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# Greater Than the Sum of Racism and Heterosexism: Intersectional Microaggressions Toward Racial/Ethnic and Sexual Minority Group Members

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Objectives: Discrimination, once unmistakable, has taken on subtler forms as exemplified by microaggressions—daily, seemingly harmless indignities that send negative messages to minority group members (Sue, Capodilupo, et al., 2007). Furthermore, unique microaggressions exist for individuals who possess more than one stigmatized identity. For example, racial/ethnic minorities who are also lesbian, gay, or bisexual face discrimination that is unlike racism or heterosexism alone or in combination. Thus, to meaningfully investigate how dually marginalized individuals experience various forms of contemporary, covert discrimination, scholars need access to paradigms that better capture their existential realities. Specifically, greater attention must be paid to how interlocking social categories shape experiences of subtle discrimination. To this end, we demonstrate how to conceptualize quantitative research that is mindful of intersectionality—or the interconnection of social identities in creating overlapping and interdependent systems of oppression. Method: We conducted a 2-phase study to examine whether an intersectional methodology better predicted adverse health outcomes for 801 lesbian, gay, and bisexual people of color as compared to an additive/multiplicative approach (i.e., combining scores from two different measures of experiences with racism and heterosexism). Results: Results indicated that intersectionality (vs. additive/multiplicative approach) better measured symptomology for racially diverse sexual minority group members who experienced microaggressions. Conclusions: These findings provide quantitative evidence in support of intersectionality, an achievable methodological approach that captures subtle encounters with discrimination for individuals with interlocking marginalized identities-encounters that would otherwise remain on the fringe of research.

# Public Significance Statement

The present study encourages researchers to think about social identities more critically in order to better understand the associations between identity-based indignities and well-being. Thus, we demonstrate how to capture the unique experiences of lesbian, gay, and bisexual people of color who face prejudice unlike racism or heterosexism alone.

Keywords: microaggressions, intersectionality, LGB, POC, well-being

Psychologists have long grappled with the manifestation of discrimination by examining one social identity (e.g., race/ethnicity or sexual orientation) at a time (Bowleg, 2008; Cole, 2009). Although this approach produced foundational theories on discrimination, prejudice, and stereotyping (e.g., Allport, 1954; Jones,

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1997; Sherif & Sherif, 1956; Tajfel, 1969), it oversimplified the complex experiences of individuals who held several marginalized social identities simultaneously (e.g., minority race/ethnicity and sexual orientation), and it privileged the perspectives of perpetrators over the experiences of targets (Dovidio & Gaertner, 2004; Glick & Fiske, 1996). Since the development of these early theories, psychologists have recognized the need to adopt an intersectional approach to better capture how social identities work together to influence people's experiences (Cole, 2009) and began to turn their attention to targets (vs. perpetrators; Crocker & Major, 1989; Sue, Capodilupo, et al., 2007). Along with these theoretical and analytical developments, discrimination has taken on subtler forms in contemporary society. In fact, minority group members routinely experience seemingly harmless incidents that send negative messages about their marginalized status (i.e., microaggressions; Sue, Capodilupo, et al., 2007)—microaggressions often directed at multiple marginalized identities simultaneously. Therefore, we aim to advance the literature on stigma and discrimination by examining microaggressions directed at two marginalized identities—minority race/ethnicity and sexual orientation—and performing a direct comparison of an intersectional versus additive/multiplicative (more traditional) approach in predicting mental health outcomes.

# Microaggressions

Microaggressions are daily environmental, behavioral, and verbal occurrences that convey negative messages to marginalized individuals (Sue, Capodilupo, et al., 2007). For example, complimenting a U.S.-born woman of Asian ancestry on her English abilities may signal that she is perceived as a perpetual foreigner in her country of birth. Similarly, when lesbian, gay, and bisexual (LGB) individuals overhear comments like "gay people are so fun," they may feel reduced to sources of entertainment. Microaggressions deliver a message that marginalized group members are undesirably different, thereby revealing underlying prejudice. Overall, the term microaggression identifies, quantifies, and qualifies covert discrimination, an otherwise nebulous and amorphous phenomenon that could not be readily studied otherwise.

Four subcategories of microaggressions exist, delineating specific forms of contemporary racism (Sue, Capodilupo, et al., 2007). *Microassaults* are overt forms of discrimination including racial epithets, avoidant behaviors, or harassment. *Microinsults* entail the denigration of personal identities through demeaning encounters like praising people for being "a credit to their race." *Microinvalidations* occur when dominant group members invalidate the experiences of minority group members, much like a heterosexual woman telling her gay friend that he is overly sensitive toward homophobic comments. Lastly, *environmental microaggressions*—like university buildings bearing the names of White males only—alienate women and ethnic minority group members (Nadal, Mazzula, Rivera, & Fujii-Doe, 2014; Sue, Capodilupo, et al., 2007; Sue, Capodilupo, & Holder, 2008).

Using interviews and focus groups, researchers have created taxonomies of racial/ethnic (Sue, Capodilupo, et al., 2007) and LGB (Nadal, Rivera, & Corpus, 2010) microaggressions. Some commonalities between these taxonomies include the expression of negative messages to targets, perpetrator's denial of target experiences, reinforcement of dominant (e.g., White-centric) societal values, and the corroboration of heterosexist and racist stereotypes. Differences between the taxonomies include more patent vitriol toward LGB individuals (e.g., "they are sickening") and LGB disenfranchisement (e.g., same-sex marriage remained illegal in the United States until 2015). Ethnic microaggressions, on the other hand, reveal that White Americans expect minority group members to assimilate into dominant culture (e.g., a Latinx person needs to "calm down").

Microaggressions, for people of color (POC) and LGB individuals alike, are prevalent. One study examining racial/ethnic microaggressions among African Americans showed that they occur at school, work, and grocery stores (Sue, Nadal, et al., 2008). Similarly, LGB microaggressions happen at work (Charles & Arndt, 2013), in therapy (Shelton & Delgado-Romero, 2011), and in class (Woodford, Han, Craig, Lim, & Matney, 2014). Further, individuals with non-binary gender expressions experience more harassment in college and high school (McCabe, Dragowski, &

Rubinson, 2013; Woodford, Han, et al., 2014). Together, these studies document the pervasiveness of microaggressions in the daily lives of POC and LGB individuals.

Most importantly, microaggressions seem to exert significant influence on racial/ethnic and sexual minority group members' cognitive, emotional, and physical functioning. The target of a microaggression expends energy on appraising the incident, deliberating on a response, and weighing the costs of confrontation. These considerations are burdensome, divert energy from other tasks, and contribute to adverse health outcomes (American Psychological Association, 2017; Brondolo, Brady, Libby, & Pencille, 2011; Huynh, 2012; Sue, Bucceri, Lin, Nadal, & Torino, 2007; Sue, Capodilupo, et al., 2007; Sue, Nadal, et al., 2008). Similarly, LGB microaggressions, whether witnessed or experienced, negatively relate to mental health (i.e., increased anxiety) for sexual minority college students (Woodford, Kulick, Sinco, & Hong, 2014). In fact, LGB college students who overhear the phrase "that's so gay" report feeling more isolated and experience more negative physical symptoms (i.e., headaches and eating problems) than those who do not experience this microaggression (Woodford, Howell, Silverschanz, & Yu, 2012). Thus, extant research shows that for POC and LGB people alike, microaggressions have tangible correlates and consequences.

# Intersectionality and Microaggressions

Intersectionality theory underscores how social identities (e.g., race, sexual orientation, gender, physical ability) influence and depend upon one another to form an individual's existential reality (Collins, 1990; Crenshaw, 1989; hooks, 1981). This framework argues that people embody a blend of social categories instead of one social identity over another. Some qualitative psychological research has already applied intersectionality to analyzing oppression. For example, in a study on Asian Americans' experiences with microaggressions, researchers uncovered exoticization, a concept unique to Asian American women, by attending to the interaction of gender and race/ethnicity (Sue, Bucceri, et al., 2007). Similarly, another study that considered the interaction of gender and sexual orientation found that gay men and lesbian women reported "ascription of intelligence" microaggressions (e.g., gay men are good interior designers, lesbian women are good mechanics) significantly more often than bisexual individuals of either gender (Sarno & Wright, 2013). These findings suggest that social identities like gender and race/ethnicity or sexual orientation intertwine to form distinctive experiences, a phenomenon that extends to socioeconomic class, age, physical ability, and countless other factors. While the intersectional framework more accurately captures interlocking identities and has gained traction in other social science disciplines, psychological researchers often have chosen other analytic frameworks over intersectionality, to the detriment of psychological science.

Various methods exist for studying social identities within the social sciences: the single axis approach, the additive/multiplicative approach, and the intersectional approach. Traditionally, psychologists have employed the single axis approach to isolate a single social identity for analysis (Lewis & Neville, 2015) and the additive/multiplicative model, which compounds social categories together, to measure (dis)advantage (Parent, DeBlaere, & Moradi, 2013). Under the first paradigm, work on ethnic and LGB micro-

aggressions often neglects social categories such as gender, socioeconomic status, race/ethnicity (for LGB microaggressions research), and sexual orientation (for racial/ethnic microaggressions research). By ignoring the influence of other social identities, the single axis framework allows researchers to study social identities independently, but in reality, individuals identify with more than one social group at a time (Cole, 2009). Similarly, the additive/ multiplicative approach sums (either by adding or multiplying) social identities together to capture overall experience. This method conflates social identities by conceptualizing them separately from one another (Williams & Fredrick, 2015) and by assuming that sexual orientation and ethnic identities are equal in their effects (Bowleg, Craig, & Burkholder, 2004). However, race/ethnicity, often a visually distinguishable attribute, may affect an LGB person of color's experiences more than sexual orientation, a nonphysical trait. These traditional methodologies, though viable depending on the research question, have generated an incomplete body of knowledge about how people experience their social identities.

In contrast, the intersectional approach treats social categories as interlocking and unique (Cole, 2009; Crenshaw, 1989; Purdie-Vaughns & Eibabch, 2008), thereby addressing key shortcomings of the additive/multiplicative and single axis approaches. Within psychology, applying an intersectional lens means conceptualizing social categories differently by asking three key questions throughout the research process: Who is included within this category? What role does inequality play? Where are the similarities? (Cole, 2009). Thus far, psychology researchers have only applied an intersectional lens to LGB and racial/ethnic issues using qualitative methods (Allen, 2013; de Vries, 2015; Nadal & Corpus, 2013; Nadal & Rivera, 2014; Parks, Hughes, & Matthews, 2004; Vaccaro & Koob, 2018; Weber, Collins, Robinson-Wood, Zeko-Underwood, & Poindexter, 2019). For example, Nadal and Corpus (2013) explored religion and family values on the sexual and gender identities of LGB Filipinos as well as their reception in the LGB community. Similarly, Allen (2012) examined ethnic microaggressions and class, finding that higher socioeconomic status did not stymie racial microaggressions linked to intelligence and deviance for African Americans. These researchers successfully described the unique experiences of marginalized groups that would otherwise remain unknown. Other researchers also have recognized the need for intersectional investigations (Else-Quest & Hyde, 2016; Parent et al., 2013; Remedios & Snyder, 2015; Williams & Fredrick, 2015). However, to our knowledge, no research studies to date have quantitatively compared traditional research paradigms to an intersectional methodology in a large sample of LGB POC.

### Gaps in the Literature

Thus far, research on racial/ethnic and LGB microaggressions has focused on identifying as well as describing microaggressions and their correlates. Taxonomies exist outlining microaggressions for African Americans (Sue et al., 2008; Sue, Nadal, et al., 2008), Asian Americans (Sue, Bucceri, et al., 2007), Latinx populations (Nadal, Mazzula, et al., 2014), and Indigenous peoples (Hill, Kim, & Williams, 2010), as well as LGB individuals (Nadal et al., 2010; Sarno & Wright, 2013). Extant research also suggests that racial/ethnic microaggressions (Donovan, Galban, Grace, Bennett, &

Felicie, 2013; Huynh, 2012; O'Keefe, Wingate, Cole, Hollingsworth, & Tucker, 2015; Torres & Taknint, 2015) and LGB microaggressions (Nadal, Wong, Sriken, Griffin, & Fujii-doe, 2015; Woodford, Han, et al., 2014) are associated with poorer mental health outcomes (e.g., more frequent anxiety symptoms). Further, numerous studies on college and community samples explore microaggressions and mental health correlates (Nadal et al., 2015; Nadal, Griffin, Wong, Hamit, & Rasmus, 2014; Wright & Wegner, 2012; Woodford, Han, et al., 2014; Woodford, Kulick, et al., 2014).

Despite these advancements, the literature lacks quantitative evidence in several key areas. First, only two studies have used a community sample to examine the correlation between racial/ethnic microaggressions and mental health (Huynh, 2012; Nadal, Griffin, et al., 2014). Contrastingly, of 12 studies on sexual orientation microaggressions, only four studies used college LGB students (Woodford, Han, et al., 2014; Woodford, Howell, Kulick, & Silverschanz, 2013; Woodford et al., 2012; Woodford, Kulick, et al., 2014). The rest sampled LGB community members who were predominantly White American urban dwellers (DeBlaere, Brewster, Sarkees, & Moradi, 2010). As such, findings may not generalize to all LGB individuals. Second, most racial/ethnic and sexual orientation microaggressions research does not quantitatively explore correlations between microaggressions and important factors like mental health.

Researchers need access to better quantitative measures of microaggressions, including intersectional measures, in order to address these gaps in the literature. Although a published measure of microaggressions toward LGBT POC exists (LGBT-POC Microaggressions Scale; Balsam, Molina, Beadnell, Simoni, & Walters, 2011), this tool is additive rather than intersectional. The LGBT-POC microaggressions measure focuses on two underrepresented groups (i.e., racial/ethnic and sexual minority groups) and confirms variation in perceived stress for LGBT POC (e.g., bisexuals reported experiencing lower perceived stress from microaggressions than lesbians and gay men), but it lacks components central to an intersectional perspective. Items within the scale such as "Feeling misunderstood by people in your ethnic/racial community" and "Feeling invisible because you are LGBT" do not measure how sexual orientation and race/ethnicity interact simultaneously to influence people's experiences. Therefore, we aim to advance research on prejudice and discrimination by developing survey questions attentive to the interconnection of race/ethnicity and sexual orientation (e.g., "I overheard jokes about Latinxs who are LGB") in order to quantitatively capture how these identities interact and are associated with mental health outcomes.

# Overview and Hypotheses

We had two research goals: first, we employed an intersectional analytical framework in developing a measure to assess the intersection of racial/ethnic and LGB microaggressions. Second, we used the newly developed intersectional microaggressions scale to examine mental health-related outcomes. In doing so, we contend that an intersectional model would enrich and deepen our understanding of microaggressions as they relate to adjustment. We focused on the link between microaggressions and health because existing research suggests that microaggressions are correlated with adverse health outcomes. For example, individuals who ex-

perience a higher frequency of racial/ethnic and LGB microaggressions report more frequent anxiety and depression symptoms (Donovan et al., 2013; Huynh, 2012; Nadal et al., 2015; O'Keefe et al., 2015; Torres & Taknint, 2015; Woodford, Han, et al., 2014). In fact, extant literature suggests that the effects of microaggressions, which accumulate over time, can contribute to negative outcomes for targeted groups, including the occurrence of mental health problems (Sue, 2010). These findings are consistent with Meyer's (2003) minority stress theory, whereby health deficits stem from the repeated stressors of facing difficult social interactions. Given that individuals who are both sexual and racial/ethnic minorities face complex discrimination tied to the interaction between heterosexism and racism, it follows that an intersectional paradigm would better capture the unique prejudice directed toward these groups members as well as its associations with their well-being.

We predicted that multiple factors would emerge for this LGB POC intersectional microaggressions scale, including (a) alien in own land, (b) denial of experiences, (c) exoticization, (d) gendered stereotypes, (e) negative treatment, and (f) being pathologized (Study 1a). In addition, we hypothesized that the newly constructed intersectional microaggressions scale (representing the intersectional approach) would explain a significant amount of variance in health-related outcomes above and beyond the interaction of the racial/ethnic microaggressions and LGB microaggressions scales (representing the additive/multiplicative approach; Study 1b). Both parts of our study received institutional review board approval.

# Study 1a

In the first phase of our study, we reviewed qualitative literature on racial/ethnic and LGB microaggressions to construct an intersectional microaggressions scale reflective of LGB POC's unique experiences. Following Cole's (2009) suggestions for employing an intersectional lens in quantitative psychological research, we attended to diversity within groups (not all POCs are heterosexual and not all LGB people are White) and emphasized similarities as well as differences, thereby eschewing myopic conceptualizations of either social identity. There were two parts to the development of the Intersectional Microaggressions Scale (IMS): content domain and item generation and then item analysis by subject matter experts.

# Method

Content domain and item generation. To construct intersectional microaggressions items, we reviewed the racial/ethnic and LGB microaggressions literature (Nadal & Corpus, 2013; Nadal et al., 2011; Rivera, Forquer, & Rangel, 2010; Sarno & Wright, 2013; Sue, 2010; Sue et al., 2008; Sue, Capodilupo, et al., 2007; Sue, Nadal, et al., 2008). We identified similarities between the racial/ethnic (Racial and Ethnic Microaggressions Scale) and LGBT (Homonegative Microaggressions Scale) microaggressions scales to generate an initial pool of 66 items on the intersection of LGB and racial/ethnic microaggressions. We excluded transgender microaggressions given their difference from LGB indignities (Nadal, Davidoff, Davis, & Wong, 2014; Nadal et al., 2010; Nadal, Skolnik, & Wong, 2012).

**Subject-matter expert identification.** We identified 29 subject-matter experts (SMEs): 15 of them were experts in

intersectionality, 16 in microaggressions, 14 in the LGB population, and 13 in racial/ethnic minority populations. Of the 29 SMEs invited to provide feedback on this scale, 13 completed (45%) the survey (see Table 1 for SME demographics). We removed one participant's responses because s/he rated most

Table 1
Subject-Matter Experts' (SMEs) and Study Participants'
Self-Reported Demographics

Variable	Study 1a (SMEs)	Study 1b (LGB POC respondents)
Sample size	14	801
Gender (%)		
Male	21	40
Female	57	60
Nonbinary	7	1
Sexual orientation (%)		
Gay	21	17
Lesbian	43	16
Bisexual	14	67
Heterosexual	21	0
Race/ethnicity (%)		
Black	29	49
Asian	29	19
White	29	11
Latinx	14	29
Middle Eastern	_	2
Native American	_	6
Other	_	5
Age range (%)		
17–20	_	17
21–30	_	62
31–40	36	17
41–50	36	0
51–60	7	0
Highest degree earned (%)		
Some high school	_	1
GED	_	14
Some college	_	35
Technical degree	_	4
AA, AS	_	12
BA, BS	_	25
MA, MS, Ed. M, MSW	_	9
PhD, MD, JD	100	1
Area of expertise (n)		
LGB population	6	_
Intersectionality	6	_
Microaggressions	5	_
Race/POC	4	_
Socioeconomic status		
Working class	_	26
Lower-middle class	_	30
Middle class	_	36.
Upper-middle class	_	8
Upper class	_	0.1
Country of birth		
United States	_	94
Foreign (average years in U.S.)	_	6 (15)
College student		- \ - /
Yes	_	42
No	14	58

*Note.* LGB = lesbian, gay, and bisexual; POC = people of color. SMEs could indicate more than one area of expertise. Study participants could select more than one ethnicity. Some percentages across groups do not sum to 100% due to missing cases.

items with a 1 (not at all relevant) or 2 (somewhat relevant) without rationale. All participants had a PhD or other doctoral degree, and most self-identified as women (68%) between the ages of 31–40 (46%) and 41–50 (46%).

**SME ratings.** SMEs had 1 month to provide feedback on the 66 items via an online survey. There were three survey sections: instructions and piped questions, microaggressions themes to be rated, and demographics. Microaggressions themes had six subsections: (a) alien in own land, (b) denial of experiences, (c) negative treatment, (d) exoticization, (e) gendered stereotypes, and (f) being pathologized. SMEs read a definition of each microaggression theme before rating item relevance using a 5-point Likert-type scale ( $1 = not \ at \ all \ relevant \ to 5 = extremely \ relevant$ ). Then, they provided item feedback in response to open-ended questions.

#### Results

We calculated the mean, mode, and standard deviations of SME ratings for each of the 66 items. We flagged means and modes below 3 as well as standard deviations above 1 for further examination, and we analyzed all SME comments. Based on SME ratings and comments, we removed three items, modified 10, and made two structural changes to the survey. First, to improve readability, "people" or "person" replaced the "s" after the piped in race/ethnicity (e.g., "I felt that Asians who are bisexual were invisible within society" became "I felt that Asian people who are bisexual were invisible within society"). Second, we introduced a "not applicable" answer choice to the Likert-type scale because one of the items asked about rejection by religious family members, but not all respondents may face such an encounter.

# Study 1b

In the second phase of our study, we sought to substantiate the intersectional framework quantitatively. To this end, we used the 63-item intersectional ethnic and LGB microaggressions scale developed in the previous phrase (Study 1a), which allowed us to quantify the interconnection of racial/ethnic and sexual orientation discrimination with health-related outcomes. We tested whether this measure (intersectional approach) would explain a significant amount of variance in health-related outcomes beyond the interaction of the ethnic/racial microaggressions and LGB microaggressions scales (additive/multiplicative method). We expected the results to corroborate that intersectionality leads to a more complex understanding of social identities, specifically that it would predict health-related outcomes above and beyond the additive/multiplicative method.

# Method

**Participants.** We recruited 843 LGB (66.4% bisexual, 17.2% gay, 16.4% lesbian) POC (43.9% African American, 23.5% Latinx, 14.7% Asian/Pacific Islander, 15.3% biracial or multiracial, 2.6% other) from multiple sites. Half of the sample was between 18 and 25 years old (M = 26.66, SD = 7.02), and more women (59%) than men (40%) and nonbinary individuals (1%) participated. Participants had comparable education levels

(35% completed some college, and 34.6% had a bachelor's degree or higher) to the LGB population (36% completed some college, and 32% had a bachelor's degree or higher; Pew Research Center, 2013). More than half (57.9%) were not currently college students, and 26% of respondents self-identified as working class, 30% as lower-middle, 35% as middle, and 9% as upper-middle to upper class. Table 1 displays demographic information for study participants.

**Recruitment.** We recruited participants from four settings. Approximately 6.5% of the sample came from the psychology research subject pool at a large and diverse public university in the Los Angeles area. We recruited another 5% of participants via flyers posted on the same university campus as well as LGB community centers/organizations around Los Angeles (site recruitment breakdown is unknown because both groups used the same survey link). The rest of the sample (88.5%) came from Amazon Mechanical Turk (MTurk), an online crowdsourcing marketplace. To participate in the study, MTurk respondents had to be least 18 years old, self-identify as LGB and POC, hold U.S. citizenship, and have completed at least 500 Human Intelligence Tasks (HITs) with a 95% approval rating for those HITs (i.e., they have performed high-quality work for other requesters before entering our study). Students recruited from the psychology subject pool received four research credits for their participation. All other participants, except for those recruited through MTurk, were part of a drawing to win one of four \$50 Amazon gift cards. MTurk participants were compensated \$4.84 for their participation. Recently, researchers have questioned the validity of data collected through MTurk as the platform's anonymity may lead users to lie in order to qualify for studies to receive compensation (Skitka & Sargis, 2005). Thus, we took the following steps to safeguard our data's validity: (a) we offered modest compensation for participating in the study, (b) we required high HITs ratings for MTurk participants, and (c) we supplemented the MTurk data with responses from other sources. MTurk was instrumental in surveying our otherwise difficult-to-reach and understudied population, which consists of individual who may not feel comfortable disclosing their stigmatized identities in less anonymous settings (Smith, Sabat, Martinez, Weaver, & Xu, 2015). The survey took participants approximately 40 min to complete.

#### Measures.

Intersectional items. The IMS item pool (after SME ratings; 63 items) measures the frequency of ethnic and LGB microaggressions. These items represent six dimensions we previously identified within the racial/ethnic and the LGB microaggressions literatures: alien in own land (15 items), denial of experiences (10 items), exoticization (six items), gendered stereotypes (eight items), negative treatment (14 items), and being pathologized (10 items). Before starting the study, participants answered open-ended questions about their self-identified race/ ethnicity and sexual orientation. Using Qualtrics software, their responses were piped into each of the intersectional items as appropriate. Next, we asked participants to indicate the number of times an event (a microaggression) occurred in the past 6 months using a 6-point Likert-type scale ranging from 0 (I did not experience this event in the past six months) to 5 (I experienced this event 5 or more times in the past six months). There was an additional rating choice (6) for participants to signal that any given question was inapplicable. Higher averaged scores indicated more frequent intersectional race/ethnic and LGB microaggressions (excluding "not applicable" responses). The IMS yielded highly reliable scores ( $\alpha = .977$ ; see Table 2 for score reliability estimates of IMS subscales).

Racial/ethnic microaggressions. The Racial and Ethnic Microaggressions Scale (REMS) examines the frequency of racial/ethnic microaggressions over a 6-month period (Nadal, 2011). The REMS uses a 6-point Likert-type scale ranging from 0 (*I did not experience this event in the past six months*) to 5 (*I experienced this event 5 or more times in the past six months*). This 45-item measure has six subscales, including (a) assumptions of inferiority (eight items), (b) second-class citizen and assumptions of criminality (seven items), (c) microinvalidations (nine items), (d) exoticization/assumptions of similarity (nine items), (e) environmental microaggressions (seven items), and (f) workplace/school microaggressions (five items). Higher averaged scores indicated a higher frequency of racial microaggressions. The REMS yielded highly reliable scores ( $\alpha = .941$ ).

LGB microaggressions. We administered the 45-item Homonegative Microaggressions Scale (HMS) to examine the frequency of LGB microaggressions (Wright & Wegner, 2012). Participants indicated how often they experienced a particular event (a microaggression) using a 6-point Likert-type scale that ranges from 0 (not applicable) to 5 (constantly/a great deal). We inadvertently left out one question ("How often have people changed the subject/topic when reference to your sexual orientation comes up?") from the survey; thus, respondents answered only 44 of 45 HMS items. Higher averaged scores indicated a higher frequency of LGB microaggressions. The HMS yielded highly reliable scores ( $\alpha = .961$ ).

Patient-Reported Outcome Measurement Information System (PROMIS). This National Institutes of Health-funded tool measures self-reported physical, mental, and social health. Several measures accompany each health factor, but we focused on five scales and paid particularly close attention to the anxiety and depression symptoms because previous research has found associations between microaggressions and these two variables (Donovan et al., 2013; Huynh, 2012; Nadal et al., 2015; O'Keefe et al., 2015; Torres & Taknint, 2015; Woodford, Han, et al., 2014). Other measures of health appeared in the survey as part of a more extensive study on microaggressions and health, but we do not report those scales and findings here.

Anxiety short form. Participants responded to four items assessing their level of anxiety over the past 7 days via a 5-point Likert-type scale ranging from 1 (never) to 5 (always). Sample items included "I felt fearful" and "I felt uneasy." Higher averaged scores indicated more frequent anxiety symptoms. This short form yielded highly reliable scores ( $\alpha = .901$ ).

Depression short form. Four items assessed depression symptoms over the past week via a 5-point Likert-type scale ranging from 1 (never) to 5 (always). Sample items included "I felt worthless" and "I felt hopeless." Higher averaged scores indicated more frequent depression symptoms. The PROMIS depression short form yielded highly reliable scores ( $\alpha = .933$ ).

Social isolation. Four items examined participants' general feelings of social isolation using a 5-point Likert-type scale (1 = never to 5 = always). Sample items included "I feel left out" and "I feel isolated from others." Higher averaged scores indicated more frequent feelings of social isolation. This scale yielded highly reliable scores ( $\alpha = .898$ ).

Informational support. Participants answered four questions about how supported they felt using a 5-point Likert-type scale (1 = never to 5 = always). Sample items included "I have someone to give me information when I need it" and "I get useful advice about important things in life." Higher average scores indicated more information support. The scale yielded highly reliable scores ( $\alpha$  = .931).

Applied cognitive abilities. Four items examined participants' perceived stability of their cognitive abilities (e.g., concentration and memory) over the past week using a 5-point Likert-type scale (1 = not at all to 5 = very much). Sample items included "My mind has been as sharp as usual" and "My thinking has been as fast as usual." Higher averaged scores indicated average or above average cognitive abilities. This scale yielded highly reliable scores ( $\alpha = .913$ ).

**Procedure.** The survey was available to all eligible participants via URL or web address. After providing their electronic consent, participants completed the described measures on microaggressions first (in randomized order), then health (also in randomized order), and then demographics. After completing the survey, we thanked and debriefed participants.

# Results

We removed 42 participants for extreme values on the following variables: physical activity, overall health, fatigue, REMS  $\times$  HMS

Table 2
Descriptive Statistics for and Correlations Between the Intersectional Ethnic and LGB Microaggressions Scale (IMS) and Its Subscales

Factor	M (SD)	1	2	3	4	5	6	7
1. Total IMS score	2.57 (1.11)	.956						
<ol><li>Negative treatment</li></ol>	2.51 (1.33)	.883**	.929					
3. LGB alien in own land	2.58 (1.46)	.778**	.513**	.914				
4. Exoticization	2.61 (1.39)	.749**	.576**	.507**	.855			
<ol><li>Pathologized</li></ol>	2.01 (1.26)	.770**	.693**	.459**	.521**	.867		
6. Denial experiences	3.26 (1.71)	.681**	.545**	.483**	.404**	.460**	.814	
7. Gender stereotypes	2.84 (1.47)	.777**	.672**	.491**	.560**	.534**	.477**	.821

Note. LGB = lesbian, gay, and bisexual. Score reliability estimates (Cronbach's alpha) are shown on the diagonal.

<sup>\*\*</sup> Correlation significant at the 0.01 level.

Table 3
Pattern Matrix From Exploratory Factor Analysis With Principal Axis Factoring and Promax Rotation of the Intersectional Ethnic and LGB Microaggressions Scale

			Fa	actor		
Item	1	2	3	4	5	6
I was insulted because I am a/an [race/ethnicity] person who is [sexual orientation] I overheard negative comments about [race/ethnicity] people who are [sexual	0.993	-0.054	-0.068	-0.102	0.017	-0.023
orientation]	0.848	0.032	0.012	-0.068	-0.040	-0.025
I overheard jokes about [race/ethnicity] people who are [sexual orientation]	0.786	-0.070	0.061	-0.030	-0.082	-0.011
I was teased because I am a/an [race/ethnicity] person who is [sexual orientation]	0.778	-0.100	-0.032	-0.009	0.072	0.083
People treated me negatively because I am a/an [race/ethnicity] person who is [sexual orientation]	0.771	-0.028	-0.084	-0.103	0.127	0.127
encountered offensive language because I am a/an [race/ethnicity] person who is [sexual orientation]  Someone avoided close proximity to me because I am a/an [race/ethnicity] person	0.726	-0.034	-0.023	0.072	0.080	0.033
who is [sexual orientation]  felt that someone avoided an unnecessary interaction (e.g., having a general	0.677	0.047	-0.056	0.099	-0.040	0.128
conversation or having lunch) with me because I am a/an [race/ethnicity] person who is [sexual orientation]	0.669	0.044	-0.012	0.095	-0.007	0.038
My experiences as a/an [race/ethnicity] person who is [sexual orientation] were viewed as comical	0.624	0.122	0.023	0.060	-0.076	0.004
I was threatened because I am a/an [race/ethnicity] person who is [sexual orientation]	0.606	0.062	0.124	0.263	-0.116	-0.200
As a/an [race/ethnicity] person who is [sexual orientation], I felt disconnected from some parts of the LGB culture  In LGB spaces, I felt excluded because I am a/an [race/ethnicity] person who is	-0.116	0.933	-0.013	0.003	0.011	-0.024
[sexual orientation]  As a/an [race/ethnicity] person who is [sexual orientation], I found myself feeling	-0.067	0.861	-0.075	0.074	-0.082	0.126
invisible within the LGB community  I didn't feel comfortable being a/an [race/ethnicity] person who is [sexual	-0.042	0.851	-0.050	0.023	-0.047	0.076
orientation] in LGB spaces I felt like I was holding part of my [race/ethnicity] [sexual orientation] self back in	0.001	0.796	0.006	0.097	0.014	-0.086
LGB spaces Within the LGB community, I felt there was a divide between [race/ethnicity]	0.014	0.766	0.175	-0.075	-0.029	-0.061
people who are [sexual orientation] and others I felt like I was holding part of my [race/ethnicity] [sexual orientation] self back in	0.046	0.765	-0.011	-0.041	-0.038	0.103
my ethnic/racial community In my ethnic/racial community, I felt excluded because I am a/an [race/ethnicity]	0.122	0.553	0.089	-0.152	0.275	-0.103
person who is [sexual orientation] I was viewed as unusual and/or desired due to my differentness by sexual partners	0.200	0.458	-0.030	-0.036	0.258	-0.006
because I am a/an [race/ethnicity] person who is [sexual orientation]  I was viewed as unusual and/or desired due to my differentness by dating partners  has used I am a/an [race/ethnicity] person who is [sexual orientation]	0.169	0.048	0.816 0.783	-0.091	-0.070	-0.016
because I am a/an [race/ethnicity] person who is [sexual orientation] I was viewed as a sex object by others because I am a/an [race/ethnicity] person who is [sexual orientation]	0.043 $-0.197$	-0.024	0.783	-0.023 $0.030$	-0.010 $0.092$	-0.008 $0.053$
I felt like people were only sexually interested in me because I am a/an [race/ethnicity] person who is [sexual orientation]	-0.153	-0.013	0.758	-0.094	0.000	0.189
I overheard from others that [race/ethnicity] people who are [sexual orientation] are viewed as unusual and/or desired because of their differentness	0.126	-0.050	0.711	0.123	0.005	-0.106
I overheard from the media that [race/ethnicity] people who are [sexual orientation] are viewed as unusual and/or desired because of their differentness	0.045	0.083	0.520	0.175	-0.059	0.014
Someone assumed I had HIV/AIDS because I am a/an [race/ethnicity] person who is [sexual orientation]	-0.082	-0.059	0.038	0.933	0.040	-0.019
Someone thought I have a disease because I am a/an [race/ethnicity] person who is [sexual orientation]	-0.015	-0.063	-0.031	0.894	0.038	0.045
Someone assumed I was a pedophile because I am a/an [race/ethnicity] person who is [sexual orientation]  Someone shielded their children away from me because I am a/an [race/ethnicity]	0.038	0.215	-0.056	0.632	-0.011	-0.054
person who is [sexual orientation]  Someone assumed that I engage in unsafe sex because I am a/an [race/ethnicity]	0.180	0.105	-0.075	0.552	0.051	0.019
person who is [sexual orientation]  [felt like my family members didn't understand my experiences as a/an	0.117	-0.152	0.194	0.472	0.125	0.094
[race/ethnicity] person who is [sexual orientation] My family dismissed my experiences as a/an [race/ethnicity] person who is [sexual	0.053	-0.008	0.012	-0.040	0.841	-0.030
orientation] [felt rejected by my religious family members because I am a/an [race/ethnicity]	-0.104	0.016	-0.034	0.140	0.758	0.035
person who is [sexual orientation]	0.078	-0.008	0.036	0.087	<b>0.656</b> (table o	-0.021 continues)

Table 3 (continued)

			Fa	actor		
Item	1	2	3	4	5	6
Others expected me to act in a certain way because I am a/an [race/ethnicity] person who is [sexual orientation]	0.082	0.027	0.127	-0.063	0.002	0.740
I was expected to dress in a certain way because I am a/an [race/ethnicity] person who is [sexual orientation]	0.077	0.045	-0.009	0.102	-0.090	0.704
I was told that I don't act like a/an typical [race/ethnicity] person who is [sexual orientation]	0.093	-0.017	0.121	-0.141	0.155	0.561
My intelligence was questioned because I am a/an [race/ethnicity] person who is [sexual orientation]	0.129	0.060	0.002	0.193	-0.053	0.488

Note. LGB = lesbian, gay, and bisexual. Bolded loadings reflect factor loadings for each subscale.

interaction, smoking, and drug use composites. The final analytic sample consisted of 801 participants. For brevity and clarity, we report findings for the entire analytic sample, not by subsamples because the bisexual and gay/lesbian subsamples are similar in demographic characteristics to each other. Further, although there are a few minor differences in EFA and regression results, none of the substantive findings and conclusions reported below change when we conduct analyses by subsample.

Exploratory factor analyses. We conducted an exploratory factor analysis (EFA) on the 63-item intersectional scale using a random half of the sample (n = 400). Bartlett's test of sphericity was significant,  $\chi^2(400) = 3737.53$ , p < .001, and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy indicated a robust relationship among variables (KMO = .96); thus, we proceeded with EFA. We did not utilize maximum likelihood factor extraction because almost all the items were not normally distributed (Fabrigar, Wegener, Maccallum, & Strahan, 1999). We selected the EFA using principal axis factoring extraction with Promax rotation because this extraction method is widely used and understood (Tabachnick & Fidel, 2001). Initially, nine factors with eigenvalues above one were extracted, but after running parallel analysis (Courtney, 2013) and eliminating items with cross loadings of .32 or higher (Cabrera-Nguyen, 2010), we arrived at a model with simple structure consisting of 36 items that produced a six-item solution explaining 68.24% of the variance (Table 3 shows items and loadings). The six factors that emerged were (a) negative treatment (10 items), (b) LGB community alien in own land (eight items), (c) exoticization (six items), (d) being pathologized (five items), (e) denial of experiences (three items), and (f) gendered stereotypes (four items).

Confirmatory factor analysis. The tenability of the hypothesized factor structure was determined via confirmatory factor analysis (CFA), which we conducted on the other half of our randomly split sample (n=401). We compared our theorized structure to an a priori competing model consisting of seven factors with 52 items that explained 59% of the variance. Based on Hu and Bentler's (1999) recommendations, an acceptable CFA has a comparative fit index (CFI) and a Tucker-Lewis index (TLI) equal to or greater than .95, a root mean squared error of approximation (RMSEA) less than or equal to .06, and a standardized root mean squared residual (SRMR) less than or equal to .08. Results indicate that our proposed structure has acceptable fit (CFI/TLI = .90, RMSEA = .06, SMRM = .07), suggesting construct validity for the 35-item IMS scale. Table 4 shows full CFA results.

**Internal consistency.** Using the items identified via EFA, we calculated composites for the entire scale and each subscale using averages. The 35-item IMS scale demonstrated good internal consistency ( $\alpha=.96$ ). The negative treatment ( $\alpha=.93$ ), LGB community alien in own land ( $\alpha=.91$ ), exoticization ( $\alpha=.86$ ), being pathologized ( $\alpha=.87$ ), denial of experiences ( $\alpha=.81$ ), and gendered stereotypes ( $\alpha=.82$ ) subscales also showed adequate reliability. Table 2 shows correlations among IMS subscales.

**Convergent validity.** Mean scores on the IMS, REMS, and HMS were highly correlated (rs > .61; Table 5). Correlations among IMS, REMS, and HMS subscales varied, ranging from small (r = .09) to large (r = .73). Overall, these correlations suggest convergent validity.

Testing intersectionality: Regression analyses. We performed three-step sequential multiple regression analyses to determine if there was a significant amount of variance left in health measure scores after accounting for the main effects of REMS and HMS (single axis approach) and the interaction between REMS  $\times$  HMS (additive/multiplicative approach). We mean-centered IMS, REMS, and HMS and computed the interaction between REMS and HMS (REMS  $\times$  HMS) by multiplying the appropriate variables (Aiken & West, 1991). We entered REMS and HMS (centered) in Step 1, added REMS  $\times$  HMS in Step 2, and included IMS (centered) in Step 3. We ran regressions on the full dataset (N=801; see Table 6 for full regression results).

In the first step of the analyses, results revealed medium and significant effects of REMS on anxiety symptoms,  $\beta = .21$ ,  $t(801) = 4.67, p < .001, depression symptoms, \beta = .25,$ t(801) = -4.615, p < .001, informational support,  $\beta =$ -.20, t(801) = -3.53, p < .001, and applied cognitive abilities,  $\beta = -.25$ , t(801) = 5.63, p < .001, but there were no significant effects of HMS on these measures. In the second step, REMS × HMS did not significantly predict anxiety symptoms, depression symptoms, social isolation, informational support, or applied cognitive abilities. In the third step, the REMS remained significant but decreased slightly in magnitude for each measure, and there was no significant effect of HMS or REMS × HMS. There were medium and significant effects of IMS on anxiety,  $\beta = .132$ , t(799) = 2.62, p = .009, social isolation,  $\beta = .115, t(799) = 2.29$ , p = .022, and informational support,  $\beta = -.102$ , t(799) = -2.0, p = .046, as well as a marginally significant and small incremental effect on applied cognitive abilities,  $\beta = -.103$ , t(799) = -1.94, p = .053 above and beyond the interaction of REMS  $\times$  HMS. There was no significant effect of IMS on depression symptoms,

Table 4 Goodness-of-Fit Indicators of Models for Intersectional Ethnic and LGB Microaggressions Scale

Model	$\chi^2$	df	$\chi^2$ diff	CFI	TLI	GFI	RMSEA	SRMR
Seven factor	1,862.82**	679	415.15*	0.89	0.88	0.801	0.066	0.063
Six factor	1,447.66**	545		0.902	0.893	0.81	0.064	0.067

Note. LGB = lesbian, gay, and bisexual; CFI = comparative fit index; TLI = Tucker-Lewis index; GFI = goodness-of-fit index; RMSEA = root mean squared error of approximation; SRMR = standardized root mean squared residual. \* Results significant at the 0.001 level. \*\* Results significant at the 0.0001 level.

 $\beta = -.093$ , t(799) = 1.74, p = .083. Overall, the results suggested that intersectional ethnic and LGB microaggressions better predict anxiety, social isolation, and informational support scores as compared to POC and LGB microaggressions assessed individually, additively, or multiplicatively.

### Discussion

To understand contemporary forms of discrimination toward dually marginalized individuals, we used an intersectional lens throughout this project. We hypothesized that an intersectional approach would better predict the association between racial/ethnic and LGB microaggressions and health as compared to the additive/multiplicative approach. To achieve this, we first developed and validated the Intersectional Microaggressions Scale (IMS). Several key factors consistent with previous literature on racial/ethnic (Sue, 2010; Sue, Bucceri, et al., 2007; Sue, Nadal, et al., 2008) and LGB (Nadal & Corpus, 2013; Nadal, Griffin, et al., 2014; Nadal et al., 2011) microaggressions emerged in factor analyses. Most importantly, the intersectional ethnic and LGB microaggressions scale predicted a significant amount of variability in anxiety, social isolation, and informational support scores, above and beyond the racial/ethnic and LGB microaggressions variables alone or their interaction. These findings reinforce the notion that an intersectional approach is beneficial in quantitative research on the interconnections and implications of multiple subordinate social identities.

# **Implications**

Broadly speaking, psychologists often misguidedly eschew intersectionality in order to retain rigorous (often experimental) study designs in their quantitative work. For instance, we often guard against confounding variables by statistically controlling or omitting seemingly unrelated social categories (i.e., the single axis approach). Similarly, psychologists frequently and inadvertently compound social identities by equating their effects (i.e., the additive/multiplicative approach). Regrettably, such models often provide incomplete accounts of discrimination as they are experienced by marginalized group members. In fact, qualitative research that attends to interconnected social identities has already uncovered unique phenomena that is absent from quantitative research that either omits or confounds these group memberships (Betancourt & Lopez, 1993). As such, adopting an intersectional perspective within quantitative psychology is essential for advancing the field's understanding of prejudice and discrimination.

Our study demonstrates that intersectionality is an achievable and beneficial methodological approach that expands our understanding of subtle discrimination. In fact, we successfully captured the unique pressures that exist for dually marginalized individuals. Specifically, we employed intersectionality throughout the research process and provided quantitative support for this research approach. To our knowledge, we are first to compare two methodological paradigms (i.e., intersectional vs. additive/multiplicative approaches) to show the limitations of traditional research

Table 5 Correlations Among IMS and Other Microaggression Scales and Subscales

Factor	IMS total	IMS negative treatment	IMS LGB alien own land	IMS exoticization	IMS pathologized	IMS denial experiences	IMS gender stereotypes
HMS	.733**	.673**	.468**	.533**	.608**	.539**	.649**
Deviance	.734**	.674**	.464**	.531**	.716**	.494**	.590**
Second-class citizen	.697**	.636**	.460**	.521**	.561**	.514**	.599**
Gay culture	.602**	.550**	.374**	.445**	.478**	.432**	.585**
Stereotypical knowledge and behavior	.622**	.597**	.381**	.415**	.558**	.401**	.578**
REMS	.689**	.619**	.510**	.524**	.525**	.418**	.606**
Inferiority	.591**	.550**	.375**	.439**	.498**	.348**	.567**
Second-class citizen	.614**	.547**	.447**	.471**	.541**	.330**	.522**
Microinvalidation	.553**	.491**	.420**	.440**	.370**	.378**	.472**
Exoticization /similarity	.576**	.524**	.407**	.483**	.407**	.344**	.515**
Environmental microaggressions	.267**	.279**	.091*	.276**	.260**	.133**	.235**
Work /school microaggressions	.643**	.596**	.474**	.484**	.523**	.365**	.517**

Note. REMS = Racial/Ethnic Microaggressions Scale; HMS = Homonegative Microaggressions Scale; IMS = Intersectional Racial/Ethnic and LGB Microaggressions Scale; LGB = lesbian, gay, and bisexual.

<sup>\*</sup> Correlation significant at the 0.01 level. \*\* Correlation significant at the 0.05 level.

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Table 6
Sequential Regressions of REMS, HMS, Their Interaction, and IMS on Well-Being

bilities	$\Delta R^2$ p	0.014 <.001			0.003 0.76				0.003 0.053				
mitive a	$t$ $p$ $\Delta R^2$		0.000	0.130		0.00	0.116	0.76		0.004	0.019	0.052	0.053
Applied cognitive abilities	t		-3.529	1.517 0.130		-3.90	1.573	1.777		-2.897	2.351	1.946	-1.935
Ap	β		-0.201	0.071				-0.071				0.078	-0.103
	d	<.001			0.875				0.046				
pport	$\Delta R^2$	0.032 <			0.000				0.004				
ional su	$t$ $p$ $\Delta R^2$		0.000	0.173		0.000	0.175	0.875		0.001	0.028	0.982	0.046
Informational support	t		-4.615	1.364 0.173		-4.363	1.358	-0.157		-3.303	2.202	0.022	-2.003
I	β		-0.251	0.061				-0.006				0.001	
	d	<.001			0.781				0.022				
nptoms	$\Delta R^2$	0.083			0.00				900.0				
tion syn	$t$ $p$ $\Delta R^2$		0.000	0.354		0.000	0.359	0.781		0.000	0.685	0.629	0.022
Social isolation symptoms	t		5.793	0.927 0.354		5.616	0.918	-0.278		4.361	-0.405		2.299
Soc	β		0.309	0.041		0.314	0.041	-0.010				-0.018	
	d	<.001			0.73				0.083				
toms	$\Delta R^2$	0.94			0.000				0.003				
n symp	d		0.000	0.084		0.00	0.087	0.73		0.00		0.618	0.083
Depression symptoms	t		5.632	1.728		5.482	1.716	-0.345		4.339	0.568	-0.499	1.737
1	β		0.321	0.081		0.327	0.081	-0.014		0.285	0.031	-0.020	0.093
	d	<.001			0.47				0.00				
smo	$\Delta R^2$	0.066 <.00			0.000				0.008				
sympto	d	_	0.000	0.164	_	0.000	0.172	0.47		0.001	0.861	0.340	0.009
Anxiety symptoms	t		4.67	1.392 0.164		4.675	1.369	723 0.47		3.377	-0.175	-0.956	2.602
	β		0.252	0.062								-0.036	
	Variable	3p 1	REMS	HMS	sp 2	REMS	HMS	REMS $\times$ HMS	ap 3	REMS	HMS	REMS $\times$ HMS	IMS

Racial/Ethnic Microaggressions Scale; HMS = Homonegative Microaggressions Scale; IMS = Intersectional Racial/Ethnic and Lesbian/Gay/Bisexual Microaggressions Scale. Ш REMS designs (Cole, 2009). We contribute to the LGB and POC literature by providing a measure with incremental validity and psychometric rigor that can help move the field toward a "gold standard" for microaggression measures (Fisher, Woodford, Gartner, Sterzing, & Victor, 2019). Overall, our work advances the microaggressions framework specifically, and theories of prejudice and discrimination more broadly, by demonstrating how to investigate phenomena tied to complex, interlocking systems of oppression.

We hope to inspire researchers to adopt an intersectional lens in their future endeavors. Although the IMS does not capture all identity dimensions, we hope researchers will investigate other intersectional identities in order to collectively bring about a better understanding of multiple stigmatization (Remedios & Snyder, 2015). Psychologists can use the IMS to explore microaggressions in applied settings (e.g., workplaces, therapy) to understand how microaggressions directed at two marginalized identities simultaneously correlate with employee turnover or therapeutic relationships. Furthermore, social scientists can build on the IMS by creating similar intersectional scales to examine other marginalized identities (e.g., gender, socioeconomic status), or they can expand our current scale by incorporating additional categories (e.g., religious affiliation, immigration status) to the existing model. To supplement our findings, psychologists can compare other traditional scales to intersectional measures. We recognize that committing to intersectionality research poses conceptual, methodological, and practical challenges, but we hope that our study, which demonstrates how to tackle these obstacles, will encourage other investigators to adapt this framework in their investigations. Ultimately, employing intersectionality in research will enable social scientists to align quantitative psychology with the perspectives of feminist and critical race theorists—views that have been unnecessarily avoided in our field despite their importance.

## **Limitations and Future Directions**

We applied an intersectional lens throughout the research process in order to capture phenomena unique to LGB POC that is absent from the LGB or POC literature alone. To our knowledge, this is the first project to compare two methodological approaches (intersectional vs. additive/multiplicative) quantitatively while drawing on a large sample of LGB POC (N=801). Furthermore, our sample (California college students [58%] and LGB community members as well as non-Californian LGB POC) enables further generalization of our findings. Our selection of study participants draws from stigmatized and nonprototypical samples, bringing otherwise invisible experiences to light (Else-Quest & Hyde, 2016; Remedios & Snyder, 2015). However, future research should address the limitations discussed next to expand on our work.

First, we did not include the LGBT-POC scale by Balsam and colleagues (2011) because of concerns over respondent fatigue. Further, given the additive structure of the scale where LGBT and POC identities are not treated as interlocking and unique, this measure lacks a truly intersectional focus. As such, the REMS and the HMS, both alone and in summation, mirror the LGBT-POC scale's identity conceptualizations, thereby addressing (at least partially) its absence from the present study. Nonetheless, future studies should compare our intersectional microaggressions scale

to the REMS, HMS, and LGBT-POC microaggressions scales on their ability to predict anxiety and depression scores.

Second, because we relied on self-reported data, participants could have misremembered the frequency of microaggressions or completed the survey while multitasking. In addition, those who chose to complete the survey could have differed from those who did not due to voluntary response and/or nonresponse bias. Third, the generalizability of findings is somewhat limited because more bisexuals (66.4%) and African Americans (49%) completed the survey than other subgroups. Moreover, the manner in which we asked participants about their intersectional identities assumed that these identities were regularly and spontaneously accessible. However, previous research has demonstrated that context matters (Spencer, Steele, & Quinn, 1999) and individual identities affect behavioral responses differently (Chiu & Hong, 2006), so future research should explore individual and contextual variations of social categories for racial/ethnic and sexual minorities. Last, but not least, researchers should continue to examine the differences between monosexual versus bisexual individuals and gender as studies already suggest that bisexuality in women may correlate with higher depression and anxiety (Kerr, Santurri, & Peters, 2013; Petterson, VanderLaan, Persson, & Vasey, 2018).

#### Conclusion

This study advances theories and research on prejudice and discrimination by contributing a quantitative intersectional analysis of LGB POC experiences with contemporary, subtle discrimination. We hypothesized that the intersectional racial/ethnic and LGB microaggressions scale (intersectional approach) would explain a significant amount of variance in health-related outcomes beyond the interaction of the racial/ethnic microaggressions and LGB microaggressions scales (additive/multiplicative approach). To test this hypothesis, we created the IMS scale, and exploratory as well as confirmatory factor analyses revealed six subcategories of LGB POC microaggressions that were consistent with previous qualitative research. Sequential multiple regressions showed that the intersectional measure significantly predicted anxiety, social isolation, and informational support and marginally predicted applied cognitive abilities above and beyond the additive/multiplicative method. These findings extend the microaggressions literature by showing that intersectionality is achievable in quantitative research and better captures the experiences of individuals with interlocking social identities that would otherwise remain unknown or ignored.

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