Short title: Testing Hypersensitive Responses

Testing hypersensitive responses: Ethnic minorities are not more sensitive to microaggressions, they just experience them more frequently.

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Abstract

Racial microaggressions have attracted significant empirical attention, and have been associated with profound negative effects. However, some researchers argue against the importance of microaggressions arguing that (some) responses to microaggressions merely reflect a "hypersensitivity" to trivial events among certain ethnic minority individuals. Three studies tested this hypersensitivity hypothesis. In 2 cross-sectional studies with dissimilar samples (N_1 = 130, N_2 = 264), ethnic minorities reported experiencing more microaggressions than ethnic majorities, and microaggressions predicted less life satisfaction. However, contrary to the hypersensitivity hypothesis, minority identity did not moderate this relationship. In a genuine experiment (N_3 = 114), White and ethnic minority participants reported their positive and negative affect before and after recalling either a microaggression or a control event. Recalling microaggressions reduced positive affect and increased negative affect, but this was also not moderated by minority identity. Implications for the hypersensitivity hypothesis, and microaggressions research, are discussed.

Keywords: microaggressions; hypersensitivity; racism;

The concept of racial microaggressions refers to verbal, behavioural, or even environmental negativity that is based on one's ethnic, racial, or other demographic identification. This negativity is often brief, subtle, and possibly unacknowledged by the perpetrator (Sue et al., 2007). Furthermore, the (e.g., racial) basis for the negativity may be hidden or ambiguous (Pearson, Dovidio, & Gaertner, 2009; Salvatore & Shelton, 2007). Microaggressions have been categorised under three headings: *micro-assaults* (e.g., using derogatory terms for ethnic minorities), *micro-insults* (e.g., questioning how a person of colour obtained a particular job or place at a particular university), and *micro-invalidations* (e.g., denying others' experiences of racism, or accusing them of being oversensitive). Later work (Donovan, Galban, Grace, Bennett, & Felicié, 2012; Lilienfeld, 2017a) has recommended separating *micro-assaults* from other types of microaggressions due to their more overt and less inadvertent nature. Nonetheless, the core concept of microaggressions remains: experiences of prejudice that may seem small or inconsequential, but whose cumulative effect may be very negative (O'Keefe, Wingate, Cole, Hollingsworth, & Tucker, 2015; Wong, Derthick, David, Saw, & Okazaki, 2014).

Microaggressions have attracted significant attention in both academic and lay circles. According to a recent search, the contemporary seminal article on microaggressions (Sue et al., 2007), has been cited over 2,800 times ("Items citing Sue et al., 2007," 2018). Quantitative research following this initial publication has devoted considerable resources to measuring microaggressions (Mercer, Zeigler-Hill, Wallace, & Hayes, 2011; Nadal, 2011; Torres-Harding, Andrade, & Romero Diaz, 2012), and to investigating their impact on minorities. This growing body of research has found that reported experiences of microaggressions predict a large number of detrimental outcomes including negative affect (Ong, Burrow, Fuller-rowell, Ja, & Sue, 2013), lower self-esteem (Nadal, Wong, Griffin, Davidoff, & Sriken, 2014) identity confusion, (Sarno & Wright, 2013), poorer working

alliance in therapy (Owen, Wampold, Tao, Imel, & Rodolfa, 2014), stress (Torres, Driscoll, & Burrow, 2010), depression (Torres & Taknint, 2015), and suicidal ideation (O'Keefe et al., 2015). These effects have been found for a variety of ethnic minorities (e.g., people of Black, Latinx and Asian identity), as well as for some sexual minorities (e.g., bisexuals). The microaggressions concept has also been popularized in the lay media, and has been discussed in wide-reaching outlets such as the New York Times (Niemann, 2017), the Economist (Press, 2017), and the Guardian (Hussain, 2018).

However, despite this empirical and lay attention, some researchers (both those critical of and supportive of the concept) point out number of potential weaknesses in research on microaggressions. It is not the goal of this current research to discuss all these potential weaknesses exhaustively, but they are said to include (1) insufficiently clear definitions and operationalization, (2) an over-reliance on subjective interpretations, self-report and recall in measurement, and (3) inadequately supported assumptions about (perpetrator) intent and (perceiver) interpretation (Haidt, 2017; Lilienfeld, 2017a, 2017b; Wong et al., 2014). This current research focuses on one specific concern repeatedly raised about microaggressions research (see, e.g., Haidt, 2017; Lilienfeld, 2017a; Thomas, 2008): the suggestion that, at least in some instances, microaggressions research is *not* uncovering the occurrence of genuinely or seriously negative events, but rather measuring the tendency of (some) ethnic minority individuals to respond with disproportionate negativity to mundane or innocuous events: a condition Lilienfeld (2017a) refers to as "hypersensitivity" (p. 162).

It should be noted that the term "hypersensitivity" has been assigned multiple meanings that may vary between individuals or even when used by the same individual. For example, "hypersensitivity" sometimes refers to an over-zealous vigilance for *detecting* prejudice: one that leads to false positives in the detection of prejudice (Harris Jr., 2008). Thomas (2008, p. 274) alludes to this understanding of hypersensitivity when pointing out

that “one could question whether all or even most of the microaggressions described . . . are racially motivated.” Similarly, while defining hypersensitivity, Lilienfeld (2017a, p. 162) discusses factors that “[predispose] minority individuals to perceive subtle signals of prejudice in their absence”. For reasons covered at greater length in the discussion section, this *detection* aspect of hypersensitivity is not the focus of this current research.

Rather, this research focuses on the *response* aspect of hypersensitivity; the proposition that (some) ethnic minorities respond more negatively to relatively trivial events than is warranted, or than ethnic majority individuals would in the same scenario. Lilienfeld alluded quite clearly to this aspect of hypersensitivity when discussing factors that lead ethnic minorities to “become more likely to experience negative psychological reactions following minor perceived provocations” (Lilienfeld, 2017a, p. 162). Lilienfeld (2017a) further suggests that, due to particular traits such as negative emotionality (Watson & Clark, 1984), or perhaps to negative racial experiences in their past, some ethnic minority individuals might be particularly sensitive to, “trivial potential slights” (p. 162). Similarly, Thomas (2008, p. 274) dismissed many of Sue and colleagues' (2007) descriptions of microaggressions as “emotional reactions [that seemed] excessive”, “ridiculous”, and “a bit pathological”. Thomas (2008, p. 274) further clarified that hypersensitivity in *responding* to prejudice can occur even when hypersensitivity in *detecting* prejudice has not, stating that “such stereotypes may be inappropriate, but they hardly necessitate the hand-wringing reactions described.”

In support of this hypersensitivity hypothesis, Lilienfeld (2017a), for example, argued that many scales designed to measure microaggressions (see, e.g., Constantine & Sue, 2007; Huynh, 2012; Mercer et al., 2011; S. Torres-Harding & Turner, 2015), conflate the *frequency* of microaggressions with the *subjective impact* of these microaggressions by measuring both variables with the same response items (though other scales do not commit this error: see e.g.,

Nadal, 2011). As such these scales might be more attuned to the sensitivity of the individual than the occurrence of the event.

Lilienfeld (2017a) also pointed out that many microaggressions scales tend to achieve a high level of internal consistency (Balsam, Molina, Beadnell, Simoni, & Walters, 2011; Constantine & Sue, 2007; Nadal, 2011; Torres et al., 2010). While this initially appears to be a positive finding, Lilienfield (2017a) argues that it is not clear *why* the internal consistency should be high, as the occurrence of one microaggression does not necessarily increase, or imply a greater likelihood of others (see also Ong et al., 2013 for a similar argument). On the contrary, scales measuring a coherent attitude or personality trait should achieve a high level of internal consistency (Cortina, 1993; Schmitt, 1996). The high internal consistency of microaggressions scales may thus suggest that these scales are not measuring the occurrence of subtly expressed prejudice, but rather measuring a personality trait of being more sensitive to mundane events.

On the contrary, various lines of evidence run counter to this hypersensitivity hypothesis. One cannot discount the wealth of quantitative, genuinely experimental evidence showing that ethnic minorities in predominantly White countries experience subtle prejudice in a variety of contexts. Even after controlling for or eliminating differences in behaviour, qualifications and other relevant information, ethnic minorities are less likely to receive offers of employment (Bertrand & Mullainathan, 2004; Booth, Leigh, & Varganova, 2012; Pager, 2003), treated with more suspicion in shopping areas (Schreer, Smith, & Thomas, 2009), interpreted as more threatening (Mendes, Blascovich, Lickel, & Hunter, 2002), and judged more harshly for the same behaviours (Sommers & Ellsworth, 2000; West & Lloyd, 2017; West, Lowe, & Marsden, 2017). These differences are detectable even in self-described egalitarian people (Balsam et al., 2011; Nosek, Greenwald, & Banaji, 2007; Solorzano, Ceja, & Yosso, 2000), though they are often subtly presented, due to a widespread concern about

being or appearing egalitarian (Butz & Plant, 2009; Legault, Green-Demers, Grant, & Chung, 2007; Pearson et al., 2009; West & Hewstone, 2012). This strongly evidenced, widespread occurrence of subtle prejudice aligns very well with the claims of microaggressions research.

Furthermore, contrary to Lilienfeld's (2017a) assertions, there are empirically supported reasons why the occurrence of one microaggression may predict the occurrence of others. Quantity of contact with White people varies between ethnic minorities at both the individual and group level (Bikmen, 2011; Holtman, Louw, Tredoux, & Carney, 2005), and White peoples' levels of racism vary according to their location (Carter, Steelman, Mulkey, & Borch, 2005). Also, across 6 genuine experiments, Kaiser and Pratt-Hyatt (2009) found that White people do not distribute prejudice equally even within the same ethnic minority group, but express more negativity toward individuals who identify strongly with their group. Thus, experiences of microaggressions should cluster depending on geographic, social, and individual variables, and some ethnic minorities should be more likely to experience them than others.

Indeed, contrary to the hypersensitivity hypothesis, ethnic minorities may be *less* sensitive to microaggressions than ethnic majorities are. Ethnic minorities raised in predominantly White contexts may not always be aware that (or to what extent) they are being treated differently from White individuals, or that these differences in treatment relate to their ethnic identity (Tatum, 1999; 2004). Alternatively, ethnic minorities who are aware of contemporary prejudice may have developed culturally-specific coping strategies that their majority ethnicity counterparts would lack (Hoggard, Byrd, & Sellers, 2012). Indeed, prior research has found a variety of both mainstream and culturally-specific coping strategies used by ethnic minorities to deal with microaggressions, the latter of which (e.g., specific spiritual or communalistic practices) may not be available to, or practicable for, ethnic majorities (Codjoe, 2001; Gaylord-Harden & Cunningham, 2009; Torres et al., 2010). Research from

other psychological disciplines also shows that it is *not* low-status individuals, but rather those with an inflated or narcissistic sense of self, who are most sensitive to, and respond most negatively to, slights and insults (Bushman & Baumeister, 1998).

However, while it is possible to speculate in both directions, to date no quantitative research has investigated the hypersensitivity hypothesis directly; thus the empirical case for hypersensitivity remains to be made. This represents an important gap in microaggressions research: one that is directly relevant for practical applications of the research, and one that has important implications for the preferred strategies for dealing with microaggressions. Those who perceive microaggressions as a manifestation of hypersensitivity in the face of innocuous behaviour are likely to advocate for strategies that reduce negative emotionality and perceptions of victimhood among ethnic minorities (see, e.g., Haidt, 2017; Lukianoff & Haidt, 2018). However, those who perceive microaggressions as genuine, impactful, negativity that occurs more frequently to ethnic minorities may be more likely to advocate for microaggressions training, or structures set up to reduce the occurrence of microaggressions (Sue et al., 2007).

Current Research and Hypotheses

Across three studies, this current research directly investigated the hypersensitivity hypothesis: the suggestion that (some) ethnic minorities respond more negatively to the same "minor perceived provocations" (Lilienfeld, 2017a, p. 162) than ethnic majorities do. If this hypothesis were correct, one should expect to find a stronger association between microaggressions and negative psychological outcomes in ethnic minorities than in ethnic majorities.

The first two studies employed cross-sectional designs and retrospective self-reports. In Study 1, White and ethnic minority participants in the UK completed measures of their experiences of microaggressions, their experiences of negativity unrelated to

microaggressions, and their global life satisfaction. It was hypothesised that microaggressions would predict lower global life satisfaction, but that (contrary to the hypersensitivity hypothesis) minority identity would not moderate this relationship. Study 2 replicated Study 1 using groups whose majority or minority status was based on short-term geographical differences, rather than longstanding cultural and ethnic differences: majority Koreans (i.e., Korean citizens living in Korea) and minority Koreans (i.e., Korean citizens living in the UK). Study 3 used a genuinely experimental design to test the same hypothesis; White and ethnic minority participants reported their positive and negative affect before and after recalling either a specific negative event designed to take the form of a microaggression, or a neutral event. It was hypothesised that recalling microaggression-like experiences would reduce positive affect and increase negative affect, but this would also not be moderated by minority identity.

Importantly, across all three studies, in the measures of microaggressions (Studies 1 and 2), and the experimental manipulation of microaggressions (Study 3) participants were not asked whether the events occurred "because of their race", or suggest (in the case of the experimental manipulation) that participants think of an event that occurred "because of their race". The inclusion of this phrase in prior research has been criticized on the grounds that it asks participants to make subjective judgements of motivation or intent where such judgements may not be accurate (Lilienfeld, 2017a). In this research the intention was merely to measure or manipulate the occurrence of particular "minor perceived provocations" (p. 162), without making attributions of intent or motivation. Similarly, the measures of microaggressions did not include any measure of how the participant felt about or responded to the incident. This was done to avoid contaminating the measure with extraneous variables such as the participants' general emotional responsiveness or a-priori perceptions of racism (see Lilienfeld, 2017a).

Study 1

A substantial body of research has found a negative relationship between experiencing microaggressions and psychological wellbeing (Nadal et al., 2014; Ong et al., 2013; Torres et al., 2010; Wong et al., 2014), though none have directly tested whether this relationship varies across demographic groups. This study was the first to test the hypersensitivity hypothesis; specifically, the study investigated whether the (negative) relationship between experiencing microaggressions and overall life satisfaction was stronger for ethnic minorities than for ethnic majorities, as the hypersensitivity hypothesis would suggest. Global life satisfaction was used as the outcome variable in this study as it has been used in much prior research to measure psychological well-being in response to long-term circumstances (e.g., Brannan & Petrie, 2011; Diener, Emmons, Larsen, & Griffin, 1985; Matheny et al., 2002). It was expected that, in line with research on contemporary prejudice, ethnic minorities would report experiencing more microaggressions. However, it was not hypothesised that ethnic minorities would also be more sensitive to them. This study also expands microaggressions research by being one of the few studies conducted in the UK; most research on microaggressions has been done in the U.S. (Wong et al., 2014).

Methods

To determine the sample size necessary for this study (and the subsequent 2 studies) a-priori power analyses were conducted using G*Power 3 (Faul, Erdfelder, Buchner, & Lang, 2009). Assuming a medium effect size for the hypothesised interaction of microaggressions x minority status on global life satisfaction, and using the following parameters – effect size (*f*) = .30, $\alpha = .05$, power = .80 – it was found that 90 participants would be sufficient for adequate power. These power calculations were based on assumptions used in a large volume of research across a variety of disciplines, including social psychology, that reached the similar conclusions concerning the number of participants required to find the hypothesised

interaction effect (see, e.g., Dowd et al., 2014; Gothe & McAuley, 2016; Hadjichristidis, Geipel, & Surian, 2017; Mackillop, Goldenson, Kirkpatrick, & Leventhal, 2018; Tipler & Ruscher, 2019).

One hundred and thirty participants, 43 (33.1%) men, 85 (65.4%) women, 2 (1.5%) who did not identify as either gender, 66 (50.8%) who were White, 64 (49.2%) who were ethnic minorities, *mean age* = 25.42, *SD* = 8.73, all completed a survey assessing the frequency with which they experienced microaggressions, the frequency with which they experienced negativity unrelated to their ethnic identity, and their overall life satisfaction.

To measure the frequency of microaggressions, participants indicated how often they experienced nine negative events (α = .79) drawn from the Daily Life Experience scale which has been extensively used as a measure of microaggressions in previous research (Nadal et al., 2014; Sellers, Copeland-Linder, Martin, & L'Heureux Lewis, 2006; Torres et al., 2010). Using a 6-point Likert scale (1 = *never*, 2 = *every year*, 3 = *every month*, 4 = *every two weeks*, 5 = *every week*, 6 = *every day*), participants indicated how frequently they experienced each of the following events: "Others expecting your work to be inferior", "Your ideas or opinions being minimized, ignored, or devalued", "Being treated as if you were stupid, being talked down to", "Being avoided, others moving away from you physically", "Others reacting to you as if they were afraid or intimidated", "Being observed or followed while in public places", "Being mistaken for someone else of the same race", "Being stared at by strangers", "Being mistaken for someone who serves others (i.e. janitor, maid)". Higher values indicated more frequent experiences of microaggressions.

Using the same Likert scale, participants also indicated the frequency with which they experienced 7 negative events that were not related to microaggressions or to each other (α = .60): "Suffering an injury that did not require medical services", "Falling over in public", "Being lied to by a close friend, significant other, or family member", "Being broken up

with", "Suffering an injury that required medical services", Being insulted, called a name, or harassed", "Having a close friend, significant other, or family member die unexpectedly".

Finally, the 5-item Satisfaction With Life Scale (Diener et al., 1985), which has been extensively used in prior research (Acun-Kapikiran, Korukcu, & Kapikiran, 2014; Swami, 2015; West, 2017), was used to measure participants' global life satisfaction. Participants indicated their agreement (1 = *strongly disagree*, 7 = *strongly agree*) with 5 items (α = .83): "In most ways my life is close to ideal", "The conditions of my life are excellent", "I am satisfied with my life", "So far, I have gotten the important things I want in life", "If I could live my life over, I would change almost nothing".

Results and Discussion

Descriptive statistics and correlations between variables can be seen in Table 1. Initial analyses showed that participant life satisfaction was not related to either participant age, r = -.03, p = .76, or participant gender t (125) = .70, p = .48. Thus, neither variable is considered further in these analyses. There was no difference in global life satisfaction between ethnic minorities and White people, t (127)[i] = .49, p = .62, d = .09.

However, as hypothesized, ethnic minorities experienced microaggressions more frequently than did White participants, t (128) = 3.08, p = .003. d = .54. Interestingly, ethnic minorities did not report experiencing negativity unrelated to minority status more frequently than did White British people; the difference was non-significant and in the opposite direction, t (128) = 1.36, p = .18, d = .24. A multiple linear regression analysis was initially used to investigate whether microaggressions and unrelated negativity predicted overall life satisfaction. As expected, microaggressions did predict lower life satisfaction (β = -.21, p = .03). However, unrelated negativity did not (β = -.09, p = .34).

Most important for the central hypotheses was whether the relationship between microaggressions and life satisfaction was moderated by minority status (i.e., stronger for

ethnic minorities). This was tested using PROCESS macros, Model 1 with pre-standardized variables, 95% confidence intervals and 1000 bias-corrected bootstrap samples. The model was significant; F (3, 125) = 3.48, p = .018, R^2 = .08. As before, microaggressions predicted less life satisfaction, β = -.39, p = .004, *95% CI* = -.64, -.13. Minority status did not predict life satisfaction, β = .06, p = .74, *95% CI* = -.29, .41, and minority status did not moderate the relationship between microaggressions and life satisfaction β = .23, p = .19, *95% CI* = -.12, .59. In sum, contrary to the hypersensitivity hypothesis, ethnic minorities reported experiencing microaggressions more frequently than White participants, but the relationship between microaggressions and lower life satisfaction was no stronger for minorities than for White participants.

Study 2

Study 1 did not find support for the hypersensitivity hypothesis. Rather it found that ethnic minorities reported experiencing more microaggressions, and that the negative relationship between microaggressions life satisfaction was present for both ethnic minorities and ethnic majorities. There was no evidence that this relationship differed between the two groups. Furthermore, this was found despite the fact that none of the items asked participants to report whether these incidents occurred "because of their race", thus removing a potential problem of subjective interpretation.

That said, there are other possible explanations of these findings, some of which will be addressed in the following studies. It has been suggested, for example, that certain minority groups may have developed cultures of victimhood, which provide social scripts of expected negative treatment from majorities and their expected responses (Haidt, 2017). In this vein, the results of Study 1 could possibly be interpreted as a reflection of social norms and expectations that differ between minority and majority groups, rather than genuine estimates of the frequency of negative behaviours and the individuals' responses: i.e., ethnic

minorities' and majorities may be responding based on their perceptions of how frequently microaggressions *should* occur to them and how negatively they *should* respond to the microaggressions.

To account for this possible interpretation, Study 2 replicated Study 1 using participant groups of the same ethnicity and nationality (i.e., very similar cultural backgrounds), whose minority versus majority status was due to current location rather than long-standing cultural differences. Both groups of participants in Study 2 were Korean in ethnicity and citizenship. Koreans who were temporarily living in the UK were used as the sample of ethnic minorities, while Koreans currently living in Korea were used as the sample of ethnic majorities. This allowed a second test of the hypersensitivity hypothesis while minimising concerns about the influence of cultural differences between the two groups.

Methods

Two hundred and sixty-four participants, 153 (58%) male, 111 (42%) female, mean age = 34.57, SD = 8.64, 190 (72%) of whom lived in Korea, 74 (28%) of whom did not, were recruited by a Korean research assistant living in the UK. All participants completed the same measures of microaggressions (α = .82), unrelated negativity (α = .65) and global life satisfaction (α = .88) that were used in Study 1. The survey was translated into Korean by a native Korean speaker for the purpose of this research, and piloted with a group of 10 bilingual speakers of English and Korean, all of whom agreed that the items retained their original meaning.

Results

Descriptive statistics and correlations between variables can be seen in Table 2. Initial results showed that participant life satisfaction was not related to participant age, $r = -.03$, $p = .65$. However, men reported higher life satisfaction than women did ($M = 4.80$, $SD = 1.23$ vs. $M = 4.47$, $SD = 1.30$), $t\ (255) = 2.05$, $p = .041$. Thus, age is not considered further in these

analyses, but participant gender is included as a covariate in the moderation analyses below. There was no difference in global life satisfaction between ethnic minorities and ethnic majorities, t (255) = .88, p = .38, d = .12.

Similar to Study 1, minority Koreans experienced microaggressions more frequently than did majority Koreans, t (97.59) = 6.42, $p < .001$, d = 1.07. Interestingly, minority Koreans also reported experiencing negativity unrelated to minority status more frequently though this effect was smaller, t (117.66) = 2.63, p = .01, d = 39. Welch corrections were applied to the latter two t-tests due to unequal variances between the groups. These corrections did not alter the pattern of results. A multiple linear regression analysis was used to investigate whether microaggressions and unrelated negativity predicted overall life satisfaction. As in Study 1, microaggressions did predict lower life satisfaction (β = -.17, p = .016), but unrelated negativity did not (β = -.11, p = .13).

As is Study 1, the relationship between microaggressions and life satisfaction, and possible moderation by minority status, was tested using PROCESS macros, Model 1 with pre-standardized variables, 95% confidence intervals, 1000 bias-corrected bootstrap samples, and participant gender included as a covariate in the model. The overall model was significant; F (4, 252) = 4.34, p = .002, R^2 = .06. Microaggressions predicted more negative life satisfaction β = -.31, p = .002, *95% CI* = -.50, -.11. Minority status did not predict life satisfaction, β = .16, p = .31, *95% CI* = -.15, .47, and minority status did not moderate the relationship between microaggressions and life satisfaction β = -.16, p = .23, *95% CI* = -.14, .40. In sum, as in Study 1, while minorities reported experiencing more microaggressions than majorities, the relationship between microaggressions and lower life satisfaction was not stronger for minorities than for majorities.

Study 3

Using cross-sectional designs, neither Study 1 nor Study 2 found support for the hypersensitivity hypothesis. This was despite using participant groups that were very dissimilar between Study 1 and Study 2, and despite using groups in Study 2 and whose status as majority or minority was solely due to current geographical location. Nonetheless, as both studies were cross-sectional, there remains another possible weakness in these designs. Specifically, though microaggressions are assumed to affect psychological well-being, the cross-sectional nature of these current data (and much past research on microaggressions) leaves open the possibility that the direction of causation is reversed, or based on another, independent variable. For example, it is possible that participants' levels of negative emotionality (Lilienfeld, 2017a; Watson & Clark, 1984) affected both their levels of life satisfaction and their recall of microaggressions, or that low levels of life satisfaction caused a greater occurrence of or recall of microaggressions. In these current studies, ethnic minorities reported more frequent microaggressions, but did *not* report lower global life satisfaction, which somewhat undermines those potential interpretations. Nonetheless, the cross-sectional nature of the prior studies impedes the ruling out of such alternative explanations, which could potentially align with the hypersensitivity hypothesis. Thus, to bolster the findings of Studies 1 and 2, Study 3 investigated the effects of microaggressions on psychological well-being with a genuine experimental design.

Prior research shows that recalling an incident has effects on one's emotional state similar to experiencing the incident (Ritchie, Sedikides, & Skowronski, 2016). In Study 3, recall of a microaggression event was used to investigate differences in White and ethnic minority affective responses. Specifically, it was hypothesised (1) that recalling negative treatment in the form of microaggressions would decrease positive affect and increase negative affect over time (contrasted with a neutral event, which would not) and (2) as

before, ethnic minority status would not moderate the effect of recalling this negative treatment over time.

This study did not use the global life satisfaction scale, which is generally used as a measure of long-term emotional state. Rather, it used a version of the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988), which has been widely used in prior research (Ambady, Paik, Steele, Owen-Smith, & Mitchell, 2004; Iyer, Leach, & Crosby, 2003; Kay, Day, Zanna, & Nussbaum, 2013) and is considered an excellent measure for investigating immediate or short-term affective changes.

Method

Participants. One hundred and fourteen participants, 50 (43.9%) men, 64 (56.1%) women, 50 (43.9%) White, 64 (56.1%) ethnic minorities, *mean age* = 26.93, *SD* = 11.94 were recruited in person by a research assistant working in London. All recruited participants were British, and participants received entry into a monetary prize draw as reimbursement for their time and participation.

Materials and procedure. Before any experimental manipulations (i.e., at $Time_1$) All participants first completed a version of the Positive and Negative Affect Schedule (PANAS; Watson, et al., 1988), modified so that responses ranged from 1 (*not at all*) to 100 (*very much*) rather than from 1 to 5, and so that responses were given using sliding scales rather than written numerical values. To complete this scale participants indicated how much 20 emotional descriptors accurately described the way they were feeling "right now". Items reflecting positive affect (e.g., alert, excited, proud) and negative affect (e.g., scared, upset, ashamed) are intended to form two separate subscales of positive and negative affect, and the reliability scores for these subscales should be (and were) calculated separately: T1 positive ($\alpha = .88$), T1 negative ($\alpha = .93$), T2 positive ($\alpha = .90$), T2 negative ($\alpha = .91$).

Participants were then randomly assigned to one of two recall conditions: a negative treatment recall condition or a neutral treatment recall condition, both of which involved similar settings. Participants in the negative treatment condition were instructed to "Please take a minute to think about a time that you went to a restaurant, pub or other service industry and received very bad service. Examples of bad service include being ignored, being treated with suspicion, rudeness or disrespect, or being confused for someone of a lower status than you are." These instructions were based on descriptions of microaggressions from previous research (Nadal et al., 2014; Sue et al., 2007). Participants in the neutral treatment condition were instructed to "Please take a minute to think about a time that you went to a restaurant, pub or other service industry and had a reasonably good time."

All participants were reminded to "reflect on a real instance in which this happened to you" and instructed to and describe their memory of the incident in their own words. Participants were given 60 seconds to recall and describe the event. As a manipulation check, participants were asked to respond to seven items ($\alpha = .94$) on a 5-point Likert scales (1 = *a great deal*, 5 = *not at all*): "- Were you treated well by the staff / servers?", "Were you ignored by the staff / servers?" (reversed), "Were you treated with suspicion by the staff / servers?" (reversed), "Were your concerns taken seriously by the staff / servers?", Were the staff / servers polite and respectful?", "Did the staff / servers make you feel welcomed?", "Did you feel like a valued customer?" Higher values indicated more negative treatment. After completing the experimental manipulation, participants completed the modified PANAS for a second time ($Time_2$). All participants were then thanked for their time and fully debriefed.

Results

Descriptive statistics for all dependent variables according to condition and time are shown in Table 3. Participants' age was not correlated with either positive or negative affect

at either $Time_1$ or $Time_2$ ($-.17 > r > -.05$, $.63 > p > .08$). Thus, age was not considered further in these analyses. However, at Time 1, men (compared to women) reported more positive affect, ($M = 42.02$, $SD = 16.93$ vs. $M = 34.64$, $SD = 20.49$), $t\,(112) = 2.06$, $p = .04$, and less negative affect ($M = 9.48$, $SD = 10.42$ vs. $M = 20.10$, $SD = 17.22$), $t\,(109) = 3.80$, $p < .001$. At Time 2 there were no differences between men and women in either positive affect, $t\,(105) = .73$, $p = .47$, or negative affect, $t\,(103) = 1.68$, $p = .10$, Nonetheless, due to differences at $Time_1$, participant gender was included as a covariate in the analyses that follow.

As expected, participants in the negative treatment condition reported recalling a more negative experience than participants in the neutral treatment condition ($M = 3.55$, $SD = 1.05$ vs. $M = 1.80$, $SD = .69$), $t\,(92.57) = 10.44$, $p < .001$, $d = 1.99$ (a Welch correction was applied due to inequality of variances), indicating that the experimental manipulation was successful.

Main analyses. Similar to Studies 1 and 2, the data were analysed using PROCESS macros, Model 1 with pre-standardized variables, 95% confidence intervals and 1000 bias-corrected bootstrap samples. Condition (negative treatment vs. neutral treatment) and status (ethnic minority vs. White) were used as the predictor and moderator variables respectively. Reported affect at $Time_2$ was used as the outcome variable, while sex and reported affect at $Time_1$ were used as covariates. Positive and negative affect were investigated separately. Alternative analysis strategies (e.g., a mixed-methods MANCOVA) found the same pattern of results[ii] but also had several disadvantages including the need to probe and interpret multiple separate ANCOVA results, testing effects that held little or no theoretical meaning (e.g., the difference between conditions collapsed across both time-points), and conducting several post-hoc tests adjusted for multiple comparisons. The current method of analysis (regression-based PROCESS Macros) conferred multiple advantages, including clarity and

simplicity of presentation, as well as a similarity of presentation between this study and Studies 1 and 2.

Concerning positive affect, the overall moderation model was highly significant; F (5, 101) = 36.87, $p < .0001$, $R^2 = .65$. As expected, recalling negative treatment led to less positive affect at $Time_2$, $\beta = -.19$, $p = .002$, *95% CI* = -.31, -.07. Minority status ($\beta = -.07$, $p = .24$, *95% CI* = -.19, .05), and participant sex ($\beta = .08$, $p = .18$, *95% CI* = -.04, .20) did not predict positive affect at $Time_2$. Unsurprisingly, positive affect at $Time_1$ did predict positive affect at $Time_2$, $\beta = .80$, $p < .0001$, *95% CI* = .68, .93. Most central to the hypotheses, however, was the possible moderation of the effect of negative treatment on positive affect by ethnic minority status. Similar to the previous studies, minority status did *not* moderate the effect of recalling negative treatment on positive affect at $Time_2$, $\beta = -.01$, $p < .81$, *95% CI* = -.14, .11.

Concerning negative affect, the overall moderation model was also highly significant; F (5, 97) = 57.54, $p < .0001$, $R^2 = .75$. Again, as expected, recalling negative treatment led to more negative affect at $Time_2$, $\beta = .16$, $p = .003$, *95% CI* = .06, .26. Minority status ($\beta = .20$, $p = .0004$, *95% CI* = .09, .30), and negative affect at $Time_1$ ($\beta = .86$, $p < .0001$, *95% CI* = .75, .97) also predicted negative affect at $Time_2$. However, participant sex did not predict negative affect at $Time_2$, $\beta = -.10$, $p = .08$, *95% CI* = -.21, .01. Most central to the hypotheses was the possible moderation of the effect of negative treatment on negative affect by ethnic minority status. However, as before, minority status did *not* moderate the effect of negative treatment on negative affect at $Time_2$, $\beta = .05$, $p < .33$, *95% CI* = -.05, .26.

In sum, these results also failed to support the hypersensitivity hypothesis. Recalling negative treatment that took the form of microaggressions reduced positive affect and increased negative affect. However, similar to Studies 1 and 2, ethnic minority status did *not* moderate the effects of this negative treatment on affect.

Discussion

As Wong and colleagues (2014, p.181) noted, "there has been an enormous scholarly interest in psychology on this construct of racial microaggressions" since the publication of Sue's seminal article on the topic (Sue et al., 2007). Much of this research has sought to develop or improve the study of microaggressions (Balsam et al., 2011; Nadal, 2011; Nadal et al., 2014; Wang, Leu, & Shoda, 2011), and some has offered a range of constructive criticisms (Wong et al., 2014). However, a certain portion of the responses, both lay and academic, have attempted to question validity or existence of microaggressions, suggesting that the fundamental construct could be misguided or perhaps even dangerous (Haidt, 2017; Lilienfeld, 2017b; Lukianoff & Haidt, 2018; Thomas, 2008).

An important hypothesis to emerge from this body of criticism is the suggestion that (some) ethnic minorities are merely reacting with "hypersensitivity" to relatively trivial, mundane, or innocuous events, and that microaggressions research is inadvertently measuring this hypersensitivity, rather than a genuine (or genuinely negative) aspect of minority experiences. (Lilienfeld, 2017a, p. 155). Though this hypersensitivity hypothesis has been repeatedly suggested (Haidt, 2017; Lilienfeld, 2017a, 2017b; Thomas, 2008), no empirical research to date has investigated whether, in fact, it occurs. This current research was the first to investigate the hypersensitivity hypothesis directly, specifically investigating whether ethnic minorities respond more negatively to the same subtle negative events than ethnic minorities do. Across three studies, this research found no evidence for hypersensitivity among ethnic minorities. On the contrary, it was found that both ethnic minorities and ethnic majorities were affected by microaggressions, and that ethnic minority status does not alter the strength of these effects. The only meaningful difference was that ethnic minorities reported experiencing microaggressions more frequently. Below, these findings are discussed

with reference to implications, study design and limitations, and suggestions for future research.

Implications

Though microaggressions might sound like relatively trivial events, a growing body of research highlights their negative effects, which are severe enough to include stress, trauma, depression, and suicidal ideation (O'Keefe et al., 2015; Owen et al., 2014; Torres et al., 2010; Torres & Taknint, 2015). Whatever the intention behind it, the hypersensitivity hypothesis calls into question the genuine nature of microaggressions and the severity of their effects, suggesting that microaggressions are are not serious enough to warrant the attention they have received. By undermining the hypersensitivity hypothesis, this current research has crucial implications for the importance of these seemingly innocuous events. In the absence of hypersensitivity, the negative effects of microaggressions cannot reasonably be attributed to some unique aspect of ethnic minority psyche or culture. An important corollary of this finding is that microaggressions affect ethnic majorities in ways similar to their effects on ethnic minorities. Indeed, this research found no evidence that ethnic majorities are more resilient to microaggressions or more adept at dealing with them. The associations between microaggressions and life-satisfaction (Studies 1 and 2), or affect (Study 3) were as strong for ethnic majorities as for ethnic minorities. This suggests that, if ethnic majorities experienced microaggressions at the same frequency as ethnic minorities, they would experience similar detrimental outcomes.

Those who have suggested the hypersensitivity hypothesis have applied considerable scholarly effort into proposing explanations for its occurrence, including personality traits, negative emotionality, and previous, sensitising experiences with racism (Haidt, 2017; Lilienfeld, 2017a; Watson & Clark, 1984). Given the lack of evidence for hypersensitivity, both at the time of its suggestion and in this current research, such speculation concerning its

causes may not have been productive. This is not intended to undermine useful research that investigates ways of more effectively coping with microaggressions (Torres et al., 2010), or approaches that could make individuals more resistant to the effects of microaggressions. For example, Burrow and Hill (2012) found that higher levels of dispositional forgiveness in ethnic minority participants decreased their tendency to interpret ambiguous actions as microaggressions, and consequently decreased the negative affect and cognitive impairment resulting from these ambiguous experiences. However, it is not clear that useful theoretical or practical knowledge can be gained from a rigorous investigation into the causes of a hypersensitivity effect that has never been empirically shown to exist, even when investigated directly.

Perhaps ironically, the hypersensitivity hypothesis may point to a different fruitful area of research. It is interesting to note that, despite a lack of supporting evidence, various versions of the hypersensitivity hypothesis appear to be strongly accepted in some lay and academic circles (Haidt, 2017; Lukianoff & Haidt, 2018; Press, 2017; Rosen, 2014). It is similarly interesting that one of the microaggressions noted by Sue and colleagues (2007) was the act of accusing ethnic minorities of being "overly sensitive and/or petty" or other behaviours that "exclude, negate, or nullify . . . the experiential reality of a person of color" when discussing contemporary racism (p. 278). The overt backlash against microaggressions research, much of which uses the hypersensitivity hypothesis, could be seen as public evidence of the ubiquity of this particular microaggression, and the appeal of hypersensitivity an as explanation for perceived microaggressions.

Future research could investigate why some individuals are prone to interpreting claims about contemporary racism as signs of hypersensitivity. A large volume of existing research could be applied to this pattern. This includes research on cognitive factors, such as knowledge (vs. ignorance) of historical examples of racism, which has been shown to affect

recognition of contemporary racism (Bonam, Das, Coleman, & Salter, 2018). It also includes research on motivational factors, such as collective narcissism, which encourages individuals to deny or downplay wrongs perpetuated by members of their ingroup (Golec de Zavala, Cichocka, Eidelson, & Jayawickreme, 2009). Other variables may also be important, such as an individual's (lack of) empathy or perspective taking (Batson et al., 1997; Johnson, Jasper, Griffin, & Huffman, 2013) or, more simply, explicit and implicit racial bias (Nosek et al., 2007). Understanding why some people find the hypersensitivity hypothesis appealing could significantly improve the ways we communicate about (and improve public understanding of) microaggressions.

Study Design, Limitations and Future Research

These studies have a number of important strengths that should be acknowledged. It is widely accepted that too much social-psychological research takes place in laboratory settings with non-representative student samples as participants (Dixon, Durrheim, & Tredoux, 2005; Henrich, Heine, & Norenzayan, 2010; Sears, 1986). This research was conducted with adequately large samples for acceptable levels of power for medium effects, and benefitted from diverse samples of non-student participants (508 across 3 studies), making these findings more reliable and generalizable than they otherwise would have been had convenience samples been used. The research also spanned two very different cultures, and took place in two very different languages (English and Korean), further increasing its generalizability.

Of course, this research also has limits. As in other microaggressions research, Studies 1 and 2 relied on participants' self-reports of the occurrence of microaggressions and their levels of life satisfaction. This methodology is vulnerable to self-presentation biases, as well as biases in participants' interpretation or memories of past events. That said, the main focus of this research was the difference (or lack thereof) between minorities and majorities

responses to microaggressions. Even granting that self-presentation biases affected the pattern of results, there is no reason to suspect that they affected the results in ways that were different for minority versus majority participants. Indeed, the recurrence of the pattern in Study 2 (using groups from similar cultures) and the similarity of the patterns of results between the two groups in both Study 1 and 2 suggests the opposite. Furthermore, Study 3 addressed this concern, at least in part, by using an experimental manipulation, and found the same pattern of results as Studies 1 and 2. Future research could further strengthen these findings with the application of more genuinely experimental designs, including those that experimentally manipulated the occurrence of real microaggressions.

When discussing meaningful null findings (i.e., in this research, the lack of a significant moderating effect of ethnicity), it is also crucial to discuss issues of power and the limits of scientific methodology to prove a negative. The three studies reported here had enough participants (minimum $n = 90$) for sufficient power (.80) to detect a medium effect size assuming a widely-used cut-off of $f = .30$ for medium effect sizes (Dowd et al., 2014; Hadjichristidis et al., 2017; Mackillop et al., 2018; Tipler & Ruscher, 2019). However, if Cohen's (1992) slightly more conservative, but also very widely used cut-off of $f = .25$ were applied, Studies 1 and 2 would have been adequately powered, but Study 3 would have been 14 participants short of the 128 minimum (Itzchakov, Kluger, & Castro, 2017). Furthermore, none of the three studies had enough participants (787) to detect or rule out a *small* effect ($f = .10$), and as the assumed effect size continues to shrink, the number of participants needed to investigate it would increase toward infinity.

For these reasons, the burden of proof does not fall on proving that hypersensitivity (or any effect) does *not* occur. Rather, as stated by Lilienfeld (2017a, p. 160), "ultimately, the onus of proof falls squarely on advocates . . . to demonstrate that their central assertions can bear the hefty evidentiary weight assigned to them." Thus far, this current research has found

significant associations between microaggressions, lower life satisfaction and less positive affect among ethnic *majorities*, thereby finding positive evidence that majorities, as well as minorities, respond negatively to microaggressions. This current research also failed to find evidence of hypersensitivity when investigated directly using multiple groups, varied methodology, and adequately powered samples. By contrast, the hypersensitivity hypothesis was *proposed* without any evidence, and none has been subsequently found.

Another potential limitation of this research is that it only investigated the *response* aspect of hypersensitivity and not the *detection* aspect: that is, the proposed tendency of (some) ethnic minority individuals to erroneously detect prejudice where none has occurred (Harris Jr., 2008). While this is an interesting area for future research, it was not the goal here, and it is not without difficulties. Much research on social norms, aversive prejudice, and implicit biases have shown that individuals may not admit to prejudiced behaviour, even when aware of committing it (Apfelbaum, Pauker, Ambady, Sommers, & Norton, 2008; Crandall, Eshleman, & O'Brien, 2002; Pearson et al., 2009), and that individuals may commit prejudiced behaviour without being aware of it (Nosek et al., 2007). Furthermore, recent research also shows that majority and minority groups may disagree on the definitions of prejudice or bias. Minority individuals tend to view prejudice as differences in responses to individuals based on demographic factors, like race: a view in line with social psychological research (Dovidio, Kawakami, & Gaertner, 2002). However, majority individuals tend to focus more on intent, deliberateness, and maliciousness, thereby defining many implicit, accidental, thoughtless, or well-intentioned group-based differences in treatment as something other than prejudice (Andreouli, Howarth, & Greenland, 2016). Attempts to investigate "hypersensitive" detection would have to resolve these issues of definition, awareness, and self-presentation before investigating whether prejudice is being over-

detected or under-detected, and whether one group's detection is more accurate than another's.

A final question about this current research concerns the extent to which it truly investigated the effects of microaggressions. As mentioned earlier, participants were *not* asked to guess whether particular experiences occurred because of their race because this would require making subjective, and possibly inaccurate, judgements about motivation or intent (Lilienfeld, 2017a). Thus, removing those subjective judgements strengthened the research. However, as an effect of removing these judgements, this research may arguably no longer have been investigating microaggressions, but merely investigating certain types of "minor perceived provocations" (Lilienfeld, 2017a, p. 162), without knowing which, if any, of these provocations occurred because of the participants' race.

That said, there are a number of potential responses to this concern. First, the measures and manipulations of microaggressions used in this current research were closely based on experiences of microaggressions reported in previous research: the only difference being the removal of the specification that the event occurred because of the participant's race (Nadal et al., 2014; Sellers et al., 2006; Torres et al., 2010). Second, in both Study 1 and Study 2, microaggressions predicted participants' global life satisfaction while unrelated negativity did not, suggesting that there was some detectable aspect of these microaggressions that was distinct from other types of negativity. Third, the measures and manipulations did not specify that the negative events of interest did *not* occur because of race. Quite the contrary, as ethnic minority participants in Studies 1 and 2 reported significantly more of these experiences, it seems quite reasonable to assert that some proportion of them *did* occur because of race or minority status, and that participants may have been aware of that.

Finally, it should be noted that the ambiguity present in these studies reflects the ambiguity experienced by minorities when microaggressions occur. Due to the brief and subtle nature of microaggressions (Sue et al., 2007), minorities may often be left unsure of whether or not one has occurred. This is no trivial point. Prior research has found that experiencing ambiguous prejudice consumes more cognitive resources and leads to more detrimental outcomes for minorities than experiencing blatant prejudice (Salvatore & Shelton, 2007). In light of such research (suggesting that increased ambiguity should have *more detrimental* outcomes), a lack of increased sensitivity to such experiences on the part of ethnic minorities further undermines the existence of hypersensitivity.

Conclusion

There is a strong and increasing interest in the concept of microaggressions, both in academic and lay spheres (Wong et al., 2014). Some have interpreted this interest negatively, seeing attention to microaggressions as a form of hypersensitivity among (some) ethnic minorities (Lilienfeld, 2017a), and a path to a future in which "everyone walks on eggshells" (Haidt, 2017, p. 177). This current research takes an important step toward allaying those concerns, finding no evidence of hypersensitive responses to negative experiences among ethnic minorities. On the contrary, three studies found that ethnic majorities responded to microaggressions in ways that were indistinguishable from the responses of ethnic minorities. The meaningful difference between the two groups was that ethnic minorities experienced microaggressions more frequently. If, as this research suggests, microaggressions negatively affect majority and minority members alike, our efforts seem better spent investigating ways of reducing these subtle, but harmful behaviours, than attempting to make ethnic minorities less sensitive to them.

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Notes

[i] One participant did not complete the GLS measure, which accounts for the degree of freedom of 127, rather than 128.

[ii] A 2 (Recall condition: Microaggressions vs. Control) x 2 (Time: $Time_1$ vs. $Time_2$) x 2 (Status: Ethnic Minority vs. Ethnic Majority) multivariate analysis of variance with repeated measures on the second factor, positive and negative affect included separately as dependent variables, and participants' gender included as a covariate found results very similar to those of the PROCESS Macros used in the main analyses. Participants in the microaggressions condition reported decreases in positive affect and increases in negative affect that were *not* reported by participants in the control condition, as shown by the multivariate interaction between condition and time F (2, 97) = 7.08, p = .001, η_p^2 = .13, as well as interactions between condition and time on both positive affect F (1, 98) = 9.88, p = .002, η_p^2 = .09 and negative affect F (1, 98) = 8.75, p = .004, η_p^2 = .08. Furthermore, as hypothesised, there was no multivariate three-way interaction between condition, time and ethnic minority status F (2, 97) = .05, p = .95, η_p^2 = .001. Nor was there a three-way interaction of these independent variables on either positive affect F (1, 98) = .001, p = .98, η_p^2 < .001, or negative affect F (1, 98) = .09, p = .76, η_p^2 = .001. Thus, similar to Studies 1 and 2, participants' ethnic minority status did not moderate the effect of the microaggression manipulation on either positive or negative affect.