# Intersectionality and Daily Affective Experiences of LGBT People

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#### **Abstract**

In this paper, I investigated the connections between LGBT identity, multiple minority stress, and well-being by examining responses to identity-related negative affective experiences such as microaggressions. In Study 1, we ran analyses on archival data. In the proposed Study 2, we recruited LGBT students at Yale, both those who have multiple minority identities and those who do not. LGBT people with multiple minority identities do not experience the result of those identities as purely additive; rather, they experience a markedly different sort of discrimination and oppression that inextricably intertwines their racial, gender, and sexual minority identities. This intertwining is called intersectionality. Our three hypotheses are that LGBT students who have multiple minority identities will experience more frequent and extreme negative experiences, will accordingly exhibit worse well-being outcomes, and exhibit more emotional granularity due to the expertise they develop in experiencing these events. We will test these hypotheses by implementing event-contingent experience sampling, where every time a participant experiences a negative affective event, they fill out a Qualtrics survey asking for details about that event. At the end of the study, all participants will fill out a survey about their well-being. We found in Study 1 that LGBT people with multiple minority identities experience depression and worry more frequently but not more intensely, which negatively impacts their well-being, as well as that LGBT people, compared to heterosexuals, actually show less emotional granularity. These results suggest that the discrimination and oppression LGBT people face can seriously worsen their well-being and needs to be addressed more directly and efficiently.

*Keywords*: LGBT, multiple minority identity, intersectionality, discrimination, negative affect, granularity, well-being

# Intersectionality and Daily Affective Experiences of LGBT People

#### Introduction

Many studies have shown that LGBT people<sup>1</sup> are at higher risk of experiencing a mental health condition, due to an array of different factors such as fear of coming out or being discriminated against. Some of them also possess racial and gender identities that are marginalized as well, and this multiplicity of marginalization can produce a different kind of discrimination. To examine the way that these identities interact with each other, one may consider "intersectionality," which refers to the interweaving of social stratifications such as race, class, gender, and sexuality in regards to larger interlocking systems of power. A society that comprises many of these individuals with multiple minority identities could potentially contain lots of conflict and friction. We can see this manifested in very visible sources of prejudice and discrimination such as the shooting at Orlando's Pulse nightclub in 2016. These obviously have very real negative impacts on health of LGBT people, both mentally and physically.

#### **Invisible Prejudice and Discrimination**

However, invisible sources can have just as detrimental an effect, if not more, on LGBT people. They are perpetuated through ignorance and bias from the general population, and can cause both mental and physical chronic stress. Many studies have tracked the mental and physical health of LGBT people, compared to their heterosexual peers as well as within the community itself. Almeida, Johnson, Corliss, Molnar, and Azrael (2009) found that LGBT adolescents were significantly more likely to report perceived discrimination on the basis of their minority sexual orientation status. Meyer, Schwartz, and Frost (2008) also found that LGB<sup>2</sup> status is related to

<sup>&</sup>lt;sup>1</sup> In this study, we will be defining "LGBT people" as those who identify with the label, as opposed to those whose attraction or behavior falls under the category. Most prior literature uses this definition.

<sup>&</sup>lt;sup>2</sup> This introduction contains studies that examined both LGBT and LGB people. For the former acronym, the study included trans participants, but for the latter acronym, the study only examined lesbian, gay, and bisexual people.

greater exposure to large-magnitude and prejudice-related life events, but not to perceived everyday discrimination or chronic strains. Furthermore, Meyer (2003) found that LGB youth are more likely than LGB adults to be victimized by anti-gay prejudice events, and in turn may suffer worse psychological consequences. LGB youth are also exposed to more discrimination and violence events than their heterosexual peers. This pattern is echoed in a study by Balsam, Huang, Fieland, Simoni, and Walters (2004) that found that for two-spirit<sup>3</sup> Native Americans, the rate of experiencing childhood physical abuse from their caretakers was nearly twice that of other American Indian and Alaska Native people. Given the impact that childhood physical abuse has on adult psychological functioning compared to other childhood experiences, this finding is very important. Balsam et al. present two potential explanations for this: first, adults who are already predisposed to violence may target a gender-nonconforming or otherwise socially different child; second, upon looking back on their childhood, two-spirit people may exhibit a negative hindsight bias due to the possibility of being rejected by their family upon disclosing their sexual orientation.

Oppression, though, is not just external—LGBT people may also experience internalized oppression. Meyer (2003) describes this phenomenon as one in which LGBT people ascribe negative social values to themselves, which happens even in the absence of explicit prejudice events and with the concealment of sexuality. Velez, Moradi, and DeBlaere (2015) echo this, stating that external oppression does not necessarily translate into internalized oppression, and internalized oppression does not necessarily motivate people to perceive and report external oppression. They also argue that internalized heterosexism and racism reflect evaluations of oneself specifically as a sexual or racial/ethnic minority. Because self-esteem and satisfaction

<sup>&</sup>lt;sup>3</sup> "Two-spirit" is a term used by some indigenous North Americans to describe people in their communities who fulfill a traditional third-gender or other gender-variant ceremonial role in their cultures.

reflect global self-evaluations as good and happy, the well-being of LGBT people may be particularly vulnerable to internalized oppression.

But what about people for whom being LGBT is not their only minority identity, namely those who are neither white nor male? Nadal, Wong, Issa, Meterko, Leon, and Wideman (2011) state that prejudice events related to heterosexism, sexism, and racism may cause even more psychological distress in LGBT women and LGBT people of color, a phenomenon also known as multiple minority stress. Meyer, Schwartz, and Frost (2008) similarly found that LGB people with racial/ethnic minority status had consistently higher levels of exposure to both general and prejudice-related stressors than white heterosexual men. Racial/ethnic minority LGB people were also exposed to significantly more racism than white LGB people for both life events and everyday discrimination, but not significantly more anti-gay prejudice. Racial/ethnic minority status thus added substantial stress to LGBT people. However, racial/ethnic minority LGB people did not differ from white LGB people in the prominence of their sexuality, sense of connectedness to the LGB community, or number of LGB groups to which they belonged. This may be hard to square with the earlier finding that racial/ethnic minority LGB people did not experience significantly more anti-gay prejudice than white LGB people. The earlier finding is also somewhat inconsistent with what other papers on multiple minority stress have found. One reason this may be is that Meyer, Schwartz, and Frost did not measure anti-gay discrimination experiences through an intersectional lens. Intersectionality refers to the idea that social categorizations such as race, gender, and sexuality are inseparably interlocked and must always be seen, explored, and analyzed as such. Thus, an intersectional approach would not have categorized prejudice events into either racist or heterosexist, but would rather take into account the interweaving of racism and heterosexism. This interconnection forms the foundation on which we base our studies.

#### **Multiple Minority Stress**

People who have more than one minority identity may experience a special type of stress called multiple minority stress, which may be triggered by everyday experiences of negative affect in response to identity-based bias, discrimination, and prejudice. These are sometimes referred to as *microaggressions*, a term that has been subject to lots of debate due to the ambiguity of its reality and assumption of "aggressive" intent. In this paper, I chose to focus on the broader frame of perceived identity threat, which does not consider the "perpetrator" or their intent as much as it does the perceptions of the individual holding the multiple minority identity. Thus, LGBT people who are also a part of a racial/ethnic minority may experience an increased frequency and intensity of negative affective experiences in response to this perceived identity threat. There have been several studies that have examined this effect more closely.

Balsam, Molina, Beadnell, Simoni, and Walters (2011) sought to measure multiple minority stress by constructing a microaggressions scale for LGBT people of color. The three factors they found to have the most impact on LGBT people of color were racism in LGBT communities, heterosexism in racial/ethnic minority communities, and racism in dating and close relationships. The second, heterosexism in racial/ethnic minority communities, may be particularly harmful because LGBT people of color may rely more heavily on those communities, more so than LGBT ones. This causes them to fear abandonment by those communities that have helped buffer them from and provide support in the face of racism for their entire lives. For LGBT people of color more so than white LGBT people, internalized homophobia is not as strongly associated with perceived external heterosexism. Heterosexism in racial/ethnic minority communities is instead more closely linked to other dimensions of LGBT identity related to perceptions and vigilance of discrimination as well as perceptions of the interference of homophobia in their lives.

Bowleg, Huang, Brooks, Black, and Burkholder (2003) examined multiple minority stress in the context of black lesbians, aptly describing their situation in their title as "Triple Jeopardy and Beyond." Most of the participants in their study said that their experiences of racism were mundane but also the most stress-inducing, giving examples that included working in covertly racist environments and being a numerical minority. They also mentioned sexism as significantly stressful, citing instances of salespeople assuming their incompetence with car repair or being denied professional opportunities because they are women. As for heterosexism, they spoke about both blatant experiences, such as being disowned, fired, or ostracized, as well as subtle ones, such as being uncomfortable with being out in the workplace and confronting heterosexist stereotypes. Considering intersectionality, which dictates that for black women, race, gender, and sexuality are intertwined, they rarely spoke about sexism and heterosexism without also mentioning racism. Szymanski and Sung (2010) conducted a similar study with Asian American LGBT people. They argue that because many traditional Asian values, such as harmony and complementarity, espouse heterosexuality as the only valid configuration of relationships, heterosexism may be stronger and more prevalent. Many Asian American LGBT people feel a lack of support from the heterosexual Asian community and experience rejection and prejudice from white LGBT people. Heterosexism in racial/ethnic minority communities, racism in dating and relationships, internalized heterosexism, and degree of outness significantly and uniquely predicted psychological distress. Velez, Moradi, and DeBlaere (2015) found results consistent with the above studies in Latinx LGBT people. Racism, heterosexism, and internalized heterosexism, but not internalized racism, were positively correlated with distress. Both internalized racism and heterosexism, but not external racism or heterosexism, negatively predicted life satisfaction and self-esteem. Balsam, Huang, Fieland, Simoni, and Walters (2004), as described before, investigated these effects in

lesbian, gay, bisexual, and two-spirit Native Americans. Even though two-spirit Natives did not show significantly higher rates of other interpersonal traumas, the percentage of those who had experienced childhood sexual abuse, lifetime sexual assault, and lifetime instances of being robbed, mugged, and attacked was higher than that of their heterosexual peers. It is evident that racial or ethnic minority LGBT people experience a very unique sort of oppression directed not against each of their minority identities individually, but rather against the collective of these identities.

#### **Identity Management and Coping**

The persistence of these identity-based threats can lead minority group members to engage what Meyer (2003) calls "disidentification," which refers to the voluntary, deliberate removal of a negatively stereotyped part of one's identity from one's self-definition. One way in which LGBT people might enact this process is through concealment, whether to protect themselves from real harm or due to feeling shameful and guilty. Concealing one's identity creates a great amount of stress, as it not only forces one to suppress their emotions, but also prevents one from identifying and affiliating with others who share their sexual minority status. One may also choose to more closely associate with other communities related to other parts of their identity. Even though a few of the black lesbians in the study by Bowleg et al. (2008) were critical of the heterosexism in black communities, they did not find this heterosexism to be significantly stressful because they very much value those communities for the buffer they provide against racism. The two-spirit Natives in the study by Balsam et al. (2004) also accorded a lot of importance to their traditional spiritual tribal beliefs and cultural practices. As for the Latinx LGBT people in the study by Velez et al. (2015), those with high internalized racism had lower self-esteem compared to those with low internalized racism. When there was a lot of racism, all participants, regardless of internalized racism, exhibited similar levels of self-esteem. Those with less positive affiliation with their racial/ethnic group took threats less personally when exposed to group-related racism than did those with more positive affiliation. Linking this back to Bowleg et al. (2008), black lesbians may be more defensive of black communities upon hearing criticism towards them due to their close affiliation with those communities. Hence, as Szymanski and Sung (2010) state, the salience of a particular identity over another, levels of sexual and racial or ethnic identity development, and integration and complexity of identity structures may all impact which external and internalized minority stressors influence mental health.

In addition to managing the level of identification with each of their identities, LGBT people also exhibit a range of different reactions to negative affective experiences and employ a number of other coping strategies to deal with those situations. Nadal, Wong, Issa, Meterko, Leon, and Wideman (2011) separated the reactions of LGB people to microaggressions into three categories: emotional, cognitive, and behavioral. Emotional reactions included: 1) discomfort and feeling unsafe; 2) anger and frustration; 3) sadness; and 4) embarrassment and shame. Cognitive reactions included: 1) resiliency and empowerment; 2) conformity to other people's heterosexist expectations; and 3) acceptance of their perspectives. Behavioral reactions included: 1) passive coping, such as ignoring discriminatory and derogatory comments, feeling angry but choosing not to react, and adopting a passive attitude; 2) confrontational coping, such as actively speaking up and challenging the person(s) putting them down; and 3) protective coping, involving maintenance of physical safety. Nadal, Davidoff, Davis, and Wong (2014) then examined the reactions of trans people, again separating them into the above three categories. Emotional reactions very similarly included: 1) anger, often in response to being disrespected; 2) betrayal, in response to partners, family, or former friends betraying them upon finding out that they identified as trans or because of transphobia in the community; 3) distress, mainly from concerns of safety; 4) hopelessness and

exhaustion, especially in reference to believing that their situations would not improve and that they could not fight the discrimination any longer; and 5) feeling invalidated and/or misunderstood, which ranges from people not understanding what it means to be trans to expectations of gender roles in both traditional and LGBT culture. Cognitive reactions included: 1) rationalization, on behalf of the perpetrators; 2) double-bind, referring to conflicts that emerge as a result of the trans experience, such as pressure to act a certain way to be accepted as male in conversation with discomfort about the privilege of the status of maleness; 3) vigilance and self-preservation, in response to both emotional and physical safety; and 4) resiliency and empowerment. Behavioral reactions included 1) direct confrontation, such as verbal assertion or provision of education on what it means to be trans; 2) indirect confrontation, such as setting boundaries and contacting the authorities; and 3) passive coping, such as diffusing, deflecting, or appeasing, or removing themselves from the situation entirely.

The aforementioned papers on multiple minority stress also examined successful coping strategies. In response to racism, sexism, and heterosexism, the black lesbians in Bowleg et al. (2008) articulated the following psychological factors of resilience: spirituality; feelings of uniqueness; self-esteem; behavioral and social competencies; and happiness, optimism, and humor. Many did not talk about happiness in traditional terms, instead conceptualizing it as liberation and freedom from restrictive gender norms. Their reactions and coping strategies included actively and directly confronting oppression, choosing not to bear the burden of others' bigotry, and turning to their supportive relationships in times of stress. Those relationships did not usually include family, instead comprising friends, intimate, partners, and religious communities. In Szymanski and Sung (2010), Asian American LGBT people accentuated one particular less stigmatized identity using identity management strategies in any given situation, utilizing that identity to provide resilience.

This strategy may also be used widely by LGBT people who possess multiple minority identities in general. As for the Latinx LGBT people in Velez et al. (2015), those with low internalized oppression used many strategies to safeguard their self-esteem during high external oppression, including making external attributions, frame-switching, reorienting to a positively valued identity, and enacting resources that preserve low internalized oppression related to one identity.

# **LGBT Health Disparities**

The discrimination that LGBT people face produce many health disparities, both compared to their heterosexual peers and within the LGBT community itself. Almeida et al. (2009) found that LGBT girls and boys were more likely than their heterosexual, non-transgender peers to experience emotional distress, marked by depressive symptoms and reports of self-harm and suicidal ideation. Victimization caused by anti-gay prejudice events, according to Meyer (2003), can also produce health symptoms such as sleep problems, headaches, agitation and restlessness, increased drug use, and deterioration in personal relationships. Internalized homophobia has been significantly linked to worse mental health outcomes, causing depression and anxiety symptoms, substance use disorders, and suicidal ideation. It has also been linked to various forms of self-harm, self-blame, poor coping with HIV infection and AIDS, and difficulties in intimate relationships and sexual functioning. Nadal et al. (2011) found that heterosexism has a detrimental impact on the mental health of LGB people, producing higher risks of suffering from mental and physical health problems and internalized homophobia. Mental health outcomes included depression, anxiety, post-traumatic stress disorder (PTSD), suicidal ideation, and self-destructive behaviors. Balsam et al. (2011) found that heterosexism in racial/ethnic communities and racism in dating and relationships were related to depression and perceived stress. The latter was also associated to internalized homonegativity, which refers to internalized negative attitudes towards homosexuality

and homosexual people. To give a specific example of the mental health outcomes described above, Balsam et al. (2004) describe two-spirit Native Americans as being more traumatized, as shown by their higher levels of PTSD, and are more likely to interpret victimization or discrimination as related to sexual orientation, ethnicity, or both. Meyer (2003) reports that overall, compared to heterosexual people, LGB people are about two and a half times more likely to have a mental disorder at any point over their lifetimes.

The mental health outcomes described above may also produce physical health disparities. Lick, Durso, and Johnson (2013) found that compared to heterosexuals, LGBT people generally rate their health to be poor, have more acute physical symptoms and chronic conditions, say that their health impedes their ability to engage in daily physical activity, and exhibit higher prevalence and younger onset of disabilities. They are more susceptible to specific health conditions such as asthma, headaches, chronic diseases, allergies, and arthritis. Frost, Lehavot, and Meyer (2015) found that experiencing a health problem over the course of a year from baseline to follow-up was associated with experiencing a prejudice event, higher expectations of rejection, and more frequent experiences of everyday discrimination. Worse self-rated physical health at the time of follow-up was also correlated with the latter two results as well as higher levels of internalized homophobia. LGBT people who experienced an externally rated prejudice event, compared to those who did not, were three times more likely to experience an externally rated health problem during the yearlong period. According to Mayer et al. (2008), LGBT people, especially trans women, show higher rates of substance use. The two-spirit Natives in Balsam et al. (2004), for example, exhibited significantly higher rates of illicit drug use and were more likely to use alcohol to increase sociability, decrease inferiority, manage their mood, and relieve some stress. Dilley, Simmons, Boysun, Pizacani, and Stark (2010) described smoking as a key risk factor for all LGB people.

They also found that lesbian and bisexual women generally showed more health disparities relative to heterosexual women than did gay and bisexual men to heterosexual men. Lesbian and bisexual women had higher risk for being overweight, drinking heavily, and smoking, all of which contribute to early mortality. Lick, Durso, and Johnson (2013) report that lesbian and bisexual women have poorer general physical health and heightened risk for and diagnosis of some cancers, as well as higher rates of asthma, urinary tract infections, and Hepatitis B and C. As for men, Lick et al. (2013) found that they have an elevated risk for cardiovascular disease, more acute and chronic health conditions, greater risk for chronic disease, and more frequent reports of moderate to severe pain and fatigue. Gay men also have more headaches, urinary incontinence, and cancer diagnoses, and have lower cancer survival rates. Their recreational drug use is correlated with higher rates of unsafe sexual practices as well as HIV and other sexually transmitted infections. Anal cancer is also an important health concern. Mayer et al. (2008) report that trans people who have undergone sex reassignment but retain pretransition organs or tissue remnants require careful follow-up for potential oncological problems. Intersex individuals have many similar problems.

Part of the reason LGBT people exhibit these health disparities, in addition to the increased amount of discrimination and oppression they face, is due to obstacles in their ability to access adequate care. Mayer et al. (2008) outline four main issues: 1) reluctance by some LGBT patients to disclose their sexual or gender identity while receiving care; 2) insufficient numbers of providers competent in dealing with LGBT issues; 3) structural obstacles that impede access to health insurance and limit visiting and medical decision-making rights for LGBT people and their partners; and 4) a lack of culturally appropriate prevention services. According to Lick et al. (2013), social policies, such as discrimination in hiring practices and compensation, may also negatively impact LGB health. Many LGB people also lack insurance coverage, and those who have it may

encounter prejudice among healthcare workers. Medical providers also have limited knowledge and competence with sexual minority health, due to the fact that medical students receive an average of only 2.5 to 5 hours of training about LGB health.

## **Emotional Self-Report**

The studies described above, especially those about multiple minority stress, largely used retrospective reporting and focus groups, which may involve the participants engaging additional meaning-making and offline processing. What we are missing, then, is a depiction of how negative affective experiences figure into everyday life and the nature of these experiences in the moment. Robinson and Clore (2002) describe the utility of the emotional self-report, calling it the "most common and potentially the best way to measure a person's emotional experiences" and lauding its uses in discovering how a person felt, feels, and will feel in the past, present, and future. They delineate four types of knowledge people access when reporting on emotions. From the most specific to the most general, they include: 1) experiential knowledge, which accesses feelings directly; 2) episodic memory, which retrieves specific moments from the past; 3) situation-specific belief, which accesses beliefs about the emotions likely to be elicited in any given situation; and 4) identity-related belief, which accesses beliefs about emotions in general, including those assessed by trait emotion scales (like empathy) and social stereotypes. The three principles of accessibility of this knowledge are: 1) relative accessibility, by which the four types of knowledge are prioritized based on their relative contributions to the judgment at hand; 2) dominance, by which the more specific source is used instead of the less specific one if they are both accessible and relevant; and 3) evanescence, by which experiential information is unable to be stored in memory and episodic memory declines quickly with time. Robinson and Clore (2002) also detail several disparities. For gender, women, compared to men, report themselves to be more

emotionally expressive, endorse emotionality as more descriptive on trait scales, recall emotional memories more quickly and more frequently, and recall emotional events as more intense. Men appear to be more reactive to current emotional stimuli. However, both men and women predict their online emotion differences are larger than they actually are. In regards to race, Asians tend to report less happiness than Europeans or North Americans. Asians underestimate and non-Asians overestimate, for online experiences, positive affect on reporting formats that are not as suited to episodic retrieval. Even though Asian Americans do not appear to be less happy than European Americans in online reports, they do in retrospective, time-inclusive, and trait reports. Generally, people think their emotions will be more strongly affected by focal events than is actually the case. In some cases, they may also overestimate their negative reactions, especially upon anticipating negative events, but they also may be overly optimistic about receiving positive outcomes and experiencing positive affect when a particular event is not prospectively focal. Lastly, people are overconfident in predicting especially socially desirable future behaviors, largely because they underestimate the variability of situational influences.

# Alcohol, Depression, Pain, and Coping

Tennen, Affleck, Armeli, and Carney (2000) probed the daily process of coping, focusing specifically on alcohol and patients with depression. They conducted an examination of openended responses among heavier drinking participants, whose daily average daily consumption of alcohol was at least two drinks per day, which revealed that alcohol consumption was reported as a coping strategy relatively infrequently. However, when reported, consumption was classified as a method of relaxation 77% of the time and as one of distraction 10% of the time. They also found that patients with primary fibromyalgia (PFS) who had a recent depression paid greater attention to pain and engaged in more pain catastrophizing. Those with a remote history of depression

believed that their coping strategies were relatively inefficacious in reducing pain and enhancing mood. Additionally, patients who had a depressive episode on average more than four years ago kept believing that they had less personal control over their pain. Patients with a history of depression were less able to inhibit pain catastrophizing the day after a good night's sleep than were never-depressed patients. A history of depression also left recently depressed patients more likely to skip social, vocational, and personal activities when they were going through more pain. Recently depressed patients were more likely, when their pain increased, to experience mood changes, threats to their perception of personal control, and doubts that their coping was effectively reducing their pain. When their fatigue increased, they were less confident that they had exerted personal control over their pain that day. When efforts to directly influence pain are unsuccessful, people may try harder the next day to adjust to that which cannot be readily changed.

# **Emotional Granularity and Regulation**

Evidently from the above, experiences in daily life may be more intense and less organized than we might assume from retrospective questionnaires and focus groups. This might indicate less granular emotions and less clear coping strategies. Therefore, we must explore the interactions between emotionality, granularity, and coping. Tugade, Fredrickson, and Feldman Barrett (2004) detail two associated accounts of the benefit of positive emotions. First is the broaden-and-build theory of positive emotions, which posits that while negative emotions heighten sympathetic activity and narrow attention to supporting specific action tendencies, positive emotions quell automatic arousal and broaden attention, thinking, and behavior. Over time, with continued positive emotions, this broadened mindset becomes habitual. In this way, experiencing positive emotions increases personal resources that can be utilized in times of need and used to plan for the future. Second is the undoing hypothesis, which theorizes that as positive emotions expand the

thought-action repertoire, they maintain homeostasis by "undoing" the lingering after-effects of negative emotional reactivity and helping return to cardiovascular equilibrium. Feldman Barrett, Gross, Christensen, and Benvenuto (2001) report that people who highly differentiate emotion have higher discrete emotion knowledge during representation. While positive emotions motivate people to expand their intellectual and social pursuits and store resources for future negative events that require regulation, negative emotions provide lots of information in that they signal the need to change or adjust one's current state or activity. Failing to respond to these signals may preclude one from avoiding potential harm. Those who differentiate more and have more intense negative emotional experiences reported more emotion regulation. Greater negative emotion differentiation was highly connected to greater emotion regulation, especially with greater intensity of emotion. Kashdan, Feldman Barrett, and McKnight (2015) add to this, stating that when distress arises, high differentiators are better able to distance themselves, a tactic called defusion or self-distancing.

High positive emotional granularity, according to Tugade et al. (2004), led to less mental self-distraction during stress, more engagement in the coping process, less automation in response, and more thinking through behavioral options before acting. Kashdan et al. (2015) build on this, stating that differentiating one's emotions can convey information and possible courses of action, make emotions easier to regulate and manage, and improve personal striving beyond simply altering or controlling private mental events. People who verbally characterize their emotions granularly and with detail are less overwhelmed during stressful situations. When asked to use a diary method to report intense negative experiences and regulatory mechanisms in daily life, people who distinguished negative emotions used more strategies to reduce negative emotions and increase positive emotions. Thus, when affect is labeled with emotional knowledge, it becomes associated with objects in a specific situation, providing information on how best to act.

Differentiation, granularity, and regulation all interact to promote psychological resilience, which Tugade et al. (2004) define as flexibility upon encountering changing situational demands and ability to recuperate from negative emotional experiences. Those who exhibit resilience experience positive emotions even while stressed, hinting that they understand the benefits of positive emotions and use them to their advantage while coping. Resilience can also be physiological. Coping approaches that are proactive and oriented towards the future help prime preparation before acting on stress. This reflects a phenomenon called thorough information processing, involving fully scanning existing resources before acting, which broadens options for possible action. Thorough information processing has been shown to facilitate health-promoting practices. Kashdan et al. (2015) report that people who employ more negative emotional granularity are less likely to drink excessively when stressed immediately prior to an upcoming drinking episode, less likely to retaliate with aggression against somebody who has hurt them, and more mindful of their conscious state, allowing them to shift attention and maintain stability.

#### **The Present Studies**

In this thesis, I aimed to test three primary hypotheses, in light of prior research. The first hypothesis was that LGBT people with multiple minority identities, compared to those without, would experience more frequent and intense interpersonal negative affect centered around perceived identity discrimination. For example, heterosexism in racial/ethnic communities may lead to instances of discrimination based on the individual's sexual orientation. Yet the desire to affiliate within racial/ethnic communities, because they provide a buffer against racism, will lead individuals to maintain ties to these communities, despite them serving as a source of discrimination, as in accordance with Balsam et al. (2011).

The second hypothesis is that greater frequency and intensity of these negative experiences will be related to lower wellbeing, due to the load that these experiences place on the individual. This hypothesis builds on prior work by Almeida et al. (2009) and Meyer (2003). The former demonstrates the link between perceived sexual orientation-based discrimination and depressive symptomatology, and the latter establishes the relationship between anti-gay prejudice events and worse mental health outcomes.

Third, we hypothesized that individuals with multiple minority identities would have greater emotional granularity than individuals with a single minority identities. This is based on the assumption that those with multiple minority identities may have accrued more lifetime experience with discrimination and developed more nuanced and specific ways of conceptualizing those events in the service of efficient coping and regulation of emotion. In other words, the greater expertise they develop due to the increased frequency and intensity of the negative affect they experience will allow them to better differentiate between and regulate their emotions.

# **Study 1: Archival Data Analysis**

To garner support for these hypotheses, we analyzed existing large-scale datasets that examine discrimination experiences, mental health, and emotional granularity (self-reported) in LGB individuals. Specifically, we drew on data from the National Health Interview Survey (NHIS) to investigate the frequency and disruptiveness of negative affective experiences as well as medication status (for depression and anxiety) in individuals with multiple minority compared to single minority status. We also drew on data from the Personality, Emotion, and Attitudes (PEA) survey of the Eugene-Springfield Community Sample (Goldberg, 2008) to examine the relationship between LGB identity and emotional granularity.

# **Study 1a: National Health Interview Survey (NHIS)**

**Survey.** The NHIS ranks as one of the largest surveys conducted annually by the U.S. government, with approximately 100,000 persons in about 42,000 households each year. Critically, the 2017 survey included both sexual orientation, racial/ethnic identity, and measures of negative affective states, allowing us to address our first primary hypothesis that people with multiple minority identities, compared to those without, would experience more frequent and intense negative affect.

**Sample restrictions.** We restricted our sample to participants whose ages ranged from 16 and 35, to selectively examine our hypotheses in young adulthood. This resulted in the removal of 58,858 cases (or 75% of the dataset). We also restricted our sample to cases where the participants reported their race/ethnicity and sexual orientation. This resulted in the removal of 17,386 cases (or 90% of the dataset).

**Data preparation.** We focused our analysis on three primary outcome variables: WORFREQ (frequency of worry: how often do you feel worried, nervous, or anxious), WORFEELEVL (level of worry: level of worried, nervous, or anxious feelings last time you felt them), and DEPFREQ (frequency of depression: how often do you feel depressed). WORFREQ had nine categories: 0 - NIU, 1 - daily, 2 - weekly, 3 - monthly, 4 - a few times a year, 5 - never, 7 - unknown—refused, <math>8 - unknown—not ascertained, and 9 - unknown—don't know. WORFEELEVL had 7 categories: 0 - NIU, 1 - a lot, 2 - a little, 3 - somewhere between a little and a lot, <math>7 - unknown—refused, 8 - unknown—not ascertained, and 9 - unknown—don't know. DEPFREQ had the same categories as WORFREQ. We reversed the coding of these variables such that larger values indicated higher frequency/level. We also removed cases in which participants did not provide a response (i.e., code 0) or the data were unavailable (i.e., codes 7-9).

This resulted in the removal of 958 cases (or 51% of the dataset). As a result of these processes, we produced three ordinal outcome variables.

To test our main hypotheses, we recoded sexual orientation and race/ethnicity variables to create a combined variable that reflects whether the individual has multiple minority or single minority status. For sexual orientation, there were four initial categories: heterosexual, gay or lesbian, bisexual, and asexual (cases with no sexual orientation specified were removed in the initial sample selection). We categorized heterosexual as sexual majority and gay or lesbian, bisexual, and asexual as sexual minority. This resulted in 426 sexual minority and 1,462 sexual majority cases. We then examined racial/ethnic breakdown within these two cells. There were two variables to work with: HISPYN for Hispanic identity (yes, no, unknown—refused, unknown not ascertained, unknown—don't know), and RACENEW for racial identity (white, black/African American, American Indian/Alaska Native, Asian, multiple race, other race, race group not releasable, unknown—refused, unknown—not ascertained, unknown—don't know). We categorized white as racial majority and everything else as racial minority (cases with unknowns and race group not releasable were removed in the initial sample selection). We then created a new variable for multiple minority status, for which a value of 0 indicated single minority and 1 indicated multiple minority<sup>4</sup>.

**Analyses.** We conducted our analyses using SPSS using non-parametric tests. Due to the ordinal nature of the dependent variables, non-parametric tests were conducted. Non-parametric tests are appropriate because they do not assume that the variable distributions conform to an existing distribution. Specifically, we employed independent samples *Mann-Whitney U* tests for

<sup>&</sup>lt;sup>4</sup> We realize that our categorization of "single minority" may have been done with an excessively wide brush, and that the group of single minorities has lots of variance within itself. However, for the purposes of this study and due to time constraints, we chose to divide our sample in the way described.

each of the three variables in which we were interested. Multiple minorities worried significantly more frequently than single minorities (Mann–Whitney U = 28,195, Z = 3.503,  $n_1 = 50$ ,  $n_2 = 879$ , P < 0.001 two-tailed). They also felt depressed significantly more frequently than did single minorities (Mann–Whitney U = 27,436, Z = 3.347,  $n_1 = 50$ ,  $n_2 = 879$ , P < 0.001 two-tailed). However, levels of worry between the two groups did not differ significantly. Single minorities reported an average of 1.76, while multiple minorities reported an average of 1.79.

**Study 1a discussion.** The results from this NHS survey showed that multiple minority members experienced worry and depression more frequently than single minority members, consistent with our first hypothesis. However, there was no significant difference between single and multiple minority members in their levels of worry, which supports the null hypothesis that intensities of negative affect in multiple and single minorities do not differ significantly. Thus, our first hypothesis was, overall, partially supported.

# **Study 1b: Eugene-Springfield Community Sample**

**Survey.** We utilized data from a 2000 survey, Personality, Emotions, and Attitudes (PEA), conducted with the Eugene-Springfield Community Sample. This dataset was used because it contained the Toronto Alexithymia Scale (TAS-20; Bagby & Taylor, 1987) and self-reported sexual orientation. Alexithymia refers to the inability to identify and describe one's own emotions. This is directly contrasted with granularity, which is the tendency to experience emotions in a more precise manner (as evidenced by self-reported tendency to attend to internal states as well as identify and label one's own emotional states). The TAS allowed us to examine the impact of LGB status on alexithymia. We predicted that LGB individuals would have a lower score on the TAS, indicating lower alexithymia. This prediction is consistent with our third hypothesis that multiple minorities, due to the more frequent negative affective events they experience, would develop

more expertise in differentiating their emotions and thus have better granularity. Better granularity would mean, in turn, lower alexithymia. However, in this analysis, we were unable to specifically examine multiple minority identity given the limited ethnic/racial diversity in the sample, which was 97% European American (White). Because there was so little racial diversity in the sample, we decided to just focus on the difference between non-LGBT and LGBT people.

# Sample restrictions. None.

**Data preparation.** There were four initial categories for sexual orientation: heterosexual, homosexual, bisexual, and nonsexual. We created a variable for heterosexuality, for which a value of 0 denoted non-heterosexual (which included the homosexual, bisexual, and nonsexual categories) and a value of 1 indicated heterosexual.

Analyses. We were interested in three variables: the general Toronto Alexithymia Scale, Difficulty Identifying Feelings, and Difficulty Describing Feelings. We analyzed the data for the three aforementioned variables using t-tests. Even though there was no significant difference between the two groups for the overall TAS-20 score and the Difficulty Describing Feelings facet, the non-heterosexual group (M = 48.72, SD = 10.78; M = 13.07, SD = 4.40) showed higher scores for both variables than did the heterosexual group (M = 45.59, SD = 9.45; M = 12.11, SD = 3.93); t(731) = 2.374, p = 0.102; t(731) = 1.762, p = 0.143. This finding suggests that individuals with LGBT identity may not differ from heterosexual individuals in overall alexithymia nor the ability to describe feelings. However, for the Difficulty Identifying Feelings facet, the non-heterosexual group (M = 16.02, SD = 5.70) scored significantly higher than the heterosexual group (M = 13.56, SD = 4.75); t(731) = 3.693, p = 0.019. This finding suggests that individuals with LGBT identity are higher than heterosexual individuals in self-reported difficulty in identifying feelings.

Study 1b discussion. We found that LGBT people scored significantly higher on the Difficulty Identifying Feelings facet of the Toronto Alexithymia Scale, and showed higher scores as well for the general Toronto Alexithymia Scale and the Difficulty Describing Feelings facet. . This contradicted our third hypothesis that LGBT people would have higher emotional granularity than non-minority individuals. While inconsistent with our hypotheses, our results are broadly in line with evidence from Erbas and colleagues (2018) which demonstrated a relationship between stress and emotion differentiation. They find that stress affects emotion differentiation by reducing cognitive resources. They found that within-person fluctuations in differentiation were associated to changes in stress levels. On the day-level, stress predicted the level of emotion differentiation of the next day, but emotion differentiation did not predict stress on the next day. Other negative emotions predicted differentiation concurrently, but stress uniquely predicted it prospectively. Connecting these findings to our results for PEA, the LGBT people in that survey may be exhibiting the effects that Erbas et al. (2018) find. Because they experience more negative affect, they subsequently have lower emotion differentiation; this may create a vicious cycle because granularity is also linked to better coping (Kashdan & Barrett, 2015). Importantly, Erbas et al. (2018) argue that since differentiation is mutable, people can be taught how to differentiate emotions. Thus, LGBT people may be able to improve their emotional differentiation abilities.<sup>5</sup>

## **Study 1 Discussion**

We investigated two samples: the 2017 National Health Interview Survey (NHIS) and the Eugene-Springfield Community Sample's 2000 Personality, Emotions, and Attitudes (PEA)

<sup>&</sup>lt;sup>5</sup> However, according to Erbas et al. (2018), less emotion differentiation may not actually be maladaptive in stressful situations. They suggest that during stress, it may be better to just process the valence of the emotions experienced rather than more intricate details. This is based on the finding by Erbas et al. (2018) that well-being, measured with the CES-D did not consistently moderate the stress-emotion differentiation relationship. One limitation of this, however, is that we might expect differentiation to (partially) mediate the relationship between stress and overall wellbeing, which this paper did not test.

survey. Results from the former survey showed that multiple minorities experienced a higher frequency of both worry and depression, which supports our first hypothesis that multiple minorities will experience more frequent negative affective experiences. However, they also show that the levels of worry in multiple minorities did not differ significantly from those in single minorities, which supports the null hypothesis that the intensity of negative affective experiences in the two groups does not significantly differ. This contradicts the other part of the first hypothesis that predicts that multiple minorities will experience more intense negative affective experiences.

Results from the latter survey showed that LGBT people exhibited more alexithymia than their heterosexual peers. Their scores for the general Toronto Alexithymia Scale and its Difficulty Describing Feelings facet did not differ significantly from those of their heterosexual group, but they tended to be higher. However, their scores for the Difficulty Identifying Feelings facet were significantly higher than those of the heterosexual group. This contradicts our third hypothesis that multiple minorities, on account of their greater expertise with negative affective experiences due to their increased frequency, will exhibit more emotional granularity and differentiation. These results are broadly in accordance with Erbas et al. (2018), which showed that there is a negative relationship between stress and emotional granularity.

Limitations. There were three big limitations to doing archival data analysis on these two surveys. First, we relied on global retrospective ratings of their experiences of worry and depression. The NHIS survey never actually asks the participants how they felt during and after a given daily experience; it simply asks them to report frequency. Second, the Eugene-Springfield Community Sample was 97% European American or white, so the diversity component of our hypotheses was completely missing. We were unable to test the granularity of multiple minority members against single minority members, and had to resort to comparing single minority

members to majority members. Third, the details of their negative affective experiences were missing in both surveys. Because the surveys only ask questions retrospectively about participants' experiences, we do not get a clear picture of what those experiences are, who or what caused them, and how the participants felt and reacted. In order to do so, we proposed an event-contingent experience sampling method in our next study. This method involves having the participants complete a survey every time they experience a negative affective event, and the survey will contain questions about details about the experience and how the participants felt and responded. With this method, we can glean a daily picture of global retrospective ratings as well as more specifics about the negative affective experiences themselves.

# **Proposed Study 2: Experience Sampling of LGBT Students**

In Study 2, we will investigate the relationship between LGBT identity, multiple minority stress, emotional reactions and responses to negative affective experiences, and global well-being. We will recruit LGBT students at Yale and implement event-contingent experience sampling. We will be as inclusive as possible with selection of participants who identify as LGBT in the hopes of capturing a general difference between people who have multiple minority identities and those who do not. We will use event-contingent experience sampling, a process in which every time participants experience a negative affective event, they fill out a survey asking them to describe the event that just took place. This survey will include questions about who they were with, where they were, who or what triggered the event, what emotions they felt in the moment, and how they chose to respond (if at all). We chose to use this method over others like the day reconstruction method (DRM), which would have participants log their negative experiences in a diary at the end

of every day, because we want to avoid any hindsight biases that might affect the way they recollected the events of the day.

#### Method

Participants. Selection criteria for participants will be that they are Yale students who identify generally as LGBT, including lesbian, gay, bisexual, trans, nonbinary people and more. We will recruit a substantial number of LGBT people with and without multiple minority identities. It would be ideal to have an equal number of white LGBT people and LGBT people of color, as race will be the primary axis of identity that I will compare in tandem with LGBT identity. We will also try to have similar numbers of men and women as well as include trans, nonbinary, and gender non-conforming people. Our planned sample size is around 30 students, which is based on expected recruitment limitations. Participants will complete a demographic measure that asks individuals to self-describe their sexual orientation identity as well as report on their age, gender identity, ethnic and racial background.

Event-contingent sampling procedure. To implement event-contingent experience sampling, we created a survey through Qualtrics, separated into three sections, as outlined below. The participants will be instructed to fill out the experience sampling survey as soon as possible after the experience. Although it was ideal for them to fill out the survey as soon as possible, filling it out much later would still be useful for the study, as we could observe whether there is a decay in negative affect throughout the day. Data collection will last five days. We decided on this length because of the taxing nature of our methodology. We expect that five days of sampling will provide adequate data at the subject level (sufficient timepoints will be necessary to compute granularity).

*Emotion at the time of survey.* This section of the survey will measure the valence and arousal the participants are feeling at the moment they complete the survey. Participants will

answer a separate item for valence and arousal, rating each on a 5-point Likert-type scale. The valence scale ranges from "very unpleasant" to "neutral" at the midpoint, to "very pleasant". The arousal scale ranges from "very relaxed" to "neutral" at the midpoint, to "very activated".

Reactions. The third section, contained two questions about what emotions the participant felt in reaction to the event, and how they responded. Emotion choices were informed by previous research (Nadal et al., 2011; Nadal et al., 2014) and included: "angry," "hurt," "hopeless," "embarrassed," "invalidated," "distressed," "betrayed," "sad," "exhausted," "ashamed," "misunderstood," "unsafe," and "annoyed," with space for participants to describe any other emotions felt. Responses were also informed by previous research (Nadal et al., 2011; Nadal et al., 2014) and included: "expressed myself directly to the other person(s)," "ignored the other person(s) or chose not to react," "extracted myself from the situation," and "diffused the situation to deflect or appease/avoid the other person(s)," again with space to describe any other responses.

**Survey Measure.** We will also implement the short form of the Mental Health Continuum (MHC-SF; Keyes, 2018), which has high internal consistency, to evaluate overall well-being. The

MHC-SF measures emotional well-being and contains fourteen items, each of which is scored between 0 and 5. Higher scores indicate better well-being. This test comprises three dimensions of well-being, listed here with the items listed after in parentheses: 1) hedonic—emotional well-being (happy, interested in life, satisfied in life); 2) eudaimonic—social well-being (social contribution, social integration, social actualization, social acceptance, social coherence); 3) eudaimonic—psychological well-being (self-acceptance, environmental mastery, positive relations with others, personal growth, autonomy, purpose in life). People can be classified as *flourishing* or *languishing* in regards to emotional well-being. In order to be deemed *flourishing*, individuals must report that they experience daily or almost daily at least seven of the symptoms, where one of the symptoms is from the hedonic cluster. In order to be deemed *languishing*, individuals must report that they never, or just once or twice, experienced at least seven of the symptoms, where one of the symptoms is from the hedonic cluster. Individuals who fit the criteria for neither label are categorized as moderately mentally healthy. Participants will be asked to fill out the mental health questionnaire both at the beginning of the study and at the end.

# **Data Preparation and Predictions**

The dependent variables based on the experience sampling data are the frequency and intensity of the identity-based negative affective events, the emotions and responses of the participants in reaction to these experiences. Identity related experiences will be identified by coding the participants' descriptions of the event. This will be coded in a binary fashion (0=no mention of identity threat; 1= mention of identity threat). Emotional granularity will be assessed by examining the co-variation of term endorsement across the instances of emotional experience. This is achieved by computing an intra-class correlation coefficient (ICC), with absolute agreement, for endorsement of terms within valence (positive and negative terms separately),

across all measured instances. The ICC represents the degree to which emotion terms are used interchangeably across instances, such that a high ICC reflects emotion term endorsement that lacks precision and is therefore considered low in granularity. We will also examine global well-being, measured at the beginning and the end of the study. The MHC-SF will be a score, summed across all items. We will examine the relationship between MHC-SF scores pre and post experience sampling. Our primary dependent variable will be the pre-experience sampling MHC-SF since it is possible that completing the sampling procedure may shift participants' reports.

**Main predictions.** In relation to whether the participants had multiple minority identity, analyses will focus on the frequency and intensity of identity-based negative affective events experienced during the time period of the experiment, their emotions and responses, and their wellbeing. LGBT students who possess multiple minority identities (MMI) will experience a higher frequency and intensity of negative affective experiences (an in particular identity-related negative affective experiences), compared to LGBT students who possess a single minority identities (SMI), in accordance with our first hypothesis. In line with our second hypothesis, MMI people will have comparatively worse self-reported well-being (as indexed by the MHC-SF) compared to SMI people. That is, white LGBT people will end up with higher overall scores on the MHC-SF, indicating better well-being, while LGBT people of color will have lower overall scores, indicating worse well-being. Further, across all participants, we predict that the frequency and intensity of negative emotional events will correlate negatively with global self-reported well-being. Finally, our initial hypothesis regarding emotional granularity would lend to the prediction that individuals in the multiple minority identity (MMI) group would have higher emotional granularity than individuals in the single minority identity (SMI) group. Yet the findings from Study 1 suggest that we may not see such a pattern emerge and may find the opposite pattern.

We do not have specific predictions regarding the specific emotion profiles because there was a lot of variation in the prior literature in the specific emotions that are identified by multiple minority identity individuals in the context of discrimination experiences.

Extended predictions. We expect that the frequency of identity-related negative affective events will be least frequent for white LGBT men and most frequent for LGBT women of color. We expect white LGBT women and LGBT men of color to fall in between these two groups, with the former showing patterns closer to white LGBT men and the latter being more similar to LGBT women of color. Finally, we predict that trans, non-binary (NB), and gender non-conforming (GNC) people will experience more of these events than their LGBT women counterparts. Thus, in order of increasing frequency of events, the pattern of results would be: white LGBT men; white LGBT women; white trans, NB, and GNC people; LGBT men of color; LGBT women of color; and trans, NB, and GNC people of color. We also predicted that the intensity of the events experienced would correlate with the demographic groups in the same way frequency would. Hence, white LGBT men will experience the least extreme events, while trans, NB, and GNC people of color will experience the most extreme events.0

#### **Study 2 Discussion**

Assuming hypothesis-consistent results, these findings will differ from those of Almeida et al. (2009) in that Almeida et al. (2009) found that LGBT women were discriminated against less than LGBT men, while this current study found the opposite. Almeida et al. (2009) rationalized their findings by arguing that more minority sexual orientation males are "out" and affiliated with the community than minority sexual orientation females. Our study differs in that our participants are out and self-identify as LGBT. Thus, the repercussions of being out will impact the way LGBT women are perceived by society and hence their experiences of discrimination. However, these

findings would be in accordance with other similar studies like Balsam et al. (2011), in demonstrating that LGBT people of color face more oppression that do their white counterparts.

Limitations. There are several limitations of this study. The first is that LGBT identity is not monolithic, and the groups that comprise it have varying expressions and thus experience discrimination in different ways. Lesbian, gay, bisexual, trans and other individuals subsumed under the label "LGBT" truly have many contrasting ways of existence, and even in these subcategories, there is a ton of variation. In addition, "LGBT," being an acronym, may also leave out different ways of being a sexual or gender minority, such as asexuality, pansexuality, and many forms of genderfluidity. We also only recruited LGBT college students, which is obviously a limiting demographic. LGBT people at different ages may experience different kinds of negative emotional events and may also react to them in varying ways, so future research will need to involve samples that are not just college-aged.

In the recruitment of our participants, we could encounter another limitation. In the way our study is framed, only people who have a clear identification of their sexual orientation, basically those who are "out," would enroll ad participate in the study. Therefore, we miss people who are questioning their sexuality or not publicly out. We will try to counteract this by avoiding recruitment techniques that would further restrict our sample such as going to events, meetings, and locations where the community gathers, which would narrow our scope even more because gathering together with one's community requires affiliation in addition to identification (Meyer & Wilson, 2009). Instead, we will use flyers and word-of-mouth to publicize our study and recruit participants. Our ideal situation would be to get a community sample and look at the subset of people who have, at the very least, a not strictly heterosexual identity. Because we unfortunately do not have the resources to do so, we tried to attain this by incorporating Study 1.

Moreover, we want to minimize any demand characteristics placed on participants, particularly by avoiding making the aims and hypotheses of our study too obvious. Thus, we plan to ask about negative affective experiences in general, not restricting sampling to experiences related to identity and discrimination. We also will attempt to recruit a racially and ethnically diverse sample without specifically targeting individuals of racial and ethnic minority groups in our recruitment materials. Thus, our goal to examine multiple minorities is not made prominent. We also hope that the rather individual nature of our methodology, event-contingent experience sampling, will limit conformity in responses that would be more present in focus groups and interviews. While powerful methods for mapping the potential responses of individuals, these methods may tap an implicit desire to reach consensus with peers and thus minimize meaningful variation in the sample..

Our method of event-contingent experience sampling is not without limitations. There may be different thresholds that individuals use when deciding whether to report on a negative affective experience. This relates to classic scaling issues like those in the emotion and pain literatures where subjective reports cannot be assumed to be equivalent. Moreover, since this study relies on self-reports of emotions, there is a chance that the participants' emotions may have been affected by unconscious biases, such as that involved in hindsight. Hindsight involves the understanding of a situation only after it has transpired, and because there may be additional processing happening between the actual event and filling out the survey, participants may misremember their emotions at the time of the event. Therefore, we cannot ascertain the authenticity of participants' emotions when a period of time elapses between the event and the submission of the survey. We can begin to look at this in our analysis, however, by examining whether there are distinct patterns of response when participants are reporting on events after a longer lag.

The last limitation is sample size. Increasing sample size increases statistical power, which is the likelihood that a study will detect an effect when there is one to be detected. Our smaller size means that we may not have had enough power to detect smaller effects. Therefore, future studies will need to recruit more participants to have an adequate amount of statistical power to detect relatively small effects.

#### **General Discussion**

The two studies described above complement each other. Study 1 leverages large-scale sampling that may include individuals who are questioning their sexual orientation privately, while Study 2 allows for more precision in the measurement of experiences and minimizes retrospective biases that may arise with other methodologies like focus groups and interviews. Taken together, these studies can also reveal how broader patterns found in community samples like the Eugene-Springfield Community Sample and the one in National Health Interview Survey may or may not correspond to the experiences of individuals on a college campus. The culture of a college campus may be drastically different from that of the real world, including potentially increased openness and less bias in attitudes of LGBT individuals. Holland, Matthews, and Schott (2013) consistently found higher levels of LGBT tolerance across the indexes among women, Democrats, more liberal Christian traditions, non-Christian faiths, and the non-religious. Importantly, students in the College of Arts and Sciences and students further along in their college careers are also more tolerant. These trends may not accurately reflect those of larger society.

Related, college students are at a critical stage of identity formation, and may have internalized bias from earlier discrimination given a heightened sensitivity in adolescence to peers and social stimuli more generally. Casey, Jones, and Hare (2008) show that risk factors such as

suboptimal decision-making and heightened emotional reactivity arise during adolescent brain development. During adolescence, the social environment is changing such that one spends more time with peers than adults and has more conflicts with their parents, which both fuel increasing emotional reactivity. The value of positive and negative information may also be exaggerated. Tottenham, Hare, and Casey (2011) investigated emotion discrimination, emotion regulation, and cognitive control in children, adolescents, and adults. They show that all three increase steadily for each age group. Thus, adolescents show better emotion discrimination and regulatory abilities than children but worse discrimination and regulation than adults. Because they have still not completely developed these skills to their fullest extent, they may be less able to cope with and demonstrate resilience in the face of negative affective experiences like discrimination. Therefore, their responses to discrimination may be more extreme than those of adults.

#### **Future Research**

Primarily, future research could investigate differences within the LGBT community itself, draw on a sample of a wider age range, and increase sample size to maximize statistical power.

These studies were unique in that they analyze the intersection between LGBT identity, multiple minority identity, and well-being, instead of each of them in isolation or just two. Future research could explore the relationships between the three more specifically, such as focusing on just one group in the LGBT community. For example, lesbian women may experience very different types of discrimination than trans men, and it would be interesting to investigate what each kind looks like, especially when racial and other differences are factored in.

Research differentiating between the varying types of negative emotional events could also determine which type is most detrimental to the well-being of LGBT people, or if they all have

negative effects. Studies could be done focusing solely on microaggressions caused by other people or just on negative affect triggered by reminders of society's heteronormativity or beauty standards. A particularly intriguing field that could be investigated involves dating app experiences, and the unique microaggressions or negative emotional events that happen in that realm.

Future studies could also implement different methodologies than the event-contingent experience sampling used in Study 2. They could utilize signal-contingent experience sampling, in which the experimenter sends out a survey to the participants a certain number of times a day. This would be more experimenter-driven than participant-driven. This method would sidestep the thresholding issue that could affect event-contingent experience sampling. Therefore, it would provide poorer frequency estimates but better comparability of events. They could also use the day reconstruction method (DRM), in which participants log their negative emotional events at the end of every day in a diary. The value in this method would be the lower burden put on participants to log events as they happen, as in event-contingent experience sampling, or every time we ask them, as in signal-contingent experience sampling. This method might allow for more large-scale data collection, while still allowing measurement of specific experiences.

Moreover, in Study 2, we attempted to make a distinction between social and nonsocial stressors, but it is unclear how media fits into this landscape. It may violate such a strict dichotomy and require more refinement in future research, given that technology plays a pervasive role in people's lives nowadays. But what constitutes a social versus nonsocial interaction with media? Are being exposed to bias and discrimination in social media versus in person psychologically distinct from each other? To what extent does it matter if the self is involved? In other words, does it matter whether a negative affective experience targets individuals or the identity groups to which they belong? Social media has transformed the material conditions of our lives such that we now

have an easily accessible outlet to increasing numbers of people. Crockett (2017) argues that one quite prominent online phenomenon is moral outrage, which is triggered when a moral norm has been violated. Though encountering a norm violation in person is very rare, being exposed to them on the internet is highly likely. Moreover, due to the decreased effort of expressing moral outrage online, people may have a lower threshold for doing so. How does this collective outrage as well as backlash affect negative affective experiences? There seems to be two possibilities. First, the "outrage bandwagon" that can form against a person or group of people can be extremely harmful, as a mass of people all expressing their outrage could be overwhelming for that person or group. However, this experience could also serve to create a sense of community, from which resilience and resistance can be mobilized. It is really important to incorporate considerations for technology because the base rates of media exposure might be really high, gradually forming subtle repetitive associations. However, these processes may not be totally transparent to individuals and thus may fly under the radar. Thus, in order to glean a complete picture of a phenomenon, researchers must always take into account the effects of technology.

#### Conclusion

This study has illuminated the connections between LGBT identity, intersectionality, and well-being. It has broader implications for operationalizing tactics and strategies to improve well-being of LGBT people of color, such as counseling that is more targeted and tailored to their unique experiences as well as general support systems that can help maintain mental stability even with the detrimental effects of negative emotional events. LGBT people of color already have to face the menacing foes of racism and heterosexism, which they cannot do without first taking care of their well-being. This research will hopefully enlighten them and their allies on how best to do so.

## **Author Contributions**

Wang devised the research questions investigated in this paper, with assistance for the third hypothesis from Gendron, the principal investigator for Yale's Affective Science and Culture Lab. With help from Gendron for the emotion sections, Wang found and synthesized prior literature for the introduction. Wang and Gendron created the Qualtrics survey for Study 2 jointly. Gendron found the two datasets for Study 1, and Gendron and Wang ran analyses together. Gendron provided consistent, constant feedback on this paper, which was continually revised by Wang to produce the best possible version. Thank you to Dr. Gendron for all of her help in advising this paper and providing lots of feedback and material to make this collaboration a successful one!

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