# Development and Initial Validation of the Inventory of Microaggressions Against Black Individuals

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The present article describes the development and initial validation of the Inventory of Microaggressions Against Black Individuals (IMABI) using a sample of 385 undergraduates who self-identified as Black or African American. The IMABI is a 14-item, unidimensional measure of racial microaggressions that captures both microinsults and microinvalidations. The present findings support the IMABI as a reliable and valid measure of microaggressions that was associated with general distress and perceived stress. Importantly, the association between the IMABI and psychological adjustment persisted even when social desirability and another measure of race-related stress were included in the analyses. Discussion focuses on the potential implications of the IMABI for understanding the daily experiences and psychological adjustment of Black individuals.

Keywords: microaggressions, race, stress

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The underlying nature of racism in the United States has changed dramatically in recent decades. For example, overt displays of racism against Black individuals have clearly declined since the Civil Rights movement (e.g., Dovidio, Gaertner, Kawakami, & Hodson, 2002; Thompson & Neville, 1999), but "old-fashioned" racism has been replaced by more subtle forms of racism referred to as modern racism (McConahay, 1986), symbolic racism (Sears, 1988), or aversive racism (Gaertner & Dovidio, 1986). These three models of subtle racism have certain features in common such as the idea that current expressions of racism are likely to be less blatant than those of the past. The subtle nature of current expressions of racism leads to considerable ambiguity because it is more difficult for victims to clearly identify these experiences, and these sorts of actions are much easier for perpetrators to deny. In extreme cases, racism may be so subtle and indirect that neither the perpetrator nor the victim can be entirely certain that a racist event actually took place.

To capture these subtle forms of racism, researchers have recently adopted the term *racial microaggressions* that was originally described by Pierce (1969). Racial microaggressions refer to "brief, everyday exchanges that send denigrating messages to people of color because they belong to a racial minority group" (Sue, Capodilupo, et al., 2007, p. 273). As such, microaggressions

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are subtle indignities and insults that minority group members may experience in their daily lives. Due to the subtlety of these microaggressions, victims are often uncertain about how to respond because they have difficulty determining the intentionality of the offense. Although microaggressions may be experienced by members of various minority groups, the focus of the present study is on the experiences of Black individuals.

It is important to examine the impact of microaggressions on Black individuals because race continues to have important political, social, and economic implications for this group (see Utsey, Bolden, Brown, & Chae, 2001, for a review). For example, Black individuals are more likely than White individuals to live in poverty, drop out of high school, be treated harshly at each stage of the criminal justice process, including incarceration, live without health insurance, have more health problems, and die at an earlier age (Utsey et al., 2001). The implications of race can be observed in nearly every domain of life, and microaggressions may be an important experience for Black individuals that influence how they think and feel about themselves, their group, and broader society. It seems likely, for example, that Black students who experience a large number of microaggressions in their academic lives (e.g., receiving subtle messages from their teachers that they are not as smart as their White classmates) may eventually withdraw from academic pursuits (Solórzano, Ceja, & Yosso, 2000).

The present typology of microaggressions experienced by Black individuals includes *microassaults* (explicit racial derogations such as referring to a Black individual as "colored"), *microinsults* (an action or remark that demeans an individual's racial heritage such as assuming that a well-developed vocabulary is atypical for Black individuals), and *microinvalidations* (actions that negate the thoughts, feelings, or experiences of a Black individual such as assuming that all Black individuals were raised in urban areas). The common misperception is that subtle forms of racism, such as racial microaggressions, are less harmful than more overt expres-

sions of racism (Sue, Capodilupo, et al., 2007), but accumulating evidence suggests that experiencing microaggressions can have negative influences on various areas of life, including psychotherapeutic outcomes (Constantine, 2007), educational performance (Solórzano et al., 2000), work productivity (Dovidio, 2001; Salvatore & Shelton, 2007), and the perpetuation of stereotype threat (Steele, Spencer, & Aronson, 2002; see Sue, 2010, for a review). The impact of microaggressions may be due, at least in part, to Black individuals feeling less able to address these subtle forms of racism because it is often difficult for them to determine the intentionality of the denigrating messages they receive (Franklin & Boyd-Franklin, 2000; Sue, Capodilupo, & Holder, 2008).

The purpose of the present study was to develop a quantitative measure of racial microaggressions that would supplement existing instruments that capture race-related experiences reported by Black individuals. The taxonomy of racial microaggressions proposed by Sue, Capodilupo, et al. (2007) served as the basis for our measure. One of the advantages of using this particular taxonomy is that it was developed using focus groups of Black individuals who were asked about their experiences with microaggressions (e.g., Sue, Capodilupo, & Holder., 2008; Sue, Nadal, et al., 2008). These earlier studies provided the framework for our measure because we were able to draw from the lived experiences and multiple perspectives offered by the participants in those focus groups.

The development of a measure of racial microaggressions against Black individuals is important because it would provide a means for researchers to capture an aspect of race-related experiences that is not adequately sampled by existing measures. There are various forms of race-related stress, and it is unlikely that any single measure would be able to adequately capture the breadth of these experiences. For example, existing measures of race-related stress tend to capture microassaults (e.g., Schedule of Racist Events [Landrine & Klonoff, 1996]; Index of Race-Related Stress [Utsey & Ponterotto, 1996]), but these experiences are more intentional and overt than microinsults or microinvalidations. Our focus was to develop an instrument that would capture microinsults and microinvalidations (i.e., the less intentional forms of microaggressions) because these are not adequately captured by existing measures.

# Microinsults

Microinsults refer to behavioral and verbal expressions that "convey rudeness and insensitivity and demean a person's racial heritage or identity" (Sue, Capodilupo, et al., 2007, p. 274). The four basic types of microinsults that have emerged from previous qualitative studies (Sue, Capodilupo, et al., 2007; Sue, Nadal, et al., 2008) that asked Black participants to reflect on their own negative race-based experiences are (a) assumptions concerning the intellectual inferiority of Black individuals, (b) the inferior status or second-class citizenship of Black individuals, (c) the assumed criminality of Black individuals, and (d) the superiority of White cultural values. The first type of microinsult stems from the assumption that Black individuals are intellectually inferior to White individuals. These comments may sometimes even be framed as "compliments," but they are insulting because they assume that Black individuals are not as intelligent or successful as White individuals (e.g., Senator Biden referring to Senator Obama as "the first mainstream African-American who is articulate and bright and clean and a nice-looking guy" during the

2008 presidential election; Nagourney, 2007). The second type of microinsult concerns the inferior status or second-class citizenship that is often ascribed to Black individuals. This form of microinsult may include events such as Black customers receiving poor service in a restaurant compared with White customers or assuming that a Black man at a country club is an employee rather than a member (Sue, Nadal, et al., 2008). The third microinsult deals with the assumption that Black individuals are criminals. For example, Black participants have reported being followed in stores or that White individuals appear excessively fearful and vigilant in their presence (e.g., Sue, Nadal, et al., 2008). The fourth type of microinsult reflects the assumed superiority of White cultural values. An example of this sort of microinsult would be a White individual criticizing the hairstyle or clothing of a Black colleague because it differs from their own preferences.

# **Microinvalidations**

Many of the microinsult themes described above are captured by current instruments that assess experiences of racism and race-related stress (e.g., Brondolo et al., 2005; Harrell, 2000; Utsey, 1999). However, the themes described as microinvalidations (Sue, Capodilupo, et al., 2007; Sue, Nadal, et al., 2008) are largely overlooked by the current measures concerning race-related stress. Microinvalidations are "communications that exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person of color" (Sue, Capodilupo, et al., 2007, p. 274). Although little empirical data exist concerning microinvalidations, it has been suggested that microinvalidations may actually inflict greater harm than microinsults or microassaults because they deny the importance of race in the experiences of individuals from racial/ethnic minority groups (Sue, 2010). For example, telling a Black individual not to be overly sensitive to messages about race is a microinvalidation because it may be perceived by the individual as an attempt to deny an important aspect of their experiences.

The three basic types of microinvalidations that have emerged from previous qualitative studies are (a) assumed universality of Black experiences, (b) denial of individual racism (or color-blindness), and (c) the myth of meritocracy. The first microinvalidation concerns the belief that all Black individuals have a shared set of experiences. This may manifest in ways such as assuming that two Black individuals will somehow know each other just because they both happen to be Black or believing that the views of one Black individual are held by all Black individuals. Although the microinvalidation reflecting the assumed universality of Black experiences was not originally included in Sue, Capodilupo, et al.'s (2007) taxonomy of microaggressions, support for its inclusion as a microinvalidation has emerged in more recent studies (e.g., Solórzano et al., 2000; Sue, Capodilupo, & Holder, 2008; Sue, Nadal, et al., 2008).

The second type of microinvalidation deals with individuals denying that they are racist or claiming that they are color-blind. These sorts of statements are considered to be microinvalidations because White individuals are suggesting that race is not notice-

<sup>&</sup>lt;sup>1</sup> The "alien in one's own land" theme—which concerns being treated as a foreigner—was not investigated in this study because the theme appears to be more frequently experienced by Asian Americans (Sue, Nadal, et al., 2008).

able or relevant for them (Sue, Capodilupo, et al., 2007). This form of microinvalidation is thought to be encountered relatively often by Black individuals (e.g., Bonilla-Silva, 2002; Neville, Lily, Duran, Lee, & Browne, 2000) despite the fact that it was not mentioned in previous qualitative studies (Sue, Capodilupo, & Holder, 2008; Sue, Nadal, et al., 2008). The denial of both individual and structural forms of racism is a common feature of White racial attitudes (Neville et al., 2000). For example, it is not uncommon for White individuals to preface derogatory statements concerning Black individuals by saying things such as "I am not prejudiced but. . ." or "Some of my best friends are Black, so it is okay for me to say. . ." (Bonilla-Silva, 2002). On the basis of these studies, it seems reasonable that Sue, Nadal, et al. (2008) included denial of individual racism or claims of color-blindness as a form of microinvalidation experienced by Black individuals.

The third form of microinvalidation concerns the myth of meritocracy such that White individuals may imply that race has only a minor role in determining life outcomes and that an individual's status is primarily the result of individual efforts (Sue, Capodilupo, et al., 2007). Although this particular microinvalidation theme was not generated by Black participants in previous qualitative studies (Sue, Capodilupo, & Holder, 2008; Sue, Nadal, et al., 2008), Bonilla-Silva (2002) noted that White individuals frequently endorse ideas reflecting "abstract liberalism" (e.g., the most qualified applicants should get jobs) when justifying their beliefs that race is unimportant at this point in the history of the United States. In addition, power evasion (Frankenberg, 1993), which is the notion that all people can succeed and that it is the fault of racial minorities if they do not succeed, is a major component of Neville et al.'s (2000) theory of color-blind racial attitudes and the associated measurement instrument. Although both the denial of individual racism and the myth of meritocracy themes were not found in two qualitative studies with Black participants, Sue, Nadal, et al. (2008) noted that these themes may occur in response to provocations or statements by Blacks that race has influenced a particular event, and this characterization appears to be consistent with a general tendency for Whites to avoid discussions concerning race unless directly confronted (e.g., Bonilla-Silva, 2002). Even if less frequently encountered than other microinvalidations, the myth of meritocracy microinvalidation was investigated in the present study because evidence suggests that this microinvalidation may be distressing to Black individuals (Bonilla-Silva, 2002; Neville et al., 2000).

# The Present Study

The present study extends prior work on racial microaggressions by developing and testing a quantitative measure to assess the four microinsult and three microinvalidation themes described above in a Black American sample. Although several instruments are available to assess experiences of racism (e.g., the Index of Race-Related Stress [Utsey, 1999]; the Racism and Life Experiences scales [Harrell, 2000]; the Perceived Ethnic Discrimination Questionnaire [Brondolo et al., 2005]), none of these measures assess microinvalidations, which are an integral component of the conceptualization of microaggressions proposed by Sue, Capodilupo, et al. (2007). Analyses were conducted to investigate the dimensionality of the newly developed measure, and item response theory (IRT) analyses were used to

identify a subset of the best performing items. IRT is well suited to guide final item selection because it provides information regarding item difficulties, which are the specific points along the latent distribution of microaggression scores at which participants are likely to endorse each item. Balancing scale length with reliability is often recommended as a strategy to guide item selection (e.g., Worthington & Whittaker, 2006); however, in addition to selecting items with high factor loadings to maximize scale reliability, we also wanted to select final items that maintained the bandwidth of the scale. Through this approach, we sought to develop an efficient measure that would minimize participant fatigue and facilitate inclusion of the measure in future studies without compromising total scale variability or attenuating relations with criterion variables.

To investigate the validity of the new scale, scores on the measure were examined in conjunction with scores on a measure of race-related stress (Utsey, 1999) as well as other constructs linked to experiences of racism, including racial and ethnic identity (Pieterse & Carter, 2010; Rollins & Valdez, 2006; Sellers & Shelton, 2003), general perceptions of life stress (Pieterse & Carter, 2010; Utsey & Ponterotto, 1996), positive and negative affect (Brondolo et al., 2008), and emotional distress (Pieterse & Carter, 2010; Thompson & Neville, 1999). Because one goal of the study was to maintain the strength of relations with criterion variables as the length of the scale was shortened, a wide variety of criterion measures were selected for inclusion to better determine the impact of reducing the item pool. We included a measure of race-related stress so that we could determine the association between our new scale and this construct. The inclusion of a measure of race-related stress also allowed us to examine whether our microaggression measure was associated with psychological adjustment beyond what was predicted by race-related stress. Measures of racial identity, ethnic identity, and anticipated rejection based on race were included to determine whether these constructs were associated with microaggressions (e.g., do those individuals who experience more microaggressions also anticipate being rejected by others because of their race?). We included these measures because it has often been suggested that factors such as racial identity may influence the perception of racism and moderate its impact on psychological adjustment. Research concerning this important topic has produced inconsistent results with some studies supporting this idea (e.g., Pieterse & Carter, 2010; Sellers & Shelton, 2003), whereas other studies have provided little-if any-support for this idea (e.g., Franklin-Jackson & Carter, 2007; Thomas, Speight, & Witherspoon, 2010). Measures of affect and distress were included to capture facets of psychological adjustment that may be impacted by microaggressions (e.g., do people report higher levels of distress when they experience more microaggressions?). Finally, a measure of socially desirable responding was included to assess whether the tendency to distort responses was associated with scores on our measure of microaggressions. In summary, we sought to broaden the range of measures that are available to assess the race-related experiences of Black individuals by developing an efficient measure of racial microaggressions that captures both microinvalidatons and microinsults.

# Method

**Participants.** Undergraduates self-identifying as Black or African American (n=385) from two universities participated in the study. Twenty-one percent of the sample were students at a large university in the southwestern region of the United States (approximately 28,000 students; 63% White, 13% Black). The remainder of the sample were students at a midsize university in the southern region of the United States (approximately 14,000 students; 66% White, 26% Black). The mean age of participants was 21.37 years (SD=5.11), and 83% of the sample were women. Regarding socioeconomic status, 47% of participants reported that the income of their family of origin was less than \$25,000 per year, 28% reported income as between \$25,000 and \$50,000, 14% reported income as between \$50,000 and \$75,000, and 11% reported family incomes greater than \$75,000 per year.

Data collection occurred across two semesters in a single academic year. Procedures were identical across the two semesters (i.e., participants were asked to complete questionnaires via a secure Internet website), but the specific measures that were administered differed by semester. Participants did not overlap across semesters. Participants were recruited via an online system used by the psychology departments at both universities, and participants received course credit for completing the survey. For the sake of brevity, data from the two semesters were combined, but readers are encouraged to note changes in the sample sizes reported for specific analyses that are presented in later sections.

#### Measures.

Racial microaggressions. On the basis of the themes included in Sue, Capodilupo, et al.'s (2007) taxonomy of racial microaggressions, an initial item pool of approximately eight items per microaggression theme was developed for possible inclusion in the Inventory of Microaggressions Against Black Individuals (IMABI). Items were generated independently by the first two authors with an explicit goal of adequately sampling the seven microaggression themes discussed earlier. Item content was guided by the specific experiences noted in several qualitative studies, two of which included focus groups of Black Americans (Sue, Capodilupo, & Holder, 2008; Sue, Capodilupo, et al., 2007; Sue, Nadal et al., 2008). Following item generation, this initial pool of items was reviewed by four additional researchers with publications in the areas of racial identity and/or stress to examine the extent to which the items fit into the theoretical model of microaggressions used in this study (Sue, Capodilupo, & Holder, 2008; Sue, Capodilupo, et al., 2007; Sue, Nadal et al., 2008) and if the wording of items needed to be modified for clarity or style. On the basis of recommendations from the expert panel, most items were revised and some items were dropped from the item pool, which resulted in the items displayed in Table 1. The items in the pool were intended to capture the following dimensions of Sue et al.'s taxonomy: Ascription of Intelligence (six items), Assumption of Inferior Status/Second-Class Citizenship (eight items), Assumption of Criminality (six items), Assumed Superiority of White Cultural Values (seven items), Assumed Universality of Black American Experiences (six items), Denial of Individual Racism/ Colorblindness (six items), and Myth of Meritocracy (six items). Participants were asked to rate the extent to which they experienced each event during the past year on a 5-point scale (0 = Thishas never happened to me; 1 = This event happened but I was not

upset; 2 = This event happened and I was slightly upset; 3 = This event happened and I was moderately upset; 4 = This event happened and I was extremely upset). This response scale was selected because it has been used with the most popular measure of race-related stress (i.e., Index of Race-Related Stress [Utsey, 1999]) as well as a broad assortment of instruments that capture features of stress (e.g., Daily Hassles Scale [Kanner, Coyne, Schaefer, & Lazarus, 1981]; Perceived Stress Scale [Cohen, Kamarck, & Mermelstein, 1983]; Ways of Coping Scale [Lazarus & Folkman, 1984]; Daily Events Scale [Butler, Hokanson, & Flynn, 1994]).

Socially desirable responding. The Balanced Inventory of Desirable Responding (Paulhus, 1984, 1991, 2002) is a 40-item measure that was designed to detect socially desirable response distortions. This instrument is composed of two subscales referred to as Self-Deceptive Enhancement (20 items; e.g., "I have not always been honest with myself";  $\alpha = .82$ , present study) and Impression Management (20 items; e.g., "I have received too much change from a salesperson without telling him or her";  $\alpha = .80$ , present study). The Self-Deceptive Enhancement subscale captures an unintentional distortion of self-image, whereas the Impression Management subscale captures a deliberate distortion of one's public image. Respondents are asked to respond on scales ranging from 1 (not true) to 7 (very true). This instrument is counterbalanced such that there are equal numbers of positively and negatively keyed items. The Balanced Inventory of Desirable Responding uses a dichotomous scoring system with responses of 6 or 7 being assigned a score of 1 and responses between 1 and 5 being assigned a score of 0 (Paulhus, 1991). The discriminant and convergent validity of the Balanced Inventory of Desirable Responding subscales have been demonstrated by examining their correlations with other measures of social desirability such as the validity scales from the Minnesota Multiphasic Personality Inventory-2 (e.g., Paulhus, 1991). Evidence that participants' responses do not reflect social desirability is generally interpreted as supporting scale validity (DeVellis, 2003). This instrument has been shown to possess adequate psychometric properties when used with Black college students (e.g., Abrams & Trusty, 2004).

Affect. Affect was measured using the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988), which is a reliable and well-validated self-report measure of affect. The PANAS consists of scales that measure positive affect (e.g., interested, enthusiastic, proud) and negative affect (e.g., distressed, scared, hostile). Participants were instructed to complete the items according to how they typically or generally feel. Responses were made on scales ranging from 1 (very slightly or not at all) to 5 (extremely). For the present sample, the internal consistencies of these scales were high (.90 and .92 for positive affect and negative affect, respectively). Brondolo et al. (2008) found that Black community members reporting more lifetime experiences of racism also reported greater levels of negative affect.

Stress. Stress was assessed using the Perceived Stress Scale (Cohen et al., 1983), which is a 14-item self-report questionnaire. Respondents are asked to indicate how often they have felt or thought a certain way during the past month (e.g., "In the last month, how often have you been upset because of something that happened unexpectedly?"). Responses were made using scales that ranged from 0 (never) to 4 (very often). Evidence for the validity of this measure includes appropriate correlations with measures of

Table 1

Geomm h	Geomin Kotated Loadings (λ), Item Discrimination (α), and Threshold Farameters (β) for IMABI Items							
Theme	Item	$\lambda_1$	$\lambda_2$	α	$\beta_1$	$\beta_2$	β3	$\beta_4$
1	Someone assumed I am not very intelligent due to my racial/ethnic background.     Someone was surprised at my skills or intelligence because they believed people of my racial/ethnic	.86	20 29	.55 .95	08 10	.35	.83	1.32
	background are typically not that smart.  3. I was treated as if I was intellectually inferior because of my racial/ethnic background.  4. I was made to feel that my achievements were primarily due to preferential treatment based on my more includability background.	4. 4.	03 .01	.92 1.02	.20	.51	.89	1.35
	<ol> <li>Tactar/ctimic background.</li> <li>I was treated as if I was less qualified because of my racial/ethnic background.</li> <li>When successful, I felt like people were surprised that someone of my racial/ethnic background could encoded.</li> </ol>	.58	.17	.95	.00	.48	.91 1.15	1.44
2	7. I was treated like a second-class citizen because of my racial/ethnic background.  8. I was treated like I was of inferior status because of my racial/ethnic background.  9. I was ignored in a store or restaurant so that someone from a different racial/ethnic group could be	<u> 1</u> . 2 3 2	.68 .20 .00	1.26 1.34 1.31	.47 .05 .19	.86 .51	1.30 .94 .91	1.96 1.56 1.45
		.63 .51 9	.17 .26 .54	1.17	.06	84. 16.	.99 .99 1.09	1.40
æ	<ol> <li>Someone assumed I was born in another county because of my racial/enine background.</li> <li>Someone assumed I was a service worker or laborer because of my race/ethnicity.<sup>a</sup></li> <li>I was treated as if I was a potential criminal because of my racial/ethnic background.<sup>a</sup></li> <li>Someone assumed I was up to no good due to my race/ethnicity.</li> <li>Someone appeared fearful of me due to my race/ethnicity.</li> <li>I was followed in a store due to my race/ethnicity.<sup>a</sup></li> </ol>	50. 54. 55. 55. 55.	.74 .58 .20 .01 .34	1.57 1.49 1.11 1.24 1.50	.17 .33 .16 .01 .13	88 88 82 85 85 80 80 80 80 80 80 80 80 80 80 80 80 80	1.35 1.14 .99 .71 1.25 1.07	1.81 1.38 .07 1.69
4	<ul> <li>19. I felt like people suspected me of doing things that were wrong (e.g., stealing, cheating) solely because of my racial/ethnic background.</li> <li>20. Someone assumed that I am aggressive due to my racial/ethnic background.</li> <li>21. I was made to feel as if the cultural values of another race/ethnic group were better than my own.<sup>a</sup></li> <li>22. I was made to feel that the way members of my race/ethnic group communicate is inferior to the</li> </ul>	.14 05 .34 .61	.65 .84 .51 .19	1.18 1.27 1.51 1.19	20 .31 .46	.65 .91 .79 .52	1.13 1.36 1.22 1.06	1.54 2.08 1.63 1.81
		.56	.25 .84	1.20	.02	.43	77.	1.43
vo	<ol> <li>25. Someone reacted negatively to the way I speak because of my racial/ethnic background.</li> <li>26. Someone reacted negatively to the way I dress because of my racial/ethnic background.</li> <li>27. Someone made comments about my hair or clothing due to my racial/ethnic background.</li> <li>28. I was treated as if my behavior represented all members of my racial/ethnic background.</li> <li>29. Someone told me that I am not like other people of my racial/ethnic background.</li> <li>31. Someone assumed I listened to a certain type of music because of my racial/ethnic background.</li> <li>32. Someone asked my opinion as a representative of my race/ethnicity.</li> <li>33. Someone fold may opinion as a representative of my race/ethnicity.</li> </ol>	10. 12. 23. 7. 18. 25. 25. 25. 25. 25. 25. 25. 25. 25. 25	67. 63. 69. 60. 60. 60. 60.	1.16 1.30 1.25 1.25 1.31 1.38		8. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	1.41 1.03 1.30 1.05 .93 .78	2.09 1.62 1.50 1.50 1.33 1.33 1.64
9		55. 20. 36.	. 54. 54. 54. 54. 54. 54. 54.	1.57		25: 84: 68: 69:	1.24	1.51
		.26	. F.	1.38	40	57.	1.14	1.69
	37. Someone told me that they are not racist or prejudiced even though their behavior suggests that they might be. <sup>a</sup>	.36	84.	1.43	.20	.63	1.14 1.64 (table continues)	1.64 tinues)
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Theme	Item	$\lambda_1$	$\lambda_2$	α	$\beta_1$	$\beta_2$	$\beta_3$	$\beta_4$
	38. Someone claimed that there is no racism or racial/ethnic discrimination anymore even though there is setil a lot in our sociate.	01	.83	1.37	.46	.85	1.28	1.73
	39. Some and that they have friends from different racial/ethnic backgrounds in order to not appear	.49	.29	1.08	04	.41	.84	1.42
7	decision prejudiced.  40. I was told that I am too sensitive to issues related to my racial/ethnic background.	.16	.63	1.17	.10	.61	1.23	1.78
	41. Someone did not take me seriously when I attempted to discuss issues related to my racial/ethnic background in a school or work setting.	02	:83	1.31	.37	.83	1.21	1.76
	42. I was made to feel like I was talking too much about my racial/ethnic background. <sup>a</sup>	21	66:	1.34	2.	1.04	1.44	1.86
	43. Someone told me that everyone can get ahead if they work hard when I described a difficulty related to my racial/ethnic background. <sup>a</sup>	.03	<i>TT</i> :	1.33	.54	.92	1.31	2.01
	44. Someone told me that I overestimate the extent to which my racial/ethnic background affects my life experiences.	.03	92.	1.28	.50	.87	1.22	1.63
	45. Someone suggested that my racial/ethnic background has not had much of an influence on my life experiences.	.24	.52	1.06	.01	.63	1.07	1.72

Domain names by number: Ascription of Intelligence (1), Assumption of Inferior Status/Second-Class Citizenship (2), Assumption of Criminality (3), Assumed Superiority of White Cultural Values (4), Assumed Universality of Black American Experiences (5), Denial of Individual Racism/Colorblindness (6), Myth of Meritocracy (7). IMABI = Inventory of Microaggressions Against Black Individuals.

Item is included in the final version

psychological adjustment such as depressive symptoms and social anxiety among college students and community samples (Cohen et al., 1983). The internal consistency for the Perceived Stress Scale was .59 for the present study, which was largely due to inconsistent responding across the positively and negatively worded items. When only the negatively worded items were analyzed, internal consistency was .82, which is more in line with published estimates of reliability for the scale. Consequently, only the seven negatively worded items were used in analyses.<sup>2</sup> Pieterse and Carter (2010) found that Black American adults reporting more frequent experiences of racism during the past month reported greater levels of perceived stress.

The Rejection Sensitivity-Race Anticipated discrimination. Questionnaire (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002) was used to assess expectations of race-based rejection. This measure consists of 12 scenarios that describe situations in which Black individuals may anticipate prejudice or discrimination. For example,

Imagine you have just finished shopping, and you are leaving the store carrying several bags. It's closing time, and several people are filing out of the store at once. Suddenly, the alarm begins to sound, and a security guard comes over to investigate.

Respondents are asked to provide answers for two questions for each scenario: (a) how concerned or anxious they would feel about the possibility of being rejected because of their race/ethnicity and (b) their expectation that the rejection would actually occur. Responses for the anxiety items were made on scales ranging from 1 (very unconcerned) to 6 (very concerned), and responses for the expectation items were made on scales ranging from 1 (very unlikely) to 6 (very likely). The anxiety score for each scenario was multiplied by its expectation score to capture anxious expectations in which affect amplifies the impact of a specific cognition (Mendoza-Denton, Pietrzak, & Downey, 2008; Metcalfe & Mischel, 1999). The anxious expectation scores were averaged across the 12 scenarios to arrive at a single index of race-based rejection sensitivity ( $\alpha = .93$ , present study). This measure has been found to predict outcomes such as academic functioning in Black college student samples (Aronson & Inzlicht, 2004; Mendoza-Denton et al., 2002). The measure was included in the present study because anticipated discrimination prior to college was found to predict subsequent reports of negative race-related experiences by Black college students (Mendoza-Denton et al., 2002) and could be related to participants' likelihood of reporting microaggressions.

General distress. The Brief Symptom Inventory (BSI; Derogatis, 1993) is a 53-item instrument designed to assess psychological symptoms spanning nine areas of potential dysfunction: somatization (e.g., "faintness or dizziness"), obsessive compulsive (e.g., "having to check and double-check what you do"), interpersonal sensitivity (e.g., "feeling that people are unfriendly or dislike you"), depression (e.g., "feeling lonely"), anxiety (e.g., "feeling fearful"), hostility (e.g., "feeling easily annoyed or irritated"), phobic anxiety (e.g., "feeling afraid to travel on buses, subways, or

<sup>&</sup>lt;sup>2</sup> Patterns of reported results were robust across two additional scoring methods: (a) parcels formed from all PSS items that included both positively and negatively worded items and (b) a latent PSS factor with the 14 items as ordered, categorical indicators.

trains"), paranoid ideation (e.g., "feeling that most people cannot be trusted"), and psychoticism (e.g., "the idea that someone else can control your thoughts"). Respondents were asked to indicate how much they were distressed by each symptom during the past week on scales ranging from 0 (not at all) to 4 (extremely). A composite score referred to as the Global Severity Index is commonly used as an index of general distress ( $\alpha = .98$ , present study). Several studies have linked perceptions of racism to general psychological distress in college students and community samples (e.g., Pieterse & Carter, 2010; Sellers & Shelton, 2003).

Race-based stress. The Index of Race-Related Stress: Brief Version (IRRS; Utsey, 1999) is a 22-item measure of the stressors commonly experienced by Black individuals as a result of their chronic exposure to racism. The IRRS assesses three domains of racism-related stressors: cultural racism (e.g., "You have observed that White kids who commit violent crimes are portrayed as 'boys being boys,' while Black kids who commit similar crimes are wild animals"), institutional racism (e.g., "You were passed over for an important project, although you were more qualified and competent than the White/non-Black person given the task"), and individual racism (e.g., "White people or other non-Blacks have treated you as if you were unintelligent and needed things explained to you slowly or numerous times"). Respondents are asked to indicate whether they have ever experienced each event and the degree to which the experienced event was stressful on scales ranging from 0 (event never happened) to 4 (event happened and I was extremely upset). Because scores on the cultural racism, institutional racism, and individual racism subscales are highly correlated, a composite score referred to as global racism is often used as a broad index of race-based stress ( $\alpha = .96$ , present study). The IRRS has been found to possess acceptable psychometric properties in previous studies of adolescents, college students, and adults (e.g., Utsey, 1999; Utsey & Ponterotto, 1996). The IRRS was included in the present study because it assesses similar content (i.e., perceptions of racism), albeit with less emphasis on microinvalidations than the IMABI.

Ethnic identity. Ethnic identity was assessed using the Multigroup Ethnic Identity Measure (Phinney, 1992). The original version of the measure consisted of 14 items, but later research found that a 12-item version of the measure was adequate (Roberts et al., 1999). The 12-item version of the Multigroup Ethnic Identity Measure appears to consist of two interrelated subscales referred to as ethnic identity search (e.g., "I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs";  $\alpha = .76$ , present study) and affirmation, belonging, and commitment (e.g., "I have a strong sense of belonging to my own ethnic group";  $\alpha = .92$ , present study). Respondents were instructed to indicate their level of agreement with each item using scales ranging from 1 (strongly disagree) to 4 (strongly agree). The Multigroup Ethnic Identity Measure has been found to possess adequate psychometric properties in samples of Black adolescents, college students, and adults (see Phinney & Ong, 2007, for a review). Rollins and Valdez (2006) found that Black American adolescents' ethnic identity was related to the extent of group-level perceptions of racism.

**Racial identity.** The Multidimensional Inventory of Black Identity was developed using a combination of items derived from the Multidimensional Model of Racial Identity and existing items from various measures capturing aspects of Black racial identity,

ethnic identity, and social identity (Sellers, Rowley, Chavous, Shelton, & Smith, 1997; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). The instrument has gone through a number of changes since its introduction, with the most recent version of the instrument consisting of 56 items that assess the following seven dimensions (Cokley & Helm, 2001; Simmons, Worrell, & Berry, 2008): centrality (e.g., "Being a member of my racial/ethnic group is an important reflection of who I am";  $\alpha = .59$ , present study), private regard (e.g., "I am proud to be a member of my racial/ ethnic group";  $\alpha = .87$ ), public regard (e.g., "In general, others respect members of my racial/ethnic group";  $\alpha = .71$ ), assimilation (e.g., "Blacks should try to work within the system to achieve their political and economic goals";  $\alpha = .88$ ), humanist (e.g., "Blacks and Whites have more commonalties than differences";  $\alpha = .89$ ), oppressed minority (e.g., "Black people should treat other oppressed people as allies";  $\alpha = .86$ ), and nationalist (e.g., "Blacks would be better off if they adopted Afrocentric values";  $\alpha = .85$ ). Respondents were instructed to indicate their level of agreement with each item using scales ranging from 1 (strongly disagree) to 7 (strongly agree). The Multidimensional Inventory of Black Identity has been found to possess adequate psychometric properties in samples of Black college students and adults (e.g., Cokley & Helm, 2001), but there is still some degree of uncertainty surrounding the factor structure of the measure (see Vandiver, Worrell, & Delgado-Romero, 2009, for a review).

# **Results**

Dimensionality of the IMABI. Prior to conducting IRT analyses, we conducted several analyses to determine the extent to which the items on the IMABI met the unidimensionality assumption of IRT (Hambleton, Swaminathan, & Rogers, 1991). First, we conducted an exploratory factor analysis (n = 385) of the items of the IMABI with the items specified as ordered categorical variables, which is recommended for items with significant skew and fewer than seven response options (Dolan, 1994; Lubke & Muthén, 2004). These analyses were carried out in Mplus 5.2 (Muthén & Muthén, 2007) using the robust mean and varianceadjusted weighted least squares (WLSMV) estimator to account for the categorical response format and heavier endorsement of the lower response choices. Four eigenvalues were greater than one (25.78, 2.07, 1.43, 1.19), and results of a parallel analysis (Kaufman & Dunlap, 2000) suggested that the magnitudes of the first two eigenvalues were unlikely to occur by chance. Despite this result supporting the retention of two factors, the first factor appeared to explain the majority of the scale variance, as evidenced by the large drop in the magnitude from the first to second eigenvalues, and many items exhibited cross-loadings across the two factors following Geomin (oblique) rotation (see Table 1 for factor loadings). In general, the factors appeared to reflect level of endorsement of the items (i.e., fewer participants endorsed higher categories on the Factor 2 items) rather than true differences in content. It is also important to note that the two factors were highly correlated (r = .79). With one factor extracted, item loadings were of large magnitude (M = .75, range = .63–.82). On the basis of the large amount of variance explained by the first factor, the unidimensionality of the IMABI is partially supported.

To further explore the dimensionality of the IMABI, we assessed the local independence of items by determining the mag-

nitude of residual correlations following extraction of the first factor. Although chi-square was statistically significant for the one-factor model,  $\chi^2(945, N=385)=1978.74, p<.001$ , approximate fit indices suggest the model fit the data adequately (comparative fit index [CFI] = .95, Tucker-Lewis index [TLI] = .95, root-mean-square error of approximation [RMSEA = .05]). Of the 1,035 correlations among the residuals, only two were greater than .20, a criterion for local dependence in some studies (e.g., Gomez, 2008), and most were of very small magnitude. Taken together, these results suggest the IMABI meets the IRT assumption of unidimensionality reasonably well.

**Item selection.** Final item selection was guided by the results of an IRT analysis (n = 385) using Samejima's (1969) graded response model (GRM) in Mplus 5.2 (Muthén & Muthén, 2007). The GRM model is similar to a two-parameter logistic IRT model (e.g., Birnbaum, 1968), only for ordered, categorical variables instead of dichotomous variables. In the GRM model, each item is assigned a discrimination parameter ( $\alpha$ ) that represents how well the item differentiates among individuals based on the latent trait (i.e., Is the item useful in separating high vs. low scorers on the IMABI?). In addition, the GRM model assigns each item a set of threshold parameters  $(\beta)$  representing the point on the latent trait at which there is a 50% probability of selecting a particular response (e.g., endorsing the "This event happened and I was extremely upset" option on the item). The threshold parameters are similar to difficulty parameters in two-parameter IRT models in that higher thresholds on an item relative to other items indicate that higher levels of the latent trait need to be present for individuals to endorse the same option across the items.

The 45 IMABI items are presented by their corresponding microaggression themes in Table 1 along with their associated discrimination ( $\alpha$ ) and threshold ( $\beta$ ) parameters. For each item, there are four threshold parameters:  $\beta_1$  represents the point on the latent IMABI variable at which there is a 50% probability of selecting response "0" versus "1-4" on the item,  $\beta_2$  represents the point at which there is a 50% probability of selecting the "0-1" options versus "2-4" on the item, and so on. Final item selection proceeded according to the following rules. First, two items per microaggression domain were selected to maintain the scale breadth as well as representing the themes identified in several studies (Sue, Capodilupo, & Holder, 2008; Sue, Capodilupo, et al., 2007; Sue, Nadal, et al., 2008). Second, items with high  $\alpha$  values were selected within each theme. Last, in the event that several items had comparable  $\alpha$  values, items with different  $\beta$  parameters were selected so that the sensitivity of the scale across the distribution of IMABI values was maintained. Using this procedure, item reduction should minimally impact the total scale variance (i.e., the total scale information) as well as the magnitude of relations of the IMABI with criterion variables.

In Table 1, items retained from the initial item pool are indicated with an asterisk. The full text of the measure, including response scale and instructions for respondents, is available as an online supplement. For the Ascription of Intelligence domain, Items 4 and 6 were retained on the basis of their comparably high  $\alpha$  values as compared with other items in the domain, with  $\beta$  values ranging from -.13 to 1.70 standard deviations from the mean IMABI value. For the Assumption of Inferior Status/Second-Class Citizenship domain, Items 8 and

14 were selected on the basis of their comparably high  $\alpha$  values, providing a β range from .05 to 1.81 standard deviations. On the Assumption of Criminality domain, the two items with the highest  $\alpha$  values (Items 15 and 18) were selected, yielding a  $\beta$ range from .03 to 1.56 standard deviations. In the Assumed Superiority of White Cultural Values domain, Items 21 and 27 had the highest  $\alpha$  values, but had similar  $\beta$  values. Consequently, Item 26, which also had a high  $\alpha$  value, was selected instead of Item 27 to broaden the β range from .31–1.67 standard deviations to -.08-1.63 standard deviatoins. For the Assumed Universality of Black American Experiences domain, the two items with the highest  $\alpha$  values were selected (Items 29 and 31), yielding a  $\beta$  range from .04 to 1.66 standard deviations. In the Denial of Individual Racism/Colorblindness domain, the two highest  $\alpha$  items were selected (Items 34 and 37). Although the  $\beta$  range is somewhat smaller for these items than items on other domains (from .20 to 1.66 SD), most of the items with higher α values also had higher thresholds. A similar pattern was evident on the Myth of Meritocracy items, with the highest α items (Items 42 and 43) also having the highest threshold values (range = .54-2.01 SD).

**Psychometric properties of the IMABI.** Fit of a one-factor model for the 14 items of the IMABI was examined (n = 385). The model chi-square was statistically significant,  $\chi^2(77, N = 385) = 165.39$ , p < .001, most likely due to the large sample size (Worthington & Whittaker, 2006); however, approximate fit indices suggested acceptable model fit: CFI = .99, TLI = .99, RMSEA = .05. All standardized factor loadings were of large magnitude (M = 0.78, range = .69-.83). The 14 items had a high estimate of internal consistency ( $\alpha = .94$ ), and correlated highly with the 45 original items of the IMABI (r = .98, p < .001).

We conducted a series of two-group confirmatory factor analyses (CFAs) to test factorial invariance by gender (n = 385). With the IMABI items specified as categorical, models could not be fit because the full range of response options was not endorsed by men on Items 14 and 42. Consequently, the items were treated as continuous.

For comparison, a baseline model with factor loadings and item intercepts specified as free to vary across men and women was fit,  $\chi^2(154, N = 385) = 345.44, p < .001$ . To determine whether weak factorial invariance was present, a model constraining the factor loadings to be equal across groups was fit. Imposition of these constraints resulted in a nonstatistically significant increase in chi square,  $\chi_{\text{diff}}^2$  (13, N = 385) = 14.93, ns, indicating that weak factorial invariance by gender held in this sample. To determine whether strong factorial invariance was present, a model additionally constraining item intercepts to be equal across groups was fit. As compared with the baseline model, the constrained model also had a nonstatistically significant increase in chi square,  $\chi^2_{diff}$ (26, N = 385) = 28.79, ns, indicating that strong factorial invariance held in this sample. In the final model, the latent mean difference was .01 (p = .94), meaning that there were no overall mean differences on the IMABI by gender.

Correlations with other measures. To explore the concurrent validity of the IMABI, we calculated zero-order correlations of the IMABI with variables representing social desirability, ethnic identity, racial identity, and psychological adjustment, which are presented in Table 2. Because responses to items on the IMABI and IRRS displayed a large number of zero responses, IMABI and IRRS scores

Table 2
Correlations of IMABI With Other Measures

Measure	n	r	SE	p	No. of parcels
BIDR Self-Deception	383	01	.07	.94	4
BIDR Impression Management	383	05	.07	.48	4
Rejection Sensitivity: Race	382	.27	.06	.00	4
IRRS Global Racism	377	.84	.03	.00	3
MEIM Search	377	.12	.07	.08	3
MEIM Affirmation	382	.02	.06	.79	3
MIBI Centrality	382	.00	.06	.95	4
MIBI Private Regard	382	01	.06	.83	3
MIBI Public Regard	382	29	.05	.00	3
MIBI Assimilationist	383	.05	.06	.42	3
MIBI Humanist	383	.04	.06	.49	3
MIBI Oppressed Minority	383	.02	.06	.76	3
MIBI Nationalist	383	.01	.05	.88	3
Perceived Stress Scale	206	.38	.07	.00	4
PANAS Positive	206	04	.08	.66	4
PANAS Negative	206	.21	.09	.01	4
BSI Global Severity Index	206	.30	.07	.00	4

Note. IMABI = Inventory of Microaggressions Against Black Individuals; BIDR = Balanced Inventory of Desirable Responding; IRRS = Index of Race-Related Stress; MEIM = Multi-Group Ethnic Identity Measure; MIBI = Multidimensional Inventory of Black Identity; PANAS = Positive and Negative Affect Scale; BSI = Brief Symptom Inventory.

were treated as zero-inflated count variables, thereby indicating that scores follow a Poisson distribution. On the basis of the recommendations of Coffman and MacCallum (2005) to sum items into parcels for inclusion in structural equation models as an alternative to analysis with summed or averaged scale scores, we created three to four parcels per scale/construct by randomly assigning items to parcels. These parcels were used to represent each construct; consequently, correlations represent the relation between the latent constructs with variance unrelated to the latent constructs partialed out in the analyses. Parcels from other scales/constructs were approximately normally distributed with deviations from normality accounted for by the robust maximum likelihood (MLR) estimator used in the analyses. Given that a separate model was fit for each zero-order correlation, model fit information is not presented for each model but is available from the authors upon request.

As displayed in Table 2, the IMABI Total was uncorrelated with measures of social desirability. The IMABI Total was positively correlated with scores on the Rejection Sensitivity: Race Questionnaire (r = .27, p < .001), indicating that individuals reporting that they experienced more racial microaggressions had greater expectations of discrimination or prejudice in social situations. The IMABI Total was strongly correlated with the IRRS Global Racism scale (r = .84, p < .001). Although the IMABI Total was uncorrelated with measures of ethnic identity and most of the racial identity scales, it was negatively correlated with public regard (r = -.29, p < .001). Consequently, individuals reporting that they experienced more microaggressions also reported that they believe others view their racial group negatively. Last, the IMABI Total correlated with three out of four measures of emotional adjustment. Specifically, the IMABI Total was unrelated to positive affect, but positively correlated with perceived stress (r =.38, p < .001), negative affect (r = .21, p < .05), and the BSI Global Severity Index (r = .30, p < .001). Taken together, these correlations suggest that as individuals reported experiencing more racial microaggressions, they also reported more symptoms of emotional distress.

# Independent relations of IMABI with emotional adjustment.

Because scores on the IMABI and IRRS were highly correlated, we conducted a series of analyses to determine whether scores on the IMABI were related to emotional adjustment after accounting for relations between the adjustment variables and IRRS Global Racism. Inspection of the correlations between the emotional adjustment variables and other variables in the data set also suggested that the two social desirability measures were highly correlated with most of the emotional adjustment variables; consequently, latent social desirability, as measured by the self-deceptive enhancement and impression management item parcels, was also included in the analyses. The IRRS Global Racism and IMABI Total constructs were represented by the same item parcels used in the prior correlational analyses, and the parcels again were specified as zero-inflated count variables. In three separate analyses, the emotional adjustment variables (BSI Global Severity Index, negative affect, and perceived stress) were regressed on IRRS Global Racism (Step 1), with social desirability added at Step 2, and the IMABI Total added in Step 3. Table 3 presents the results of these latent regression analyses.

For the BSI Global Severity Index analyses, both the IMABI Total ( $\beta=.28, p<.05$ ) and social desirability ( $\beta=-.35, p<.001$ ) were statistically significant predictors in the final model. Although IRRS Global Racism was statistically significant in the first model, the magnitude of the coefficient was smaller with the introduction of social desirability in the second model, and no independent relation between IRRS Global Racism and the BSI Global Severity Index was found in the final model. The IMABI Total explained an additional 5% of the variance in the Global Severity Index beyond IRRS Global Racism and social desirability. In general, individuals exhibiting more social desirability tended to report fewer symptoms of distress, yet individuals re-

Table 3
Latent Hierarchical Regression Analyses Predicting BSI Global
Severity Index, PANAS Negative Affect, and Perceived Stress

		BSI Global Severity Index		negative fect	Perce	
Predictor	$\Delta R^2$	β	$\Delta R^2$	β	$\Delta R^2$	β
Step 1 IRRS Global Racism	.06	.24**	.07	.26**	.03	.16
Step 2 IRRS Global Racism	.11	.15*	.18	.15	.02	.21
Social Desirability		35***		43***		.05
Step 3 IRRS Global Racism	.05	04	.02	.10	.14	05
Social Desirability		35***		45***		.05
IMABI Total		.28*		.08		.48**
Total $R^2$	.22		.26		.18	
N	203		203		203	

Note. BSI = Brief Symptom Inventory; PANAS = Positive and Negative Affect Scale; IRRS = Index of Race-Related Stress; IMABI = Inventory of Microaggression Against Black Individuals.

\* p < .05. \*\* p < .01. \*\*\* p < .001.

porting the experience of more microaggressions reported more symptoms of distress after accounting for social desirability.

Regarding the negative affect analyses, only social desirability was statistically significant in the final model ( $\beta = -.45$ , p < .001). IRRS Global Racism was statistically significant in the initial model; however, it was no longer significant with the addition of social desirability in the second model.

In reference to perceived stress, only the IMABI Total was statistically significant ( $\beta = .48$ , p < .01). Neither IRRS Global Racism nor social desirability was statistically significant in prior models. Consequently, individuals who reported the experience of more microaggressions also reported more perceived stress, and the IMABI Total accounted for 14% of the variance in perceived stress beyond IRRS Global Racism and social desirability. In summary, the IMABI Total exhibited independent associations with two out of the three emotional adjustment variables (i.e., BSI Global Severity Index and perceived stress) after accounting for a similar measure of race-related stress (the IRRS) and the tendency of individuals to exhibit socially desirable responses (i.e., underreport symptoms) on some of the measures.

# Discussion

The present findings support the IMABI as a reliable measure of both microinsults and microinvalidations in Black individuals, and preliminary evidence supports the validity of the IMABI. Although existing instruments capture some aspects of microaggressions—particularly microinsults—the IMABI heavily emphasizes microinvalidations, and the present findings suggest that this form of microaggression may be particularly relevant in understanding the life experiences, stressors, and emotional adjustment of Black individuals. The IMABI was highly correlated with a measure of

race-related stress, but it was significantly related to global perceptions of life stress and emotional distress even after accounting for scores on the IRRS and social desirability. The high correlation between the IMABI and IRRS was not unexpected given that the IMABI appeared to be unidimensional even with the inclusion of microinvalidation themes that are not assessed in other measures of race-related stress. Given the unidimensionality of the IMABI, its correlation with the IRRS could reflect that both measures assess microinsult themes. However, the associations of the IMABI with the measures of emotional distress that extend beyond the variance explained by the IRRS highlights the IMABI's added value and contribution, especially as the IRRS does not assess microinvalidations. As suggested in Sue, Capodilupo, et al. (2007), microinvalidations may be more harmful than microinsults because microinvalidations deny the "racial and experiential reality of people of color" (p. 278) and can be used to justify prejudicial behavior and attitudes in White individuals. The results of this study lend partial support to this claim.

The results of this study partially address the discrepancy between the theoretical importance of microinvalidations and the lack of empirical support for its salience, as found in the existing literature. Although denial of individual racism, color-blindness, and the myth of meritocracy were included in Sue, Capodilupo, et al.'s (2007) microaggression taxonomy, these themes were not reported by Black American participants in subsequent qualitative studies (Sue, Capodilupo, & Holder, 2008; Sue, Nadal, et al., 2008). Despite the theoretical importance and negative impact of microinvalidations as suggested by Sue (2010), it appears that this form of microaggression may be experienced less frequently than other forms of microaggressions. Specifically, although the IMABI is unidimensional, indicating that individuals who endorsed microinsult items also tended to endorse microinvalidation items, the item thresholds were higher for most of the microinvalidation themes as compared with the microinsult themes. In particular, the themes reflecting denial of individual racism (colorblindness) and myth of meritocracy had high item thresholds, indicating that individuals had to report high overall levels of racial microaggressions to endorse these items. These results, in combination with the results of prior qualitative studies, suggest that microinvalidations may be less likely to be experienced by Black individuals than microinsults.

As noted by Sue, Nadal, et al. (2008), the infrequent endorsing of the denial of individual racism (color-blindness) and myth of meritocracy themes could reflect that these specific microaggressions predominantly reflect responses by White individuals to statements by people of color. For example, when a Black individual discusses an incident of perceived racial discrimination (e.g., not receiving a promotion) with a White coworker, the White coworker may respond that race had nothing to do with the decision and endorse a firm belief that qualifications and hard work, instead of race, are rewarded by management. Because these statements are reactions to comments by people of color, they may be less likely to be experienced, particularly if people of color are fearful of being labeled as hostile or an "angry Black man/woman" when addressing perceived incidents of racism (Sue, Capodilupo, & Holder, 2008). Despite the limited support for these themes in qualitative studies of Black Americans (Sue, Capodilupo, & Holder, 2008; Sue, Nadal, et al., 2008), the literature on colorblind racism (e.g., Bonilla-Silva, 2002; Neville et al., 2000) suggests that the responses of some White individuals to statements that race is important in society or has played a role in specific events are likely to contain assertions that the White individual is not personally racist, race has a minimal impact on life in the United States, and consideration of race is unimportant because individual effort is the most important factor in life outcomes.

Responses for most of the IMABI items were skewed such that participants were more likely to endorse the lower response options (e.g., that the event did not happen). This response tendency was addressed by treating items as ordered categorical variables when items were included as variables (e.g., in the factor analyses) and by treating composites of items as count variables following a zero-inflated Poisson distribution. This distribution of responses is common for life event scales even though it is infrequently discussed in the literature. Scores on the IRRS appeared to follow the same distribution and were handled similarly to the IMABI in the present study. This distribution of scores is also apparent on many commonly used measures of adjustment such as the Child Behavior Checklist (Achenbach & Rescorla, 2000). Although such scores are often assumed to be normally distributed in statistical analyses, it is generally preferable to model such items as ordered categorical variables (see Lubke & Muthén, 2004) or performing other transformations to better meet assumptions when analyzing composites of items.

Although the present study has strengths, such as a greater focus on racial microinvalidations, it is also important to acknowledge some of its potential limitations. First, current best practices in scale development rely on focus groups of individuals to generate, revise, and/or trim the item pool (see Constantine, 2007, for an example), but the present study did not include focus group procedures. This limitation was partially tempered by the process used to generate items (i.e., item generation was based on themes and quotes found in prior qualitative studies), but including a focus group in the present study would have been preferable.

Second, we conducted the exploratory factor analysis, IRT analysis, and CFAs on the same group of participants. Due to the large number of free parameters in the polytomous IRT analysis (due to estimating four thresholds per item in addition to other parameters), the entire sample was needed to successfully carry out these analyses. Consequently, the CFA results could best be viewed as investigating model fit under a more restrictive model (i.e., one factor loading per item) rather than truly "confirming" the factor structure.

Third, the correlational nature of the study precludes an understanding of the direction of causality between racial microaggressions and the indicators of psychological adjustment. The assumption underlying the present research was that individuals who experience more racial microaggressions would experience adjustment problems as a result of these experiences, but this cannot be established using the present data. Further research is clearly needed to gain a better understanding of the causal link between racial microaggressions and outcomes such as psychological adjustment.

The fourth limitation of the present study is that it relied exclusively on self-report measures, which leaves open the possibility that the associations we observed reflect the perceptions of our participants (or at least their reports of their perceptions) rather than their actual experiences. This is likely to be a continuing problem in this area of research because racial microaggressions are ambiguous and open to interpretation.

The fifth limitation is that the present data were obtained exclusively from undergraduate students, which may limit the generalizability of the present findings. It is unclear, for example, whether individuals in other developmental stages may report the same sorts of events and whether these events would have similar associations with the outcomes that were assessed in the present study. Our concerns about the generalizability of the present findings also extend to the regions of the United States that were included in the present study. We do not contend that our participants—who attended universities in the southwestern and southern regions of the United States—adequately reflect the diversity of the Black population across the country. For example, the participants drawn from the southern region come from an area of the United States that has the greatest concentration of Black individuals (i.e., 54% of all Black individuals in the United States live in the southern region; U.S. Census Bureau, 2001), but this region has a history of racism (e.g., slavery, segregation) and still struggles with racial tension in the present day (e.g., the confederate flag remains a part of the state flag of Mississippi). It is an open empirical question as to whether the present results would replicate in other regions of the United States.

Additional research concerning racial microaggressions may aid researchers in developing a better understanding of the experiences of Black individuals. For example, future research should examine how Black individuals organize self-relevant information (i.e., self-concept structure; see Showers & Zeigler-Hill, 2003, for a review). Certain forms of self-concept structure, such as evaluative compartmentalization (i.e., the separation of positive and negative self-beliefs into separate self-aspects), have been shown to increase the reactivity of individuals to negative experiences (Zeigler-Hill & Showers, 2007), and it would be informative to know whether a similar pattern would emerge for the reactions of Black individuals to racial microaggressions. Gaining insight into how Black individuals think and feel about themselves may also allow researchers to better understand when microaggressions are likely to be perceived and how they will impact individuals. Microaggressions are somewhat ambiguous by their very nature (Sue, Capodilupo, et al., 2007), so it may be very helpful for researchers to gain a better understanding of the factors that are associated with Black individuals perceiving events as microaggressions. In fact, the ambiguity surrounding most incidents of microaggressions regarding whether or not the incident was racist combined with fear regarding the reactions of others if the Black individual claims that the microaggression was racist are hypothesized to underlie the cumulative, negative impact of microaggressions on Black individuals (Sue, Nadal, et al., 2008). Consequently, better understanding of variations in how microaggressions are perceived by Black individuals is critical in elucidating adaptive coping mechanisms in relation to these incidents.

In addition to inclusion in research, we hope that future research will explore the clinical utility of the IMABI as a potential bridge to open discussion by counseling professionals regarding the race-related experiences of Black populations. Furthermore, the scale development approach used in this study could be applied to develop additional quantitative, group-specific measures of microaggressions given that different themes appear in the experiences of other groups (e.g., being treated as a persistent foreigner is more likely for Asian Americans; Sue, Bucceri, Lin, Nadal, & Torino, 2007). It is our hope that the availability of a quantitative measure of racial microaggressions against Black individuals will encour-

age future quantitative research investigating protective factors that mitigate the negative impact of racial microaggressions and continue the dialogue concerning the appropriate ways to address microaggressions as part of the counseling process.

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