate for both the woman ($M = 52.08, SD = 12.83$) and the man ($M = 49.25, SD = 7.23$).

Results were further examined using Tukey’s HSD test (HSD = 4.92, $p = .05$), which indicated that the mean reactive empathy score for the heterosexual characters ($M = 54.88, SD = 8.63$) was significantly higher than for the gay male and lesbian characters ($M = 47.49, SD = 8.62$); however, the mean reactive empathy score for the characters with an unspecified sexual orientation did not differ significantly from either the heterosexual or gay or lesbian characters ($M = 51.14, SD = 8.77$). Finally, a one-tailed $t$ test examining reactive empathy scores obtained for the lesbian character compared to the gay male character was significant, $t(47) = 1.84, p = .037$ (one-tailed), $r^2 = .08$, indicating that women in college report more reactive empathy toward lesbians than toward gay men.

Discussion

Based on participants’ scores on Davis’ (1980) Interpersonal Reactivity Scale, more reactive empathy was reported for a heterosexual character having a bad day than a gay male or lesbian character experiencing the same series of negative events. The data supported our hypothesis that college women would report more reactive empathy for heterosexuals than gay men or lesbian women who encountered misfortune. Our results are consistent with Hayes and Erkis’ (2000) findings regarding how licensed psychologists report less reactive empathy and are less willing to work with an HIV-positive client if this client is a gay as opposed to a heterosexual man.

The mean reactive empathy scores obtained for the characters whose sexual orientation was unspecified fell between the scores obtained for the heterosexual characters and the gay male and lesbian characters, but did not differ significantly from either score. These results may be explained by the concept of heteronormativity. Participants may have assumed the character (the man or woman) was heterosexual even though the character’s sexual orientation was unspecified. Additionally, participants may have perceived the term “significant other” as a euphemism for “same sex partner” and thus believed the character was a gay man or lesbian. This simple assumption may explain why the reactive empathy scores for the unspecified characters were lower than the reactive empathy scores of the heterosexual characters. However, participants were not questioned about
their presumptions regarding the sexual orientation of the unspecified character, so future research is needed to better understand how individuals perceive such ambiguous information.

At the same time, there was no difference between the conditions based on the sex of the vignette character, indicating that participants responded with similar levels of reactive empathy for the male and female characters in each respective vignette. However, as hypothesized, one significant difference emerged, such that higher amounts of reactive empathy were reported for the lesbian character than the gay male character. This finding suggests that although participants showed less concern for gay men and lesbians compared to heterosexual men and women, lesbians were regarded more positively than gay men. These findings are in line with previous research indicating that prejudice is reported more often toward gay men than to lesbians due to gender-based schematic processing and sex typing (Bem, 1981; Herek & Capitanio, 1999).

This finding is also consistent with research conducted by Keiller (2010), who found that men face stronger pressure to conform to gender roles and behaviors. Because the gay male vignette character did not maintain a masculine gender role, by “professing his love” in the vignette, this may explain why the gay male character received less reactive empathy than the lesbian character. However, this is unlikely since reactive empathy scores did not vary by sex in each of the other two conditions (heterosexual and unspecified characters). Future research is needed to determine if the effect extends to a male population, or whether these reactive empathy rating bias effects may be due to same-sex identification among women toward lesbians.

In our study, participants were not asked to disclose their sexual orientation on the demographic questionnaire. Due to deception, participants were less likely to guess the true nature of the study, particularly the emphasis on the relations between reactive empathy and sexual orientation, which likely helped reduce participant bias. Additionally, we purposely chose to examine the relations between reactive empathy and sexual orientation among college women of any sexual orientation. However, if this study were replicated, it would be beneficial to obtain the self-identified sexual orientation of the participants. Obtaining this information would allow the researchers to examine the effects of being an LGBT individual on reactive empathy reported toward heterosexual characters versus a gay male or lesbian character.

Additional limitations of the study include the fact that all of the participants were women and it was conducted at a small liberal arts college in the Northeastern United States. Critical steps toward generalizing these findings involve determining whether the same results would emerge from a sample of college men or in contexts outside of a college campus. Researchers could add to this study by comparing the differences between participants from different regions and backgrounds—such as large cities versus smaller, rural communities—to analyze whether lesbians and gay men are regarded differently in diverse environments. At the same time, it is essential to determine the effect that vignette character ethnic identity has on participant reactive empathy as well. As it was hypothesized that participants might view the characters with an unspecified sexual orientation as being heterosexual due to heteronormativity, it may also be possible that participants assumed the characters were of a specific ethnicity, either the majority ethnicity or the ethnicity matching their own. In determining the ethnic identity of the participants and the assumed ethnic identity of the characters, we will be able to determine if and how race and ethnicity may interact to impact reactive empathy in participants from various backgrounds.

In the experimental packets, we purposely placed Davis’ (1980) Interpersonal Reactivity Scale immediately after the vignette and immediately before Caruso and Mayer’s (1998) Multi-Dimensional Emotional Empathy Scale. This ensured that scores on the reactive empathy scale were based specifically on the vignette, and were not influenced by questions on the general empathy scale. However, Perreault (1975, p. 543) notes how “earlier items of an inventory may create a response set or expectation that influences response to later items.” Thus, by not varying the presentation of the general and reactive empathy scales, an order effect may have occurred, which should be addressed in future research.

In conclusion, the results of this study affirm each of the hypotheses demonstrating that college women report lower levels of reactive empathy for gay male and lesbian characters than for heterosexual characters. However, female students report higher levels of reactive empathy for a lesbian character than a gay male character which may be due to gender-based schematic processing. A research opportunity remains in
examining the impact of participant gender and sexual orientation on reactive empathy toward vignette characters of each gender and sexual orientation. Considerable research is still needed in this unique research niche in order to fully comprehend the relations between sexual orientation, gender roles, and reactive empathy.

References


APPENDIX

Example Vignette With the Gay Male Character

This story is about Andy, a senior in college, who is having a bad day. Andy woke up to a phone call from his mother. She told him his childhood dog, Skippy, had been hit by a car and died. He crawled out of bed and got ready for class, not really focusing on what he was doing. Later, he checked the mail and found a letter from UCLA, the prestigious graduate school he wanted to go to. The letter said he was declined acceptance. He crumpled up the disappointing letter and went to class. Later that night, Andy met up with Michael, his boyfriend of two years, for dinner. After casually eating dinner, Michael told Andy they needed to talk about their relationship. He proceeded to tell him it wasn’t working out for him, and he didn’t want to see Andy anymore. Upset by the news, Andy professed his love for Michael, but Michael left anyway. Andy left for his room, reflecting on his horrible day.