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The Effects of Mood on Empathy, Openness to Diversity, Attitudes, and Willingness to Help Marginalized Groups

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THE EFFECTS OF MOOD ON EMPATHY, OPENNESS TO DIVERSITY, ATTITUDES,
AND WILLINGNESS TO HELP MARGINALIZED GROUPS

by

Angela J. Adams

(Under the Direction of C. Thresa Yancey)

Members of marginalized groups such as lesbian women and gay men are often at an increased risk of threat or harm compared to their heterosexual counterparts. They may experience prejudice in the form of discrimination and stigma related behaviors. Due to the stigma lesbian women and gay men face throughout various stages of their lives, it is important to examine and discover which factors increase more acceptance and empathy. Additionally, it is important to examine ways to increase positive regard and reduce discrimination in order to promote psychological and overall wellbeing for lesbians and gay men. Given what we know about stigma, the current study used a MANOVA to examine the impact of mood induction (i.e., happy, sad, and neutral mood groups) on participants' empathy, openness to diversity, attitudes toward lesbian women and gay men, and stigma behavior following a passage about a lesbian woman overcoming adversity. The sample consisted of 67 undergraduate students. No differences were found on any dependent variable based on mood condition. In addition, there were no rural differences in reports of the dependent variables. The results of the two 2 x 3 factorial ANOVAs illustrated a main effect of time and a significant interaction between time and condition on positive affect. For negative affect, a main effect of time was not found, but there was a significant interaction between time and condition. Given these findings, more research needs to be done to explore other factors that may help in fostering more positive and accepting attitudes towards marginalized groups.

Keywords: Mood induction, Stigma, Openness to diversity, Empathy, Willingness to help, Marginalized groups, Lesbian women, Gay men

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CHAPTER 1

INTRODUCTION

There have been many advances in the push for equal opportunity in the United States. However, like most forward momentum toward a more progressive society, steps toward equality have been met with resistance and backlash (Grapes, 2006). Sexual orientation is a highly debated topic and will continue to be in years to come. Once diagnosed as a mental illness, attitudes toward gay men and lesbians have shifted greatly throughout the past few decades and are gradually becoming more positive and accepting. Unfortunately, the fight to legitimize gay and lesbian sexual orientations continues as discrimination still exists at social and political levels (Grapes, 2006).

From a sociological perspective, *stigma* is defined as the co-occurrence of stereotyping, labeling, status loss, discrimination, and separation in a context where power is exercised (Link & Phelan, 2001). Gay men and lesbian individuals are highly stigmatized in our heteronormative society. As such, they face many barriers throughout life. For example, gay men and lesbians are at risk of bullying or teasing in school, are at times unable to attend prom with their same-sex partner, and face legal discrimination by employers (Marshal, Friedman, Stall, & Thompson, 2009).

Enduring these blatant expressions of inequality, discrimination, and persistent psychosocial stress puts gay men and lesbian women at risk for life long health issues (e.g., substance abuse, high blood pressure, mental health issues; Marshal et al., 2009). Due to the adversity and stigma lesbian women and gay men face throughout various stages of their lives, it is important to identify and examine factors that promote more acceptance and empathy at a societal level (McCabe, Bostwick, Hughes, West, & Boyd, 2010).

Specific Aim

In recent years, there has been considerable progress in the fight for equal opportunity among marginalized groups, but there is still more work to be done. The current research is important because it addresses how a variation in mood may alter how individuals experience positive psychological resources needed to minimize discrimination against marginalized groups. This research hoped to add to the literature by identifying different pathways to combat discrimination. Additionally, the study examined ways mood may potentially promote more open and accepting attitudes toward stigmatized groups. Fredrickson's (2004) broaden-and-build theory of positive emotions suggests that positive emotions may "broaden one's awareness and encourage novel, varied, and exploratory thoughts and actions". Over time, this broadened behavioral repertoire builds skills and resources. This study examined attitudes toward lesbian women and gay men. These marginalized groups continue to face open displays of discrimination. Past research explored the relationship of mood on helping behaviors and empathy (Manucia, Baumann, & Cialdini, 1984) but literature on the relationship between mood and openness to diversity and stigma behaviors is scarce. This gap in the literature is what the current research aimed to address.

- Aim #1: Determine if mood affects self-reports on measures of empathy, openness to diversity, attitudes toward lesbians and gay men, and willingness to help members of these groups.
- Past research demonstrates a relationship between happy mood and increased empathy (Berry & Hansen, 1996). Based on this information, a significant positive effect on empathy was predicted for participants with a happy mood compared to those with a more neutral or sad mood.

- The current research aimed to expand the literature on the impact of happy mood induction and its relationship with attitudes toward marginalized groups, since previous literature has focused mainly on mood's relationship with empathy (Devlin, Zaki, Ong, & Gruber, 2014). Since empathy and helping behaviors are both related to happy mood, it was hypothesized that those with a happier mood will demonstrate more open and accepting attitudes toward diversity and demonstrate more willingness to help diverse groups than those with a neutral or sad mood.

Purpose

Interventions such as the one used in the current study are potentially useful in priming others' moods to promote positive recourses and accepting attitudes toward those who are traditionally marginalized. The current study was exploratory in the sense that I examined whether altering an individual's mood impacted one's openness to diversity and empathy toward marginalized groups of people.

Definition of Terms

- *Empathy* can be defined as attending to, sharing in, and understanding another's subjective experiences. Put simply, empathy can be described as being able to put yourself in another person's shoes (Eisenberg, 2009).
- *Positive affect* refers to an emotional state consisting of high energy, complete concentration, and pleasurable engagement (Watson, Clark, & Tellegen, 1988). Calmness, joy, and enthusiasm are emotions associated with positive affect (Watson et al., 1988). Some benefits research has suggested regarding positive affect include cognitive flexibility, increased self-efficacy and confidence, and meaningful interpersonal relationships (Lyubomirsky, King, & Diener, 2005).

- *Negative affect* refers to distress associated with a variety of mood states such as contempt, guilt, anger, fear, disgust, and nervousness (Watson et al., 1988). The current study expects that the different mood induction/memory recall tasks will produce various levels of positive and negative affect.
- *Openness to diversity* has been shown in research to impact changes in student beliefs, attitudes, and actions toward greater tolerance and acceptance of individual differences (Hu & Kuh, 2003).

CHAPTER 2

LITERATURE REVIEW

Stigma

Generally, stigma is viewed as a disadvantage and can be a source of stress especially if an individual is stigmatized based on multiple circumstances associated with being a member of a minority group (e.g., racial minority, religious minority, gender or sexual minority, disabled, mentally ill, HIV positive; Major & O'Brien, 2005). Stigma is defined in various ways with the focus primarily at the individual level (Hatzenbuehler, Phelan, & Link, 2013). Link and Phelan (2001) proposed a reconceptualization of the construct of stigma from a sociological perspective, which is now widely used in the literature. They defined stigma as the co-occurrence of stereotyping, labeling, status loss, discrimination, and separation in a context in which power is exercised (Link & Phelan, 2001).

The term stigma encompasses multiple status types and characteristics (e.g., sexual orientation, obesity). Features of stigma include discrimination at both individual and structural levels; stigma is a broader term than discrimination (Hatzenbuehler et al., 2013). Since stigma is a social disadvantage and a significant source of stress, it is no surprise stigma impacts the health, especially in rural areas where social support and resources may be limited (Simmons, Yang, Wu, Bush, & Crofford, 2015).

Health inequalities may also be experienced by minority members of a rural area if they are perceived as different or a threat (e.g., a Muslim man seeking healthcare). The effects of stigma on health for specific stigmatized statuses (e.g., mental illness stigma) and examining single outcomes is widespread in the literature. However, the study of population health would benefit from a synthesis of various stigmatized groups, various outcomes, and a framework to provide insight into how health inequalities are generated among stigmatized group members

(Hatzenbuehler et al., 2013). Rather than focusing on the mechanisms linking social factors to health outcomes, policies and interventions should address the actual social factor or else risk the production of health inequalities through the creation of new pathways to adverse outcomes.

(Hatzenbuehler et al., 2013).

When a variety of stigmatized characteristics (e.g., mental illness, sexual minority, obesity, HIV/AIDS, disability, minority race/ethnicity) are considered together, the impact on the population is quite profound as many of these stigmatized statuses are common and affect a large number of people. Another alarming pattern involves examining the wide and diverse range of outcomes associated with the above mentioned stigma statuses (e.g., social relationships, employment/income, housing, behavioral/psychological responses, healthcare treatment; Hatzenbuehler et al., 2013).

Status loss is also an essential component of stigmatization as it relates to resources and power (Link & Phelan, 2001). Gender, age, race, education and other factors that are the focus of status characteristic theory are the building blocks for the creation and maintenance of status hierarchies. The *status characteristic theory* states different status labels, such as female and male among cooperative goal-oriented groups, produce unequal performance expectations and evaluations that replicate the original status hierarchy (e.g., men perform better than woman; Berger, Rosenholtz, & Zelditch, 1980). Not only does stigma influence status, it also influences social isolation due to fear of rejection which may prevent individuals from pursuing close relationships for fear of others discovering their status. Stigma may be linked to population health through the pathway of social isolation (Pachankis, 2007).

Gender and Sexual Minority Stigma

Although the focus of this current study is on examining attitudes toward lesbian women and gay men, it is important to acknowledge difficulties all members of the gender and sexual minority community endure from a heteronormative and cisgendered society (i.e., gender identity matches what is usually socially ascribed to those with their sex assigned at birth; Mustanski, Andrews, & Puckett, 2016). In just the past decade, attitudes and policies have altered in such a way that the general population is becoming more accepting of lesbian women and gay men (Baunach, 2012). There is still a long road ahead though, and the fight for equal opportunity is far from over. Stigma toward lesbian women and gay men is still rampant and reflected in the numerous states lacking laws banning discrimination against LGBT persons (lesbian, gay, bisexual, transgender; Koppelman, 2014). An increasing amount of research has emerged in the psychology literature over the past two decades documenting the widespread stigma toward lesbian and gay individuals as well as the damaging effects of this stigma (e.g., substance use, depression, suicide; D'Augelli, Pilkington, & Herschberger, 2002; Huebner & Davis, 2007; LaSala, 2010; Meyer, 2003).

Sexual minority stigma: rural vs. urban locations. There has been a rapid increase in the research associated with rural sexualities since the mid-1990s (e.g., Barton 2010; Gray 2009). Rural areas are characterized by the following: high land-to-human ratios, economic dependence on farming, forestry, and mining, individuals who often value cultural homogeneity, “traditional values,” localism, and religiosity (Miller & Luloff, 1981). When interviewed, many rural-living lesbian, gay, and bisexual (LGB) individuals described their social environment as inhospitable and bleak. Findings from the above mentioned studies highlighted the hostile nature of rural

communities in the treatment of LGB individuals forcing them into silence, perpetuating fear of hate crimes, and leading to social isolation (Swank, Fahs, & Frost, 2013).

In contrast, urban areas tend to be disruptive of authoritarian and ethnocentric perspectives due to city size, population density, and greater cultural heterogeneity. Due to more diversity and the mentioned macro issues, those residents residing in urban cities regularly encounter new and unique social systems that may clash with their own “moral code.” In order to adapt to a wide range of beliefs and opinions, city dwellers must learn to reconcile their own moral beliefs with the behavioral expectations of a more liberal community which leads to an adaptation that normalizes flexibility in thought and fosters acceptance (Swank et al., 2013). Urban regions tend to have a denser concentration of people with liberal views which are associated with higher education levels, less religious fundamentalism, and general tendency to not perceive diversity as a threat compared to more rural areas (Moore & Vanneman, 2003). When compared to their urban counterparts, rural areas were viewed as oppressive whereas urban areas were viewed as a better, more enjoyable, and safer place to flee to if one identifies as a sexual minority (Swank et al., 2013).

Swank and colleagues (2013) found LGB individuals living in rural regions reported experiencing more property damage, homophobic statements, and employment discrimination when compared to urban residing LGB individuals. Those LGB individuals from even smaller rural towns encountered additional amounts of housing discrimination and were also more frequently chased by strangers compared with sexual minorities in urban areas. When race and class differences are also explored in this context, white sexual minorities were less likely to experience multiple forms of heterosexist events (specifically being kicked and punched) and affluent sexual minorities experienced less employment discrimination.

Stigma Reduction

Gay men and lesbian women in the United States are targets of a considerable amount of prejudice manifesting in behaviors ranging from being targets of verbal dislike and bullying to more disturbing behaviors such as being victims of violent attacks and even death (Herek, 1988). G. Weinberg first defined the term “homophobia” in 1972. His definition of homophobia means “the irrational condemnation of homosexual individuals, which results in violence, deprivation, and separation.” In more recent decades, the term has taken on a more general meaning and is frowned upon since it implies a fear of homosexuals which may not be accurate (Briton, 1990).

In the 1980s, the National Gay Task Force (1984) conducted a study in the United States of 2,000 homosexual individuals in 8 metropolitan areas and found 75% of women and 90% of men reported being verbally harassed due to their sexual orientation with half reporting threats of physical violence as well. Information compiled in the 1990s suggests hate crimes rose by 35% since 1991 (Community United Against Violence (CUAV), 1995). More recently, attitudes toward sexual minorities are gradually becoming more positive as reflected in our laws and policies, especially following the Supreme Court ruling on marriage equality nationwide in the United States on June 26, 2015 (Holland, 2015).

The fight is far from over though as hate crimes and discrimination still occur (Holland, 2015). When examining the statistics of lesbian women and gay men’s experience of discrimination, the need for stigma reduction strategies becomes increasingly apparent. It is important to note sexual minority individuals are not the only targets of stigma and stigma reduction efforts should be devoted to other groups as well (e.g., gender minorities, racial minorities, religious minorities). As previously stated, stigma can be psychologically and physically damaging not only to the target of stigma, but to the perpetrator as well

(Hatzenbuehler, 2009). The previous literature on stigma reduction strategies highlights how exposure to members of outgroups and education help decrease stigma (Glassner & Owen, 1976).

The amount of contact an individual has with a lesbian woman or gay man such as on a personal level (e.g., friend, family member) or as a work colleague to complete a task, influences attitudes toward sexual minorities, consequently influencing levels of homophobia (Cullen et al., 2002). Compared to individuals with no prior exposure to sexual minorities, past studies demonstrate those who are acquainted with gay men and lesbian women show less prejudice and demonstrate less stigma behavior. According to Glassner and Owen (1976), personal contact with members of the sexual minority destroys stereotypes people once thought were accurate such as believing all gay men are effeminate and all lesbians are men hating softball players. In addition, previous experience with outgroups, whether gender or sexual minorities or those of another race, decreases one's prejudice by being further exposed to outgroups and developing an understanding toward outgroups by alleviating feelings of disgust, discomfort, and anxiety and seeing the person as more humanized and sharing similar qualities and wants out of life (Millham, San Miguel, & Kellogg, 1976).

Since the current study is examining attitudes toward lesbian women and gay men in particular, how does this relate to other outgroups who experience stigma? Studies show exposure to sexual minorities is a predictor of support not only for sexual minorities but for gender minorities as well, such as transgender individuals (Tee & Hegarty, 2006). This pattern resembles a phenomenon in research on racial and ethnic attitudes called *secondary transfer effect* of intergroup contact which describes how the prejudice reducing contact with one outgroup transfers to attitudes toward a similar stigmatized group (Pettigrew, 2009).

Personal contact and exposure reduces stigma, but what if intergroup contact is not prevalent in a certain region such as in rural areas? *Imagined intergroup contact* may be a solution to this dilemma especially since these may be areas where contact is most needed but harder to come by (Pettigrew, 2008). Imagining positive intergroup interactions may act as a substitute for actual interactions in circumstances where the opportunity for personal contact is limited (Crisp & Turner, 2009). The term imagined intergroup contact is defined as “the mental simulation of a social interaction with a member or members of an outgroup category” (Crisp & Turner, 2009, p. 234). This technique has the following effects: improving intergroup attitudes at the explicit and implicit levels (Turner, Crisp, & Lambert, 2007; Turner & Crisp, 2010), promoting positive trait projection and contact self-efficacy (Stathi & Crisp, 2008; Stathi, Crisp, & Hogg, 2011), encouraging intentions to engage in personal contact and reducing stereotype threat susceptibility (Husnu & Crisp, 2010).

Bartos, Berger, and Hagerty (2014) conducted a meta-analysis of 146 studies and found educational interventions modestly improved attitudes toward sexual minorities and were even more effective at increasing knowledge about sexual minorities. Interventions promoting tolerance toward sexual minorities improved behavior but not attitudes. Other interventions such as those using media narratives and those inducing emotions show promise, but too few of these studies were reviewed in the above mentioned meta-analysis to calculate stable effect sizes. Video or audio recorded narratives of members of a sexual minority are cost-effective and address situations in which personal contact is limited (Tompkins, Shields, Hilman, & White, 2015). Corrigan, Larson, Sells, Niessen, and Watson (2007) examined the effectiveness of recorded narratives to test their viability as a form of low cost contact intervention and found they were effective at eliciting immediate positive changes in attitudes that were maintained at 1-

week follow up. Perspective-taking, a strategy involving assuming the feelings, views, and behaviors of another has also been shown to reduce stigma as well as providing interpersonal benefits such as decreased stereotyping of other groups and increased levels of empathy (Mann & Himelein, 2008). Additionally, perspective-taking may be an important means of increasing contact for those individuals with strong prejudices who do not normally choose to interact with members of stigmatized out groups (Hodson, Costello, & MacInnis, 2013).

Mood and stigma reduction. Previous research on the effects of mood provides evidence that positive affective states are important in reducing stigma (Batson, Coke, Chard, Smith, & Taliaferro, 1979). A possible explanation is mood enhancement contributes to general behavior activation. Batson and colleagues (1979) conducted a field experiment with 40 adults and found evidence for an activation explanation of the relationship between enhanced mood and increased helping. According to an activation explanation, elevated mood not only increases helping others in need, it also increases a range of behaviors in response to stimuli such as information acquisition (Batson et al., 1979). This activation effect is limited to behaviors perceived as having a predominantly positive valence by the participants.

Batson and colleagues (1979) tested their hypothesis by dividing the 40 participants into two groups and instructing them to make calls from designated payphones in the Student Union. Mood was manipulated by having a female confederate make an unsuccessful call prior to each participant's use of the payphone. The confederate would then either remove her dime or leave it before the participant made a call. One group, the elevated-mood condition, found a dime in the coin return of a payphone, whereas the neutral-mood condition did not. Participants were observed closely to ensure they checked the coin return. Those who did not were excluded from

the study. Participants were then given opportunities to obtain general interest information to help a person.

The dependent variable of helping was reflected by whether or not the participants assisted a confederate who spilled a large folder of papers on the floor. Batson et al. (1979) found evidence consistent with previous research in showing elevated mood increased helping as well as evidence for an activation explanation since increased information acquisition increased with mood elevation. These results suggest a person with an enhanced mood is not only more likely to engage in helping, but also more likely to engage in a range of activities.

Many other research strategies have provided similar results as Batson et al., (1979). The following have been shown to increase helping in research experiments: simply thinking happy thoughts (Moore et al., 1973; Rosenhan et al., 1974); unexpectedly receiving a packet of stationary, cookies, or a dime (Isen et al., 1976; Isen & Levin, 1972; Levin & Isen, 1975); and succeeding at a task (Berkowitz & Connor, 1966; Isen, 1970; Isen et al., 1973). Isen et al. (1978) proposed a causal model to help explain the effect of enhanced mood on a range of behaviors. They proposed more willingness to engage in behaviors was due to the effects enhanced mood have on selective recall of more positive aspects of prior experiences. The effects of mood on helping across these various studies have been observed for male and female children as well as adults. The helping effect has been attributed to the “glow of goodwill” (Batson et al., 1979).

In contrast to the above mentioned correlation between enhanced mood and increased helping behaviors, research also shows evidence for a link between sad mood and helping (Manucia, Baumann, & Cialdini, 1984). Prior literature on the influence of experimentally induced happiness and sadness suggests: (a) increased helping among participants with a happy induced mood is a side effect of happiness as opposed to an attempt to maintain happiness, and

(b) increased helping is a result of individuals trying to dispel their negative mood state following a sadness mood induction. Manucia et al. (1984) tested a deviation from this hypothesis and proposed enhanced helping is a direct effect of experimentally induced sadness but a side effect of experimentally induced happiness.

Manucia and colleagues (1984) tested this hypothesis by dividing participants into three groups (i.e., happy, neutral, or sad mood). Participants were given a placebo drug manipulation and told it would induce a particular mood. Half of the participants were told their induced mood was temporarily fixed while the other half was told their mood was manageable and labile. Manucia and colleagues (1984) found, as predicted, those in the sadness induced mood group showed increased helping only when they believed their mood was changeable and those in the happy induced mood group showed increases in helping regardless of whether they believed their mood was labile or fixed. This outcome supports the hypothesis that enhanced helping is a direct effect of induced sadness and a side effect of induced happiness.

A generalized interpretation of this pattern is helping occurs as an active response to manage the temporary mood state, meaning individuals help as a way to maintain happiness and alleviate their own sadness. This *instrumental* perspective of mood-based benevolence presumes altruism among adults contains a self-gratifying quality that allows it to favorably influence mood states (Manucia et al., 1984). Cialdini, Darby, and Vincent (1973) are proponents of negative mood-enhanced helping, as embodied in their *negative state relief* model which accounts for increased helping in terms of its effects on the benefactor's distress rather than the recipient's distress. It is important to note the negative moods Cialdini and colleagues (1973) referred to are those similar to temporary depression. Unpleasant experiences such as frustration

and anger, typically relieved via aggressive action, are not expected to have a link to helping behaviors (Manucia et al., 1984).

Sad mood. Cialdini and associates (1973) tested their *negative state relief* model by lowering participants' moods by having them observe harm to an innocent person and presented them with an opportunity to assist a third party. Half of the subjects were given something gratifying such as unexpected praise or money between witnessing the harm and the opportunity to help; the other half were not given the rewarding experience. Congruent with predictions, those not given an unexpected reward helped significantly more than those who were given a reward, and those who did receive the reward were no more helpful than those in the control group who did not witness harm to another person.

Other studies found similar results compatible with an instrumental motive for negative mood-based helping suggesting helping occurs only when it is likely to lead to gratification and mood relief (Kendrick, Baumann, & Cialdini, 1979). Similar conclusions can be drawn from studies examining how helping actions of saddened adults are influenced by the personal costs and benefits of rendering aid. For example, Weyant (1978) found college students helped more frequently than control participants when their mood was lowered by task failure when the helping opportunity appeared rather low cost such as sitting at a donations booth for perceived high benefits such as collecting money for the American Cancer Society. In contrast, the negative mood subjects tended to help less than those in the neutral mood group when the helping act required high costs such as soliciting donations door-to-door for low benefits such as collecting money for a Little League Baseball team (Weyant, 1978).

Happy mood. An instrumental model could be a viable explanation of prosocial behaviors among individuals in a positive mood since altruism can be gratifying and pleasurable

for adults (Harris, 1977). Previous research demonstrated indirect evidence of participants helping more in order to maintain their current mood such as rewarding themselves more (Masters, 1972) and exposing themselves to favorable self-information (Mischel, Ebbesen, & Zeiss, 1973). Data also suggest that individuals in a happy mood help less than neutral mood controls on tasks with unpleasant consequences but help more on tasks with pleasant outcomes, suggesting helping was used as a means to maintain positive affect (Forest, Clark, Mills, & Isen, 1979). However, other outcomes in the field of mood and helping appear to disagree with this instrumental model (Manucia et al., 1984).

An example disputing an instrumental model of positive affect and helping is examining how happy mood inductions lead to generosity not just in adults, but in young children as well, who do not find altruism gratifying like adults (Barden, Garber, Duncan, & Masters, 1981). In addition, even when the help is anonymous, the promotive effect of positive affect on benevolence of young children still appears, suggesting benevolence manifests within happy individuals for reasons not explained by self-gratification (Manucia et al., 1984). In summary, enhanced helping is better explained by an instrumental model in the case of sad mood, while a *concomitance model* best explains increased helping behaviors among participants in a happy mood. This model states that prosocial activity is viewed as a side effect rather than a direct response to positive mood (Manucia et al., 1984).

Four possible explanations are offered proposed as interpretations for how helping can be a side effect of positive affect. The first explanation is positive mood inductions cause individuals to like others more, and therefore be more willing to help others (Clore, 1975). A second explanation relates to the “pay it forward” concept in the sense that positive affect produces an increased belief in individuals that if they are more generous with their present

resources, then good things will await them in their future. This explanation may stem from general optimism of individuals with a positive affect or an enhanced sense of personal control (Manucia et al., 1984). A third explanation revolves around equity considerations of those happy participants who consequently are emotionally advantaged and desire to share their positive feelings with those in need (Rosenhan, Salovey, & Hargis, 1981). The fourth explanation supporting a concomitance model states positive mood facilitates access to positive memories as opposed to neutral or negative ones; thus, individuals confronted with an opportunity to help others may selectively recall previous positive experiences of helping others and be more willing to help in the present (Isen, Shaker, Clark, & Karp, 1978).

Empathy. *Empathy* can be defined as attending to, sharing in, and understanding another's subjective experiences. Put simply, empathy can be described as being able to put yourself in another person's shoes (Eisenberg, 2009). When examining past research on empathy and positive emotion, two contradictory theories have emerged. The *empathy amplification* hypothesis suggests positive emotion is associated with greater empathy since it tends to enhance prosocial processes. However, the *empathy attenuation* hypothesis suggests positive emotion would be associated with lower empathy due to positive emotions promoting antisocial or self-focused behaviors. More evidence seems to support the *empathy amplification* hypothesis as positive emotion is associated with trust, enhanced relationship commitment, increased helping behaviors toward others, higher-quality social interactions, feelings of care toward others in distress, and perspective taking (Berry & Hansen, 1996).

Devlin and colleagues (2014) explored the relationship between positive emotion and empathy further by investigating associations between positive emotion and subjective (self-report) as well as objective measures (task performance) of empathy. Positive emotion is

associated with increased subjective empathy but objective measures of empathy depend on the context of the participant's emotional state. Interestingly, if the emotional stimuli are mood incongruent (i.e., negative), positive affect may be associated with decreased objective empathy in this context. If the emotional stimuli are mood congruent (i.e., positive), then the positive mood may increase empathic performance as well as display a higher sensitivity to upshifts in emotion.

Another relevant distinction in the conceptualization of empathy is between *dispositional* or trait empathy versus *situational* or induced empathy (Batson, 1990; Davis, 1983). Participants scoring high in dispositional empathy perceive themselves as chronically responding empathically; however, under the right circumstances, nearly everyone can have their empathy responses engaged or disengaged. The fact that empathy can be induced suggests empathy is a heavily 'gated' modulated process (Watt, 2007). Correlational studies typically use dispositional measures of empathy, which limits the ability to make causal inferences. To further examine these relationships, the current study examined situational empathy induced by assigning participants to imagine scenarios from a target's perspective, which will help clarify any causal relationship between mood and empathy.

Empathy has a good reputation as being positive. As such, it is difficult to locate research studies pointing out potential problems with having or displaying empathy. Empathy has benefits as it relates to strangers, friendships, relationships, and professional settings among others (Coffman, 1981). A significant focus of literature is on the role of empathy in professional settings, particularly those related to caring such as medicine, teaching, and clinical psychology. Teachers with high empathy can positively influence the outcomes of students by increasing motivation, and highly empathic therapists and doctors help improve patients' mental and

physical health (Coffman, 1981). Its association with more prosocial behaviors toward strangers is one of the most widely studied and obvious benefits of high empathy (Konrath & Grynberg, 2013).

Openness to diversity. While less often a focus of research compared to other factors for reducing stigma, the current study predicted participants scoring higher in positive mood and openness to diversity would have more favorable attitudes toward lesbian women and gay men and would also be more willing to help members of a stigmatized group in need. Most of the research exploring openness and stigma examines openness to experience from a personality characteristic perspective, but even this research is scant (Cullen, Wright, Jr., & Alessandri, 2002).

Cullen and colleagues (2002) investigated the personality variable of openness to experience as it relates specifically to negative attitudes toward gay men and lesbian women. Participants included 123 students enrolled in introductory psychology and sociology courses from a large university. Participants completed the NEO Personality Inventory (NEO-PI), the Assessment of Attitudes Towards Lesbians and Gay Men, and the Bern Sex Role Inventory. The current study also utilized the same 20-item Assessment of Attitudes Towards Lesbians and Gay Men (ATLG; Herek, 1984) which measures personal feelings toward lesbians, gay men, and homosexuality in general.

Based on the 5-Factor Model of Personality, the NEO-PI is a comprehensive taxonomy of personality traits (i.e., Neuroticism (N), Extroversion (E), and Openness (O); McCrea & Costa, 1991). Cullen and colleagues (2002) hypothesized participants scoring high in homophobia would be more likely to score high on Neuroticism and low on the Extroversion and Openness scales. They also predicted levels of homophobia would be higher for men compared to women,

those with little to no contact with lesbian women and gay men, and those who adhere to traditional gender roles for men and women. Across the literature, consistent patterns identifying those holding negative attitudes toward lesbian and gay individuals have been observed (Cullen et al., 2002). Some of the most common variables known to influence negative attitudes toward members of marginalized groups are gender, an individual's support for traditional gender roles, religious affiliation, degree of religiosity, coping style, amount of personal contact with lesbian women or gay men, and degree of empathy (Berkman & Zinberg, 1997).

One of the most consistent predictors of negative attitudes toward lesbian women and gay men is gender (Herek, 1988). Compared to heterosexual women, numerous studies reveal heterosexual men, on average, have more antigay hostility (Herek, 1988). Herek (1988) states this gender difference may exist due to the different experiences men and women have that are associated with principle correlates of homophobia (e.g., religiosity, perceived attitudinal norms, personal contact with gay individuals, family, and gender ideologies). Additionally, American culture continuously emphasizes the importance of rejecting men who violate social norms to further affirm someone's own masculinity. This type of ideology surrounding masculinity is likely supported by an individual's male peers, particularly in late adolescence and early adulthood. Consequently, this rigid adherence to masculine ideologies may limit a heterosexual male's contact opportunities with homosexual individuals due to the alleged violation of traditional "gender-specific" behavior (Cullen et al., 2002).

Results of Cullen and colleagues' (2002) study revealed a lack of exposure to members of the lesbian and gay community was the most critical predictor of homophobia followed by gender and the personality variable Openness to Experience. Openness, in this context, reflects elements such as active imagination, aesthetic sensitivity, receptiveness to inner feelings,

preference for variety, intellectual curiosity, and independence of judgment (Costa & McCrae, 1985). In addition, men and those who had no prior contact with lesbian or gay individuals were significantly more homophobic.

These results highlight the importance of openness and exposure to marginalized group members in reducing stigma. It is important to note that while the current study did not focus on openness from a NEO-PI perspective, it does relate in the sense that some of the same variables mentioned may also correlate with openness to diversity which the current study explored.

Tolerance for ambiguity, also termed “openness,” positively relates to non-conventionality which tends to lead to more accepting views of ideas that may be unclear or people who may stray from the norm (Costa & McCrae, 1985).

Summary

Given what we know about stigma, the current study examined the impact of mood induction (i.e., happy, sad, and neutral mood groups) on participants’ empathy, openness to diversity, attitudes toward lesbian women and gay men, and stigma behavior following reading a passage about a lesbian woman overcoming adversity. In addition rurality was examined to investigate the relationship between region and attitudes toward lesbian women and gay men. Examining the impact of mood on these variables was exploratory in the current study in the sense that this area is not as researched as other aspects of the study such as imagined exposure and perspective taking.

Hypotheses

Consistent with previous literature (Delvin et al., 2014), we hypothesized participants in the happy mood induction group would report higher levels of empathy, greater openness to diversity, and more positive attitudes toward lesbian women and gay men compared to the sad

and neutral/control mood groups. We hypothesized these individuals would also exhibit less stigmatizing behavior on the stigma measure compared to those in the neutral and sad mood induction groups.

We hypothesized individuals in the neutral or control mood induction group would score somewhere between those in the happy and sad mood induction groups on the measures of empathy, openness to diversity, attitudes toward lesbian women and gay men, and the behavioral measure of stigma. Those in the sad mood induction group were hypothesized to score lowest on all the measures listed above. In addition, we hypothesized individuals from rural areas would have more stigmatizing views toward lesbian women and gay men as shown in previous literature (Swank, Fahs, & Frost, 2013).

CHAPTER 3

METHOD

Participants

A total of 67 students participated in the current study. The average age of the participant sample was 19.40 years with a standard deviation of 2.37 years. Participants ranged in age from 18 to 32. In response to the gender prompt, 53 participants (79.1%) identified as women and 14 (20.9%) identified as men. Most participants identified as White/Non-Hispanic (31; 46.3%), with 20 participants identifying as African American (29.9%), 9 as Hispanic American/Latino(a) (13.4%), and 7 as bi/multi-racial (10.4%). The majority of participants identified as heterosexual (58; 86.6%), three identified as lesbian/gay (4.5%), three identified as bisexual (4.5%), and three identified as undecided (4.5%). Thirty participants (44.8%) reported being raised in a rural area while 37 participants reported being raised in a non-rural area (55.2%).

Procedures

Participants were recruited for the study via the SONA system, and data collection was conducted in person. Only one participant completed the study at a time to protect confidentiality. Data were collected via pencil and paper and an online behavior task. Each participant was given a random numeric code which negated the need to collect names on study documents.

First, participants read and signed an informed consent document. The first of three mood survey administrations, using The Positive and Negative Affect Schedule (PANAS), was conducted on paper. Next, the participants were randomly assigned to one of three conditions: “happy” mood induction, “sad” mood induction, and “neutral.” See Appendix A for mood induction scripts. The participant listened to the appropriate prompt for the given mood induction

and completed a memory recall exercise on the computer in which they spent 15 minutes writing about either a happy, sad, or neutral memory depending on random assignment (please see Materials section below). Next, the second mood survey administration was conducted via pencil and paper. Then, all participants read along and heard an audio recording of the empathy-inducing story of a lesbian woman overcoming adversity (see Appendix B).

The experimenter then instructed the participants to complete the remaining measures: the final mood administration, a measure of empathy as it relates to the story about the lesbian woman overcoming adversity (Exposure Task Passage Questionnaire), the Current Openness to Diversity measure, the Attitudes Towards Lesbians and Gay Men Revised (ATLG-R) Scale, and a demographic sheet (see Appendix C for measures created by the author).

After completing the measures, participants completed a behavioral task on a designated computer. Participants were informed that the researchers will donate one cent per click to the *It Gets Better Project* (a pro-LGBT organization), up to 100 clicks per participant. The computer program automatically counts clicks. Next, onscreen instructions directed participants to close the behavioral task program, ensuring confidentiality of responses, and exit the room to notify the experimenter that they were finished.

Lastly, all participants were thoroughly debriefed. As part of the debriefing process, participants engaged in an active mindfulness/debriefing exercise to help stabilize their mood. The researcher also provided the participants with resources they can utilize in the event of emotional distress following their participation in this study. In total, time for participation in this study was approximately 90 minutes.

Measures and Materials

The following questionnaires were administered: the PANAS Questionnaire (mood measure), questions adapted by the investigator from Barkley's (2005) Openness to Diversity and Challenge, a measure of empathy designed by the investigator to measure the participants' level of empathy as it relates to the Exposure Passage, and the Attitudes Towards Lesbians and Gay Men Revised (ATLG-R) Scale. In addition, participants completed a behavioral measure of willingness to assist members of the lesbian and gay community (please see Procedures). Participants provided demographic information via a demographic self-report sheet.

Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegan, 1988).

The PANAS consists of 20 words, 10 positive and 10 negative, describing different feelings and emotions. Participants indicate to what extent they currently feel each affective state on a scale of 1 (*very slightly or not at all*) to 100 (*extremely*). Scores are added separately for the positive and negative words, generating two scores between 10 and 100. Lower scores indicate low (positive or negative) affect and higher scores indicate high (positive or negative) affect. The PANAS has strong internal consistency and validity. Watson et al. (1988) reported strong internal consistency for various time reference periods for the Positive Affect Scale (Cronbach $\alpha = .86 - .90$) and the Negative Affect scale (Cronbach $\alpha = .84 - .87$). In the current study, initial PANAS scores demonstrated good internal consistency (Cronbach $\alpha = .90$ for positive affect and Cronbach $\alpha = .87$ for negative affect on the first administration of the PANAS for the current study).

Current level of openness to diversity (COTD; adapted from Barkley, 2005). The researcher adapted six questions from Barkley's (2005) Openness to Diversity and Challenge questionnaire by adding the word "Currently" at the beginning of each statement to capture the participants' current level of openness to diversity. Current openness to diversity served as a

dependent variable. This measure is face valid and captures the participant's attitudes to different ideas from their own experiences. Responses are on a five-point Likert scale and range from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores represent a higher level of openness to diversity. Barkley's (2005) Openness to Diversity and Challenge measure consisted of eight questions from the College Student Experience Questionnaire (CSEQ; Kuh, Gonyea, Kish, Muthiah, & Thomas, 2003). The eight questions used in Barkley's (2005) research are valid and reliable in extensive literature and in various surveys (Edison et al., 2001; Kuh et al., 2003).

Exposure passage questionnaire. The exposure passage questionnaire was created for use in this study to assess levels of empathy specifically related to the lesbian character in the exposure passage. The exposure passage task consisted of participants listening and reading along to a story about a lesbian woman overcoming adversity and hardship during her process of coming out. The exposure questionnaire consists of five items, each rated on a four-point Likert scale from 0 (*completely true*) to 3 (*completely untrue*) with higher scores representing greater levels of empathy. An example item on the empathy questionnaire is, "Kim's misfortunes did not disturb me a great deal" (see Appendix C).

The Attitudes Towards Lesbians and Gay Men Revised Scale (ATLG-R; Herek, 1994). The ATLG-R (Herek, 1994) is a brief instrument designed to measure attitudes toward lesbians and gay men. The ATLG-R measures attitudes toward lesbians (ATL) and gay men (ATG). Each of these subscales consists of ten items. Responses are rated on a nine-point Likert scale ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). Higher scores indicate more negative attitudes whereas lower scores indicate more positive attitudes. The ATLG-R and its subscales have demonstrated high levels of internal consistency among college students ($\alpha = .90$) for the full scale and subscales ($\alpha = .85$; Herek, 1994). ATLG-R correlates with family ideology,

limited contact with lesbians or gay men, and religiosity (Herek, 1994). The current study used the ALTG-R to assess the dependent variable of attitudes toward lesbian women and gay men. In the current study, the ATLGR demonstrated good internal consistency ($\alpha = .95$).

Behavioral task. The behavioral task measures participants' current willingness to assist lesbian women and gay men determined by how much of the researcher's money they would allocate to this pro-lesbian/pro-gay organization. Participants completed a clicker task online via a website made specifically for this study. Participants were told that each time they click their mouse on a target area, one cent will be donated to the *It Gets Better Project*, an organization associated with promoting equality and lesbian and gay rights. Participants had the option of clicking as many times as they wished, with a maximum donation of \$1.00 per participant. The mean number of clicks was 158.99, and the standard deviation was 122.54.

Demographics questionnaire. Participants completed a 10-item self-report questionnaire to determine their current demographic information (e.g., gender, age, educational level, race/ethnicity, sexual orientation, geographic region; see Appendix C).

Happy mood induction. Participants assigned to the happy mood group listened to the researcher read a prompt asking them to recall a recent accomplishment and write about it (see Appendix A). Participants completed the writing entry on a computer and all entries were saved on a protected drive.

Sad mood induction. Participants assigned to the sad mood group listened to the researcher read a prompt asking them to recall a time they felt rejected and write about it (See Appendix A). Participants completed the writing entry on a computer and all entries were saved on a protected drive.

Neutral mood induction. Participants assigned to the control group listened to the researcher read a neutral prompt asking them to recall an event in their life that does not elicit positive or negative emotions and write about it (See Appendix A). Participants completed the writing entry on a computer and all entries were saved on a protected drive.

Exposure Task Passage. All participants listened to and read along with a passage about a woman coming to terms with her sexual orientation and the stigma and discrimination she experiences along the way. This passage was designed to elicit empathic responses from participants (See Appendix B).

CHAPTER 4

RESULTS

Pre-Manipulation Analyses

Baseline differences in positive affect and negative affect scores (PANAS) were examined between individuals randomly assigned to the three memory conditions (happy memory, neutral memory, and sad memory conditions). Self-reports of positive affect were examined for the Happy Memory group ($n = 23$), the Neutral Memory group ($n = 22$), and the Sad Memory group ($n = 22$). A oneway ANOVA indicate no differences among the three groups, $F(2,67) = .69, p > .05$. Individuals in the Happy Memory condition ($M = 553.74, SD = 196.13$) reported comparable levels of positive affect at baseline as individuals in the Neutral Memory ($M = 551.91, SD = 256.49$) and Sad Memory ($M = 617.64, SD = 173.78$) conditions.

Self-reports of negative affect were also examined for all three groups. Results of the ANOVA reveal no differences among the three groups $F(2,67) = .21 p > .05$. Individuals in the Happy Memory condition ($M = 187.58, SD = 173.16$) reported comparable levels of negative affect at baseline as individuals in the Neutral Memory ($M = 161.41, SD = 149.64$) and Sad Memory ($M = 192.14, SD = 182.05$) conditions.

Prior to hypothesis testing, data were analyzed using a MANOVA to ascertain if the dependent variables differed by rural vs. non-rural status. For all dependent variables, there were no differences based on geographic region where participants were raised. Please see Table 1 for means and standard deviations by region.

In addition, correlational analyses were conducted on the dependent variables. As expected, empathy (passage score), current openness to diversity and number of clicks to donate to a LGBT positive organization were positively correlated. In addition, attitudes toward lesbians

and gay men (ATLG scores) were negatively correlated with the other dependent measures.

Please see Table 2 for results of correlational analyses.

Manipulation Check

To ensure that the mood induction task was effective, a series of 2 x 3 mixed factorial ANOVAs were conducted for the Happy, Sad, and Neutral Mood recall task groups at time 1 and time 2. Results were evaluated to determine the main and interaction effects for both the positive PANAS scores and negative PANAS scores of the three mood recall task groups at times 1 and 2 and are reported below.

Positive Affect. As shown in Figure 1, mean positive affect scores significantly increased for participants who participated in the happy memory task. This finding was confirmed with a 2 x 3 Factorial ANOVA with Time (time 1, time 2) and Condition (happy, sad, and neutral) as independent variables. The results illustrated a main effect of Time, $F(1, 67) = 4.73, p = .03, \eta_p^2 = .931$. Also, a significant interaction was revealed between Time and Condition, $F(1, 67) = 12.22, p = .00, \eta_p^2 = .72$. Specifically, this interaction effect suggests participants who engaged in the Happy Memory recall task experienced greater increases in positive affect from baseline to post memory condition completion when compared against participants who completed the neutral and sad memory recall task.

Negative Affect. As shown in Figure 2, mean negative affect scores decreased for participants who completed the neutral and positive memory tasks. These results were confirmed with a 2 x 3 Factorial ANOVA with Time (time 1, time 2) and Condition (happy, sad, and neutral) as independent variables. A main effect of Time was not found, $F(1, 67) = 2.00, p = .16, \eta_p^2 = .97$, but a significant interaction effect was found between Time and Condition, $F(1, 67) = 15.25, p = .00, \eta_p^2 = .68$. This interaction effect suggests participants experienced comparable

levels of variation in negative affect. Specifically, individuals who engaged in the Sad Memory recall task experienced an increase in negative affect while individuals who completed the Neutral and Happy memory recall tasks experienced a comparable decrease in negative affect.

Hypothesis Testing

The first hypothesis stated that participants in the happy mood induction group will report higher levels of empathy, openness to diversity, more positive attitudes toward lesbian women and gay men, and donate more money in the behavioral clicker task compared to participants in the sad and control mood groups. Results from an one-way multivariate analysis of variance (MANOVA) indicate no significant difference in participants' empathy (passage score), score on the Current Openness to Diversity (COTD) measure, score on the Attitudes towards Lesbians and Gays (ATLG) measure, and total number of clicks based on condition, Wilk's $\Lambda = 0.919$; $F(8, 120) = .647, p > .05$, partial $\eta^2 = .041$ among the three conditions. Please see Table 3 for means by condition.

CHAPTER 5

DISCUSSION

The current study investigated the impact of mood on current openness to diversity, empathy, attitudes toward lesbian women and gay men, and helping behavior toward members of sexual minorities. Participant mood was manipulated for three conditions (happy, sad, and neutral) via a series of narrative-based induction tasks. Differences between groups were examined by comparing the four dependent variables (empathy/exposure passage score, current openness to diversity, attitudes toward lesbians and gay men, and number of clicks on the behavioral/donation task).

Condition Group Differences

Participants in the happy condition did have a significant increase in positive mood; compared to those in the sad and neutral mood conditions. Individuals in the sad mood condition experienced a significant negative mood increase compared to the other two conditions. Overall, it appears as though our mood manipulation was successful. Narrative based tasks may be effective in eliciting mood. Future research may want to consider continuing to utilize narrative tasks for mood induction studies.

Levels of Empathy

In the current study, mood did not impact reported empathy level. This finding is inconsistent with previous research related to *empathy amplification* and *empathy attenuation* hypotheses (Berry & Hansen, 1996). More evidence in past research supports the *empathy amplification* hypothesis which suggests positive emotion is associated with greater empathy since it tends to enhance prosocial processes. The *empathy attenuation* hypothesis, however, suggests positive emotion would be associated with lower empathy due to positive emotions

promoting self-focused or antisocial behaviors (Berry & Hansen, 1996). Past research by Delvin and colleagues (2014) suggests that if the emotional stimuli are mood congruent (i.e., negative), positive affect may be associated with a decreased objective empathy. One explanation for the lack of significant impact of mood on empathy levels in the current study may be that both the *empathy amplification* and *empathy attenuation* hypotheses simultaneously occurred. For the current study, it is possible that some participants in the happy mood group experienced *empathy attenuation*, while others in the same condition experienced *empathy amplification*. Future research may consider focusing on positive mood induction and examining empathy levels within the group.

Openness to Diversity

In the current study, no group differences were found. The results indicate that mood did not alter levels of openness. No previous research was available regarding mood and its impact on openness to diversity, so the current research was exploratory in the sense of investigating whether the two are related. However, more research exists on openness to experience as a personality trait and examines whether openness impacts positive or negative affect as opposed to the current study which sought to examine how positive and negative affect impact openness to diversity. Openness to diversity relates to openness to experience in that those who are more open to new things, are more likely to be open to experiences of those different from them

Several research studies found no significant association between positive and negative affect and openness to experience (Kuppens, Van Mechelen, Nezlek, Dossche, & Timmermans, 2007). However, a meta-analysis has linked openness to higher positive affect (Steel, Schmidt, & Shultz, 2008). Another study on the effect of personality on daily life emotional processes found that openness had no effect on average level of affect, but it did impact emotional reactivity

(Komulainen et al., 2014). Since the research is lacking on mood's impact on openness to diversity, future research should consider continuing to examine if mood has an impact on openness to diversity by inducing positive mood in one group and negative mood in the other and examining how participants respond on a measure of general openness, such as Barkley's (2005) Openness to Diversity and Challenge questionnaire. This may provide information on any direct relationship between current mood and ratings of openness.

Attitudes toward Lesbian Women and Gay Men

No group differences were found in the current study. While the research to suggest that mood impacts attitudes toward lesbian women and gay men is lacking, there is research to suggest that mood impacts reliance on heuristics or stereotypes. Research shows that positive moods appear to increase reliance on heuristics and other generic knowledge structures (e.g., Bless et al., 1996; Isen & Daubman, 1984; Isen & Means, 1983). Sadness, in contrast, seems to be associated with the avoidance of or less reliance on simplified processing strategies (Bless et al., 1990; Weary & Gannon, 1996). Implications from these findings suggest that happiness is associated with greater reliance on stereotypes compared to sadness. Individuals who hold negative or positive stereotypes toward sexual minorities may have been more reliant on heuristics if they received the positive mood manipulation in the current study. However, the current study did not examine pre-existing stereotypes the participants may or may not have held. Future research may benefit from assessing stereotypes held by participants before mood manipulation in order to investigate whether mood impacts attitudes in light of those held stereotypes. The difficulty may be in finding a measure to assess these stereotypes which does not create priming effects in the participant and does not increase the chance of responding based on social desirability.

Willingness to Donate

In an attempt to examine stigmatizing attitudes from a behavioral perspective with less influence from social desirability, participants clicked on a picture to increase researcher donations to a pro-LGBTQ support group. This task was exploratory to examine if mood would impact amount of clicks and donations given. While willingness to donate was correlated with empathy, mood did not seem to impact the amount an individual was willing to donate. It appears participants were willing to increase the researcher donation regardless of mood condition. This finding is consistent with previous research on helping behaviors related to positive and negative affect. Past research demonstrates that individuals in a positive mood may exhibit prosocial behaviors since altruism can be gratifying and pleasurable and helps to maintain their positive mood (Harris, 1977).

In addition, past research has also found that individuals in a sad mood exhibit helping behaviors in order to decrease their negative mood state (Kendrick et al. 1979). Manucia et al. (1984) also found that enhanced helping was a direct effect of experimentally induced sadness. More specifically, they found that individuals induced to be sad helped more if they were told their mood was changeable. Future research could include randomly assigning participants to either a happy or sad mood condition and then add a prompt to half of the participants in each group in which they are told that their mood would change if they engaged in helping behaviors.

Limitations

A college sample was used in the current study for convenience. This population may have more exposure to the LGBTQ community and may not hold as many stigmatizing views as individuals in the community. For future research, it may be beneficial to utilize a community sample to allow for more variability in attitudes toward sexual minorities. This will allow for

more of a representation of the general population as opposed to only having a college sample. The current study also had a small sample size of 67 participants. In the future, research may want to use a larger community sample to have better power and to be more representative of the general public; particularly in a rural area.

The nature of the study necessitated in person data collection. This is a limitation since it may have influenced participants' responses. In addition, due to face validity concerns, we were unable to get a pre-manipulation attitudes and stigma toward sexual minorities rating, so we were unable to determine if the attitudes of participants actually changed. We were only able to determine that attitudes toward gay men and lesbians were not related to assigned condition for the mood manipulation. Future research should attempt to discover if mood does result in changes in attitudes and stigma by using a sample in which stigmatizing attitudes were already assessed in a previous study at an earlier time. This will help to avoid priming the participants to the nature of the study.

Finally, most participants in the current study were women. Research suggests that women are more accepting of sexual minorities compared to men (Herek, 1988). It is possible that the women in the current study were already accepting of sexual minorities so regardless of mood, their attitudes were not going to shift. Given the small sample size for the current study, it was impossible to look at gender as a covariate. Future research should include more men in the sample to investigate possible gender differences.

Strengths

Though the current study had several limitations, some strengths are worth noting. In regard to demographic representation, the study had good racial diversity which is consistent with the college population at the university where data collection occurred. When examining the

study design, the mood induction memory recall prompts were successful at significantly impacting mood. In addition, the current study also included a behavioral component to examine helping behaviors toward sexual minorities without as much effect of social desirability as the face valid measure of attitudes toward lesbians and gay men. This would potentially give a truer indication of a person's attitudes toward sexual minorities if a participant felt they should answer in a more socially acceptable manner on measures assessing attitudes.

Conclusion

The current study did not yield significant results in regards to positive or negative mood affecting empathy, openness to diversity, attitudes toward lesbian women and gay men, and helping behaviors; however, future research may want to address the limitations and barriers presented in the current study. It is important for researchers to continue exploring ways to decrease stigmatization and discrimination and increase more accepting attitudes and openness toward marginalized groups, including sexual orientation minority persons.

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TABLE 1*Table 1. Means and Standard Deviations by Region*

Variables	Rural <i>M</i>	Rural <i>SD</i>	Non-Rural <i>M</i>	Non-Rural <i>SD</i>
Exposure Passage Score	15.63	3.29	16.49	2.78
Current Openness to Diversity	23.80	3.67	24.56	3.65
Attitudes toward Lesbians and Gay Men	40.20	16.00	39.16	15.19
Donation/Clicker Task	140.73	114.08	173.78	128.63

Note: A MANOVA was used to ascertain if dependent variables differed by rural vs. non-rural status. No differences were found.

TABLE 2*Table 2. Correlations for Dependent Variables*

Variables	Total Clicks	Exposure Passage Score	Current Openness Diversity
Exposure Passage Score	.529**	--	--
Current Openness to Diversity	.434**	.406**	--
Attitudes toward Lesbians and Gay Men	-.649**	-.637**	-.461**

*Note: ** $p < .01$*

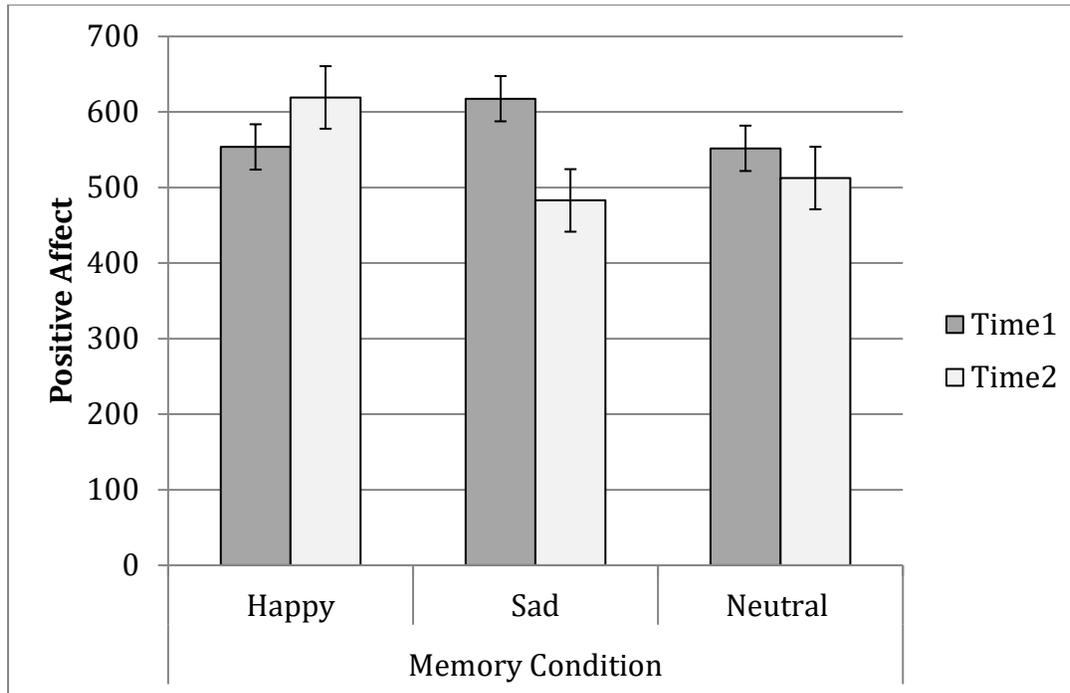
TABLE 3*Table 3. Means by Mood Condition*

Variables	Happy <i>M</i>	Sad <i>M</i>	Neutral <i>M</i>
Exposure Passage Score	15.26	16.77	16.27
Current Openness to Diversity	23.30	25.10	24.32
Attitudes toward Lesbians and Gay Men	42.17	38.86	38.23
Donation/Clicker Task	153.17	160.62	161.50

Note: Results indicate no significant differences in dependent variables by condition.

FIGURE 1

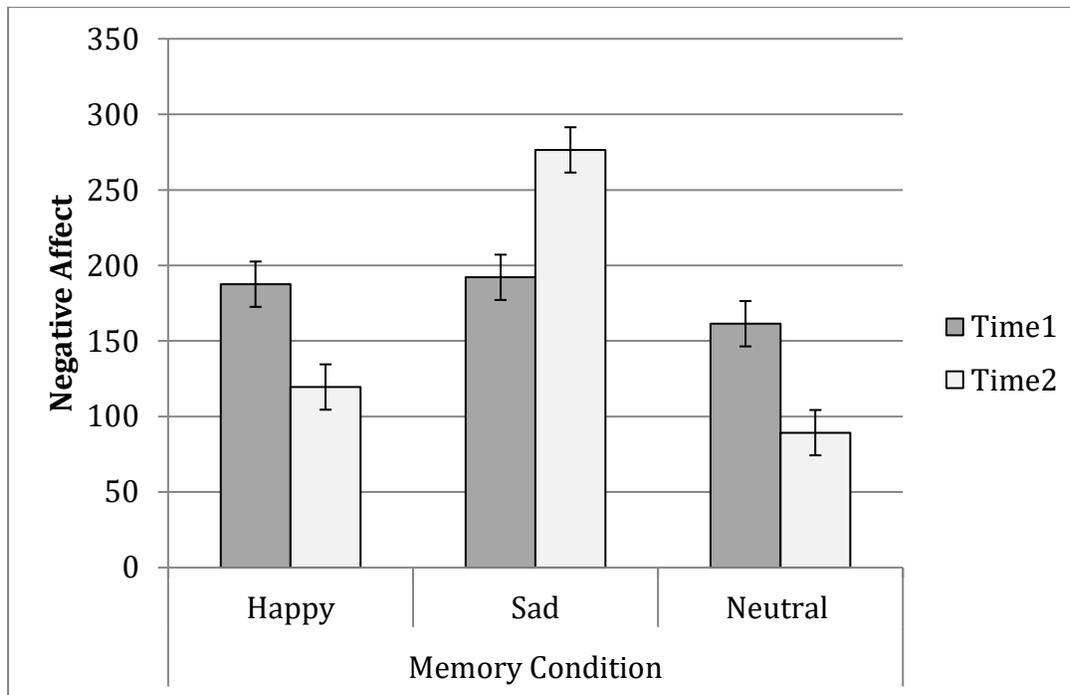
Figure 1: The Interaction Effects of Memory Recall Condition and Time on Positive Affect with Means and Standard Errors



Note: The results illustrated a main effect of Time, $F(1, 67) = 4.73, p = .03, \eta_p^2 = .931$ and a significant interaction between Time and Condition, $F(1, 67) = 12.22, p < .001, \eta_p^2 = .72$.

FIGURE 2

Figure 2: The Interaction Effects of Memory Recall and Time on Negative Affect with Means and Standard Errors



Note: A main effect of Time was not found, $F(1, 67) = 2.00, p = .16, \eta_p^2 = .097$, but a significant interaction effect was found between Time and Condition, $F(1, 67) = 15.25, p < .001, \eta_p^2 = .68$.

Appendix A

Mood Recall Tasks

Happy Mood Group - Positive Memory Recall Task

“I am going to ask you to complete some memory and journaling based tasks. Here is a laptop computer. On a word document, I would like for you to write down some of your past accomplishments. These accomplishments can be anything from the last two to three years. When ready, just start jotting down notes about the accomplishments you have achieved over the last two to three years. Jot as many accomplishments down as you can think of for the next minute or so.”

After giving these instructions, the researcher will stay in his/her seat and wait approximately 1 minute for the participant to complete his/her list of accomplishments. Once the participant has completed his/her list, the researcher will give the following instructions:

“Thank you for completing this list. Now, I want you to look at the list and pick out one accomplishment that stands out over all of the others. Choose the accomplishment that you are most proud of achieving; the one you invested a substantial amount of time and energy to complete. Please take a few moments to choose the one accomplishment that makes you feel the most happy and prideful. Please let me know when you have chosen one.”

The researcher will wait for the participant to choose one accomplishment. When the participant has confirmed that he/she has chosen an accomplishment, give the following instructions:

“Now that you have your chosen accomplishment, I would like for you to engage in a small writing task. Specifically, I would like for you to write a personal story highlighting your chosen accomplishment. I would like for you to write about the journey of achieving your chosen accomplishment. Remember a good story should have a beginning, middle, and an end. Also, good stories outline how important emotions change throughout the journey of completing a goal. When ready think about how you achieved your accomplishment. Specifically, reflect on the barriers you overcame and the emotions you experienced. Once you have the outline of your story in your head, please type it out on the computer. Please write at least 400 words summarizing the story of your achievement.”

Sad Mood Group - Reliving Rejection Task

“I’m going to ask you to engage in a small writing task. Specifically, I would like you to write about a time in which you felt intensely rejected in some way, a time that you felt as if you did not belong. This rejection can be interpersonal in nature (e.g., a time in which someone broke up with you, or no longer wanted to be your friend) or can be a rejection from a group (e.g., a time in which you were chosen last for a team or excluded from a clique). I will give you about 2 minutes to think about a specific experience before you begin writing. Please let me know when you have chosen one.”

After giving these instructions, the research assistant will stay in his/her seat and wait approximately 2 minutes for the participant to think about his/her specific experience. Once the participant has confirmed that they have a specific rejection experience in mind, the research assistant will give the following instructions:

“Now that you have a personal experience of rejection in mind, I would like for you to write a detailed account of it. Think of the experience in terms of a story that has a beginning, middle, and an end. Specifically, reflect on the thoughts that went through your mind and the emotions that you experienced as the events unfolded. Once you have the outline of your story in your head, please type it out on the computer. Please write at least 400 words summarizing the story of your rejection.”

Control: Neutral Mood Group - Neutral Memory Recall Task

“I am going to ask you to complete some memory and journaling based tasks. Here is a laptop computer. On a word document, I would like for you to write down some of your memories that elicit a neutral response – one that is neither positive nor negative. For example, recalling a memory about an event that did not elicit a lot of emotions. When ready, just start jotting down notes about neutral memories you have experienced over the past two to three years. Jot as many neutral memories down as you can think of for the next minute or so.”

*After giving these instructions, the researcher will stay in his/her seat and wait approximately **1 minute** for the participant to complete his/her list of neutral memories. Once the participant has completed his/her list, the researcher will give the following instructions:*

“Thank you for completing this list. Now, I want you to look at the list and pick out one neutral memory that stands out over all of the others. Choose the memory that you feel you had the least emotional response. Please take a few moments to choose the one neutral memory that elicits the fewest emotions. Please let me know when you have chosen one.”

The researcher will wait for the participant to choose one neutral memory. When the participant has confirmed that he/she has chosen a memory, give the following instructions:

“Now that you have your chosen neutral memory, I would like for you to engage in a small writing task. Specifically, I would like for you to write a personal story highlighting your neutral memory. I would like for you to write about your journey of experiencing this neutral memory. Remember, a good story should have a beginning, middle, and an end. Also, good stories outline how feelings change throughout the storyline. When ready, think about how you experienced this neutral memory. Specifically, reflect on the actions you participated in so that you can recreate the entire memory. Once you have the outline of your story in your head, please type it out on the computer. Please write at least 400 words summarizing the story of your neutral memory.”

Appendix B

Exposure Passage

Kim's Story (Lesbian Overcoming)

My life was “seemingly normal” up until my mid-thirties. I married my high school sweetheart, Seth, but after 15 years together, I could not shake the feeling that something was missing. I loved Seth dearly and grew frustrated with myself that I wasn't content; after all, Seth was an incredible husband. “What was wrong with me?” I asked myself frequently. I found myself being to a woman which caused me to question my integrity, my worth, and my identity. I have never experienced such excitement and torment all at the same time. It was a weight I carried with me everywhere I went. What will become of my marriage and friendship with Seth? I was also worried what would happen at work since the woman I was attracted to, Lisa, is a co-worker. What would my friends and family say? Will my church accept me? All these questions whirled around constantly in my mind like a whirl wind. I felt like I was going crazy!

I decided to talk with Seth and my best friend, Samantha about the conflicting emotions I was experiencing. To my complete surprise, neither of them was surprised and even said that they have always suspected me to have lesbian tendencies. I had always welcomed diversity but that did not stop me from judging myself. It became increasingly hard to balance my married life and working with Lisa Monday through Friday as my longing and curiosity deepened. I felt incredibly guilty. Seth had always supported my endeavors and would surprise me with spontaneous trips whenever I was feeling down. I could see the pain on his face and the toll it was taking on him emotionally.

As I spent time with Lisa during the work week, I began to have an awakening deep inside as if I was finally waking up for the first time. I knew that I would be doing Seth and I both a disservice if I stayed with him, so after a lot of thinking and tears, I approached Seth and told him that I wanted a divorce and explained that I loved him so much but did not want to live a lie anymore. Discovering this new part of me was beautiful but I struggled to find peace spiritually. I feared what my family would think. I moved out of the house Seth and I had shared into an apartment. I lost a few of my closest friends as I struggled to redefine myself. I was shunned by those that meant the most to me which made me question everything. I was called a “dyke whore” on social media and eventually deleted all my accounts. Seth was understandably bitter and his friends continued to harass me. I was scared my parents were going to find out and I knew I had to think of an excuse to tell them for why I moved out of Seth's house and why we were getting a divorce.

To my surprise, my family was supportive! What a relief! I opened up to my mom and dad about the verbal harassment I was experiencing and they routinely checked up on me to make sure I was alright. Lisa and I grew incredibly close and I found myself spending most of my time at her house. One day she and I were taking an evening walk when a car pulled over in front of us. I was unaware of the danger that lay ahead. The stranger rapidly jumped out of his car and approached Lisa and I with a baseball bat in his hand. He had a crazed look in his eye, so I immediately began talking to him calmly for fear of our safety. The man struck Lisa first in the leg and then he struck me in my shoulder and then my back. I was overwhelmed with pain but with my adrenaline flowing, I grabbed Lisa by the arm as we took off running. The man followed us for a little while before he gave up and went back to his car.

We locked ourselves in Lisa's house that night and notified the police. He was later found and my father drove me to verify his identity. After the court hearing, his family yelled "lesbian" and "fag." I had never experienced discrimination before when I was married to Seth. I became concerned as to whether or not I would eventually get fired for my same-sex attraction. Thankfully when I returned to work, I was met with comfort and support. Half a year after the assault, Lisa and I moved in together. Life has not been easy but I have a wonderful support network now and am finally living my life true to my identity.

Appendix C

Measures

Empathy Evoking Passage Questionnaire

Please answer the following questions based on the story you read.

		Not True At All	Mostly Not True	Neutral	Mostly True	Very True
1.	Kim's misfortunes did not disturb me a great deal.	0	1	2	3	4
2.	I can relate to Kim's story of overcoming hardship.	0	1	2	3	4
3.	I felt happy for Kim that she can finally live her life true to herself.	0	1	2	3	4
4.	Kim deserved the harassment she experienced.	0	1	2	3	4
5.	When I see someone like Kim who is being treated unfairly, I do not feel much pity for that person.	0	1	2	3	4

Participant ID _____

Demographic Questionnaire

Date of Birth: _____

Age: _____

Gender:

 Male Female Other

Race:

 White African American Hispanic Asian Pacific Islander
 Native American Bi/Multi Racial: _____

Current Marital Status:

 Single, Not dating In exclusive relationship, Not married Married
 Partnership/Civil Union Divorced Widowed Other: _____

Sexual Orientation:

 Heterosexual Homosexual (Lesbian/Gay) Bi-Sexual Undecided

Occupation Status:

 Full Time Stay-at-Home Parent/Caregiver Part Time
 Unemployed Student Retired

What is your current major? _____

Current year in school?

 Freshman Sophomore Junior
 Senior Post baccalaureate Graduate student

How often do you currently attend religious services?

- Once a week or more One to three times a month
 Less than once a month I do not attend religious services

How often, on average, did you attend religious services prior to the age of 18?

- Once a week or more One to three times a month
 Less than once a month I did not attend religious services

What is your religious affiliation?

- Protestant Christian Catholic Evangelical Christian
 Jewish Muslim Hindu
 Atheist/Agnostic Buddhist Other: _____

How would you best describe the area in which you were raised? (lived prior to 18 years of age)

- Urban/Large City Suburban Small city/Small town Rural

How would you best describe the area in which you live currently?

- Urban/Large City Suburban Small city/Small town Rural

Do you have a family member who identifies as lesbian or gay?

- Yes Not sure No

Do you have a friend who identifies as lesbian or gay?

- Yes Not sure No