



Replication and Extension of the Acceptability of Racial Microaggressions Scale (ARMS)

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Abstract

Mekawi and Todd (Cult Divers Ethn Minor Psychol 24:346–362, 2018) developed the Acceptability of Racial Microaggressions Scale (ARMS) to assess acceptability of saying racially microaggressive statements about people of color. The purpose of this study is to replicate and expand on Mekawi and Todd’s study by: (a) conducting the study in a politically conservative state; (b) replicating the scale structure in a single confirmatory factor analysis; and (c) extending evidence of validity by examining whether stronger White identification would be associated with higher ARMS scores. White college students in the mid-South ($N = 210$, 68% women, approximately one-third conservative, one-third moderate, and one-third liberal, average age = 19.93) were recruited for this online study. Participants completed the ARMS and White identification measures. We confirmed the four-factor structure of the ARMS. Additionally, we found greater identification with Whiteness was associated with higher acceptability of victim blaming, power evasion, and color evasion microaggressions. Male gender was associated with higher acceptability of victim blaming, power evasion, and exoticization microaggressions; however, women were more likely to report higher white identification. Our study suggests the ARMS is a useful tool with strong psychometric properties. Most microaggressions were deemed unacceptable, although higher identification with Whiteness (a higher need to belong, higher group identification, and stronger ingroup norms of loyalty) was associated with her acceptability ratings. Exoticization was the exception, perhaps because these statements can be construed as examples of race-based sexual harassment.

Keywords Racial microaggressions · White identification · Scale validation

Introduction

Racial microaggressions, coined originally by Pierce (1970), have been defined by Sue et al. (2007) as commonplace indignities (verbal, behavioral, or environmental) that communicate derogatory and negative racial slights and insults, intentional or unintentional, toward people of color. They are often described as subtle instances of interpersonal discrimination or racism. Since the Sue et al. (2007) paper, there has been a push for more rigorous measurement of microaggressions and assessment of who is likely to engage in these microaggressive behaviors. For instance, Mekawi and Todd (2018) developed the Acceptability of Microaggressions

Scale to assess how acceptable individuals find these statements if they were stated by a White person. In addition to research on the acceptability of microaggression, Kanter et al. (2017) led to the development of another measure, the Cultural Cognitions and Actions Scale in which participants indicate how likely they would be to engage in microaggressive behavior. These measures have allowed for more additional research that explores whether certain identities that participants hold may make them more or less likely to engage in microaggression (Kanter et al., 2020; Williams, 2021).

Recent literature has argued for and against the use of the word “microaggression” (Lilienfeld, 2017; Williams, 2020). Lilienfeld (2017) argued that the term microaggressions is not an appropriate label for subtle forms of discriminatory behavior as the intentional aspect of the behavior from the perpetrator is often ambiguous. In particular, Lilienfeld says that aggression in the social psychology literature generally refers to actions that are intended to harm. According to

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Sue and colleagues, intentions of harm are not relevant to labeling a behavior as a microaggression. Williams (2020) argued that microaggressions are maintained by society at large (i.e., they maintain a system of White supremacy) and therefore individual intentions are irrelevant to their definition.

Regardless of intentions, people of color have endorsed experiencing subtle, everyday racism and discrimination at high rates. In a recent study by Lee et al. (2019), approximately 55% to 75% of people of color reported experiencing racism and racial discrimination in their lifetime, compared to 35% of White people. Research has shown that experiencing discrimination is associated with various negative mental and physical health outcomes, including increased incidence of depressive symptoms (Auguste et al., 2021), trauma symptoms (Abdullah et al., 2021; Bird et al., 2021; Kirkinis et al., 2021), and poorer physical health (Nadal et al., 2017). Overall, racial microaggressions can cause harm to health and harm to people of color's general quality of life by affecting access to social, educational, and employment opportunities and the quality of those opportunities when they are available.

The Acceptability of Racial Microaggressions Scale (ARMS)

Mekawi and Todd (2018) created the ARMS to measure how acceptable someone may find a verbal racial microaggression to be if it were said by a White person toward a people of color. The ARMS comprises four subscales representing different types of racial microaggressions: Victim Blaming, Color Evasion, Power Evasion, and Exoticizing. Mekawi and Todd (2018) defined the Victim Blaming microaggressions as statements that belittle and blame people of color and their cultures for racial disparities (e.g., *There won't be racial progress until racial minorities stop relying on handouts from the government.*). Color Evasion included statements that clearly avoid discussing race and represent a color-blind ideology (e.g., *There is only one race, the human race.*). Power Evasion included statements that specifically deny the role of racism in racial disparities (e.g., *Everyone gets a fair legal trial regardless of their race.*). Finally, Exoticization statements use race and ethnicity to make assumptions about an individual's sexual performance and sexuality (e.g., *Latinos are just so sexy.*).

The ARMS was developed using the theory of reasoned action (Ajzen & Fishbein, 1977) as a guiding framework. The theory of reasoned action suggests that attitudes and norms predict the likelihood that someone will engage in a behavior. Background factors such as race, gender, and knowledge may shape the development of attitudes and normative beliefs. Accordingly, Mekawi and Todd (2018) theorized that perceiving microaggressive statements as

acceptable is important in predicting the likelihood of engaging in future microaggressive behavior. Indeed, in the original validation study, Mekawi and Todd found that the acceptability of racial microaggressions was positively correlated with theoretically relevant variables such as modern racism, colorblind ideology, and self-reported likelihood of engaging in these behaviors. Additionally, Mekawi and Todd find that male respondents were more likely to find microaggressions acceptable compared to their female counterparts. This result echoes Ajzen and Fishbein's (1977) point that background factors may be important. However, when Mekawi and Todd compared different racial and ethnic groups in their acceptability of microaggressions, they found very few differences. The only statistically significant differences were (a) White participants scored color evasion statements as more acceptable than East Asian participants, and (b) Black participants scored all statements as less acceptable to say compared to all other racial and ethnic groups.

Mekawi and Todd (2018) noted some limitations to their initial validation study of the ARMS. Firstly, participants in their sample were liberal leaning; the authors suggested a different pattern of results might emerge in a more politically conservative group. Secondly, the authors note that the lack of differences in the acceptability of racial microaggressions by racial and ethnic groups requires more nuanced questions to be asked, like "for whom are microaggressions more likely to be perceived negatively?" (p. 359). Lastly, the authors call for replication of their findings due to the large number of confirmatory factor analyses (CFAs) they ran.

White Identification and White Racial Identity

Whiteness is a system of oppression that privileges lighter skin tones and oppresses people of non-White racial/ethnic heritage or who appear non-white in their phenotype. Identifying as "White" in a system of white supremacy is not a benign act: it indicates an identification with power and privilege. With increased racial tensions and political support for White identification, many White people are publicly vocalizing their identification with Whiteness and normalizing it as White pride and nationalism (e.g., Charlottesville Unite the Right rally, the rise of the Proud Boys, and the January 6th Capitol insurrection).

Given the rise in white identification it is essential to define it and differentiate it from White racial identity development. We are defining the construct of White identification to be like the ideas of ethnic identity or pride—a sense of significance and meaning on takes from one's ethnic identity—as well as a sense of belonging, commitment/attachment to one's group, and a positive evaluation of one's group. When White identification is the construct of interest, research has found that participants who highly identify as White are often proponents

of racist and prejudice beliefs. For instance, Rios and Mackey (2022) found that self-identification as “White” versus “European-American” was associated with more negative attitudes towards multiculturalism and reduced personal feelings of diversity. Additionally, research from Earle and Hodson (2022) suggests that individuals who are more highly White-identified endorsed more anti-immigrant attitudes than those lower in White identification. As mentioned, White identification is a separate construct from White racial identity development. Helms (1995) described White racial identity development, focusing on how White people come to understand their power and privilege and to work towards social justice as White allies. Genuine White allyship requires actively supporting outgroup members by working to decenter Whiteness, even when faced with resistance from other White individuals. It is a role to which one is assigned by people of color; it is not a role that a White individual can assign on their own (Spanierman & Smith, 2017; Williams et al., 2021). As White people become more aware of their privilege, they may go through a stage in which they negate their Whiteness to combat that privilege and White guilt (Grzanka et al., 2020). This suggests that some White individuals may advance through the stages of White racial identity development and potentially achieve status as a White ally but become less White-identified. As with most racial identity development models, the process is not linear and it may be difficult to measure how strongly someone identifies as White by identifying their location on this developmental process. Therefore, it follows that a focus on White identification rather than White racial identity development can provide us with an important aspect of identity to assess in connection with issues of racism and discrimination.

Purpose

Given the aforementioned limitations of the prior work done by Mekawi and Todd (2018), the purpose of this study was to replicate and extend their work by: (a) conducting the study at a school in the mid-south in a politically conservative state; (b) replicating the CFA; and (c) examining whether a participant background variable (White identity) was associated with ARMS scores. Given prior research, we hypothesized that we would replicate the four-factor structure of the ARMS in this new sample of White participants located in a politically conservative state (**H1**). Additionally, we hypothesize that participants who identified highly with Whiteness would be more likely than those who identified less with Whiteness to rate racial microaggressions as acceptable, controlling for gender (**H2**).

Method

Participants

A total of 269 participants ages 18 and up completed the study from a larger pool of undergraduate psychology students. The final sample for the analyses consisted of the 210 participants who identified as non-Latinx monoracial White (see Table 1). Most participants identified as women (67.6%), first year students (61.4%), with an average age of 19.93 (SD 4.33). Additionally, students from the psychology pool were fairly evenly divided along three political ideologies: conservative (30.9%), moderate (38.9%), and liberal (30.2%).

Procedure

All data collection procedures were approved by the University of Arkansas’ Institutional Review Board. Participants were recruited from a pool of undergraduate students taking Introductory Psychology. The study was advertised through the department’s experiment management system. The study was advertised as an online study focused on personal identity.

Once they signed up, participants clicked on a link to a web-based survey housed on Qualtrics. Participants were first presented with an informed consent form. After

Table 1 Demographics of the sample

Demographic Characteristic	<i>N</i> (%)	<i>M</i> (SD)
Gender		
Women	142 (67.6%)	
Men	68 (32.4%)	
Year in School		
First year	129 (61.43%)	
Second year	50 (23.80%)	
Third year	18 (8.58%)	
Fourth year	12 (5.71%)	
Fifth year	1 (0.48%)	
Race/ethnicity		
White/Caucasian/European American	210 (100%)	
Biracial/multiracial	3 (1.43%)	
American Indian/Native American/ Alaskan Native	5 (2.38%)	
Hispanic/Latinx	8 (3.80%)	
Black/African descendant	0 (0%)	
Asian/Pacific Islander	0 (0%)	
Race most strongly identified with		
White/Caucasian/European American	210 (100%)	
Age, in years		19.93 (4.33)

indicating their consent, participants completed a demographics questionnaire. Then participants were randomly assigned to one of six vignettes and completed questions corresponding to the vignettes (this portion of the study is not included in the current manuscript). Participants completed another set of questionnaires next (see descriptions below). Finally, participants were presented with a full debriefing form and awarded research credits.

Measures

Gender

Participants were allowed to self-identify with their gender identity. The question regarding gender was: “What is your gender?” with the options of “Male”, “Female”, “Non-Binary/Third Gender”, and “Prefer to self-describe.” The option of “prefer to self-describe allowed participants to enter the word that best described their gender. An additional question was added to ask participants if they identified as transgender. This question provided the options “Yes”, “No”, or “Prefer not to say.”

White Identification

To measure White identification, the Ashmore et al. (2004) framework of collective identity was used. Ashmore et al. (2004) describe that collective identity comprises many dimensions, including self-categorization, attachment, and sense of interdependence, and content/meaning. Therefore, we adapted three brief measures to assess White identification. Attachment and sense of interdependence were assessed with a need to belong scale (Leary et al., 2013). Self-categorization was assessed with a group identification scale (Major et al., 2002). Content and meaning were assessed with a group loyalty and expectations scale developed for this study. Each is described below. All finalized items can be found in Appendix B of the supplementary materials.

Need to Belong The Need to Belong Scale (Leary et al., 2013) was developed to measure the desire that people have for acceptance and belonging. The scale has 10 items which have been shown to have good inter-item reliability (median coefficient alpha .81; Leary et al., 2013). Leary et al. (2013) tested the construct validity of the Need to Belong Scale with measures of related concepts such as need for affiliation, sociability, and extraversion, finding weak to moderate correlations. The original scale included questions such as *If other people don't seem to accept me, I don't let it bother me, I have a strong 'need to belong', and My feelings are easily hurt when I feel that others do not accept me.* Respondents were asked to indicate “the degree to which

each statement is true or characteristic of them on a 5-point scale.” The scale was “1 = *not at all*, 2 = *slightly*, 3 = *moderately*, 4 = *very*, and 5 = *extremely*.” Items 1, 3, and 7 in the scale are reverse scored. Scores are averaged; higher scores indicate a higher need to belong.

In the current study, the instructions were modified to have participants focus on their racial group which was piped in from a demographics question asked at the beginning of the survey. Therefore, the instructions read *The following scale asks you to respond about how you feel regarding other people in your group (that is, other White people).* Each question then was changed to also allude to the group. For example, one item listed previously was reworded as: *If other people in my group don't seem to accept me, I don't let it bother me.* Therefore, higher scores indicated a higher need to belong to the group “White people.” This measure had good internal consistency reliability in the present study (coefficient = 0.84).

Group Identification Four items assessed racial group identification. These items were originally developed by Major et al. (2002) to assess ethnic group identification. A sample item includes *How strongly do you identify with other members of your ethnic group?* Items are scored on a 1–7 Likert scale, then averaged together. Higher scores indicate higher ethnic group identification. In their study, they found that the measure had good internal consistency reliability (coefficient alpha = 0.79) for use with White people.

In the current study, the items were adapted to refer to the participants' racial group membership. The questions presented to participants in this study were: *How strongly do you identify with White people?* (1 = *not at all* to 7 = *very strongly*), *How important is your race/ethnicity, White, to your identity?* (1 = *not at all* to 7 = *extremely important*), *How often do you think of yourself as a member of this racial/ethnic group: White?* (1 = *never* to 7 = *very often*), and *How close do you feel to other White people?* The measure had good internal consistency reliability in the present sample (coefficient alpha = 0.73).

Group Expectations of Loyalty Group loyalty and expectations were assessed using four items. The participants were provided the following instructions: “The following scale asks you to respond about how you feel regarding other people in your group (that is, other White people).” These items were: *I expect people from my group to be loyal to one another, I expect people from my group to be kind to each other, I expect people from my group to give each other the benefit of the doubt, and It is important that members of my group stick together.* The items were then rated by participants on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). In the present study, the measure has good internal consistency reliability (coefficient alpha = 0.91).

Acceptability of Racial Microaggression

Participants completed the Acceptability of Racial Microaggressions Scale (ARMS; Mekawi & Todd, 2018) to assess how acceptable, they found engaging in different microaggressions to be. The ARMS consists of 34 racial microaggressions rated on a Likert-scale ranging from 1 (*totally unacceptable*) to 6 (*perfectly acceptable*). The ARMS asks participants to “Imagine that you are talking with a racially diverse group of peers about various topics, including race and ethnicity. Rate how ACCEPTABLE you think it would be for a White group member to say the following to a racial/ethnic minority group member.” As noted above, the ARMS includes four subscales labeled Victim Blaming, Color Evasion, Power Evasion, and Exoticizing. These subscales were the main dependent variables for the study. The ARMS subscales demonstrate moderate to large positive correlations with the Modern Racism Scale (McConahay, 1986) indicating good convergent validity.

Victim Blaming The subscale labeled Victim Blaming includes nine items. Some examples of these items include *Lots of people worked their way out of poverty, why can't Blacks and Latinos do the same?* and *If African American spoke less slang, they'd be more likely to get jobs*. This subscale was strongly and positively associated with racial colorblind ideology, social dominance orientation, modern racism, and right-wing authoritarianism in the original study of the creation and validation of ARMS. Additionally, test–retest reliability from Mekawi and Todd (2018) suggested that this scale proves to be stable over a 2-week period ($r = .80$). These items are more explicit and have been found to be less acceptable by various groups in previous samples therefore those who endorse these are more likely to endorse antipathy toward minorities and disregard the impact of racism on people of color (Mekawi & Todd, 2018). The subscale had good internal consistency reliability in the present study (coefficient alpha = .92).

Color Evasion The Color Evasion subscale comprises eight items. An example of items included in the color evasion subscale are *I don't see your race; I see you as a person* and *We are all the same*. Color evasion was positively associated with modern racism, color-blind ideology, and right-wing authoritarianism in the original study of the creation and validation of ARMS but not as strongly as other subscales. Mekawi and Todd (2018) found that the color evasion subscale had the highest acceptability ratings which was suggested to indicate that their relatively innocuous presentation made them more acceptable to say to others compared to items in other subscales. The color evasion subscale had good internal consistency reliability in the present study (coefficient alpha = .96).

Power Evasion The Power Evasion subscale comprises nine items. For example, one item states *Everyone has access to the same resources such as schools and hospitals*. Another item states *Race doesn't matter for who gets sent to prison*. In the validation study by Mekawi and Todd (2018), the Power Evasion subscale was positively associated with modern racism, colorblindness, right wing authoritarianism, and the Victim Blaming subscale. Power Evasion presents similar messages as Victim Blaming in a way that seems to be more masked and insidious (Mekawi & Todd, 2018). It's possible that Power Evasion was rated more acceptable on average compared to Victim Blaming because of the subtle presentations of these items. The power evasion subscale had good internal consistency reliability in the present study (coefficient alpha = .95).

Exoticizing The last subscale is Exoticizing, comprising eight items. These items also serve as a way of dehumanizing racial and ethnic minorities. In their study, Mekawi and Todd (2018) found that this subscale was positively associated with benevolent sexism, modern racism, and right-wing authoritarianism. Additionally, people who rated these items as more acceptable were more likely to value traditionalism. The color evasion subscale had good internal consistency reliability in the present study (coefficient alpha = .94).

Data Analyses

RStudio Version 1.2.5001 (RStudio Team, 2019) was used to conduct all analyses. Participants with missing data were removed from the analytic sample (54 White participants were removed out of the original 264 who began the survey). In the process of cleaning the data, the Need to Belong measure responses were converted from a 5-point scale to a 7-point scale. This change was needed to so all three indicators of the latent factor were scaled identically. The change meant that response scores changed in the following ways: 1 = 1, 2 = 2.5, 3 = 4, 4 = 4.5, and 5 = 7 (and the reverse was true for items that required reverse scoring) Descriptive statistics were computed for sample characteristics and primary study variables to evaluate assumptions of normality. We also examined density plots to examine assumptions of normality and bivariate scatterplots to examine assumptions of linearity. Bivariate correlations were calculated to examine assumptions of multicollinearity. We found no violations. To assess the measurement portion of the model, confirmatory factor analyses (CFA) of the ARMS and of the White identification measures were conducted using the “lavaan” package. Structural equation modeling was then performed to examine primary study aims. Good fit was determined by examining absolute fit and relative fit indices (chi square

test, chi-square/degrees of freedom ratio, goodness-of-fit indices, and standardized root mean residual).

Positionality Statement

Traditionally, positionality statements have been used in qualitative research. However, identities can also influence the approach we take to interpreting quantitative work. Furthermore, Roberts et al. (2020) recommend that authors include how their identities relate to the research topic to encourage transparency and contribute to the efforts of reducing racial inequity in psychological research. The first author identifies as a queer Latina and became interested in the topic of identification of whiteness and microaggressions due to her lived experiences with discrimination in predominantly White spaces by White perpetrators. The first author has gained expertise in the research of issues related to racism and discrimination. She is dedicated to using this knowledge to help improve the lives of people of color by naming, addressing, and dismantling the systems of White supremacy. The second author is a Black woman. She initially became interested in racial microaggressions after seeing the damaging effects that they have had on the mental health of those in her community. The second author has conducted research on the longstanding history of racism and how it has specifically contributed to disparities in healthcare. She will spend her career working to eradicate these disparities for all people of color. The third author identifies as Latina and an immigrant. She has been dedicated to understanding and addressing the systemic barriers people of color and other marginalized groups face when trying to access mental health care. To that end, she views attitudes supportive of microaggressions and colorblindness as important barriers that negatively affect well-being and impede the quality of mental health care people of color receive. These identities have influenced the authors' understanding of racism and identity development.

Results

Descriptive Statistics

Two hundred and ten White-identified participants completed measures for the study: 67.6% identified as women and 61.43% were first-year undergraduate students. The full demographics of the sample can be found in Table 1. All participants completed the ARMS as well as the White identity scales. The means and standard deviations for the subscales of the ARMS and the White identity scale can be found divided by gender on Table 2. A correlation table including all the variables is shown in Table 3.

Table 2 Means and standard deviations for study measures

Measures	Women (<i>n</i> = 142)	Men (<i>n</i> = 68)	Full sample (<i>N</i> = 210)
ARMS			
Victim blaming	1.69 (0.91)	2.34 (0.93)	1.89 (0.96)
Color evasion	4.09 (1.32)	4.23 (1.19)	4.14 (1.28)
Power evasion	3.18 (1.32)	3.45 (1.21)	3.27 (1.29)
Exoticization	2.21 (1.07)	3.00 (1.09)	2.47 (1.13)
White identity			
Need to belong	4.51 (1.02)	4.03 (0.92)	3.41 (0.46)
Group ID	4.98 (1.14)	4.47 (1.30)	4.81 (1.21)
Ingroup norms	5.22 (1.43)	4.63 (1.58)	5.03 (1.50)

Mean (Standard Deviation). ARMS subscales on a 1 = *totally unacceptable* to 6 = *perfectly acceptable* scale. N2B on a 1 = *not at all* to 7 = *extremely*. Group ID on a 1 = *not at all* to 7 = *very strongly/often* scale. Ingroup loyalty on a 1 = *strongly disagree* to 7 = *strongly agree*

Measurement Models

Acceptability of Racial Microaggressions Scale

We hypothesized a four-factor model for the ARMS, consistent with the original development study (Mekawi & Todd, 2018). In our study, we found a four-factor solution generally provided adequate fit to the data, $\chi^2(521) = 1339.91$, $p < .001$, χ^2/df ratio = 2.57, CFI = .88, TLI = .87, RMSEA = .09, 90% CI for RMSEA: .08, .09, SRMR = .06. All items loaded significantly onto their factors (factor loadings ranged from .580 to .916; all p values < .001). Table 4 provides correlations among the four ARMS subscale factors. Thus, our first hypothesis was supported.

White Identification

Because our measures of White identification were developed for this study, we examined the construct validity using descriptive statistics, alpha-if-item-deleted statistics, and a confirmatory factor analysis. All items across the three White identification scales (Need to Belong, Group Identification, and Ingroup Expectations of Loyalty) were examined simultaneously in an internal consistency reliability analysis. The overall alpha for the combined set of items was .88. Examining alpha-if-item-deleted statistics revealed removing each item would either not affect the overall alpha or would decrease the alpha (Supplementary Table 1). Correlations among the three scales were all significant and positive (Table 3), with r values of .37 or higher.

A hierarchical CFA was conducted to see whether items loaded significantly onto the three White identification measures and whether the three White identity measures were nested within a higher order factor (Fig. 1). Results of the initial CFA revealed adequate fit, $\chi^2(132) = 300.75$, $p < .001$,

Table 3 Bivariate correlations for study measures

Variables	VB	CE	PE	EX	IGN	GID	N2B
Victim blaming (VB)	1.00	0.31***	0.49***	0.45***	0.08	0.11	0.02
Color evasion (CE)	–	1.00	0.71***	0.39***	0.29***	0.17*	0.11
Power evasion (PE)	–	–	1.00	0.54***	0.25***	0.21**	0.12
Exoticization (EX)	–	–	–	1.00	0.09	0.03	– 0.03
Ingroup norms (IGN)	–	–	–	–	1.00	0.37***	0.48***
Group identification (GID)	–	–	–	–	–	1.00	0.40***
Need to belong (N2B)	–	–	–	–	–	–	1.00

*** $p < .001$; ** $p < .01$; * $p < .05$

Table 4 Factor correlations for ARMS subscales

Subscale	VB	CE	PE	EX
Victim blaming (VB)	–	.21**	.54***	.40***
Color evasion (CE)	–	–	.53***	.24**
Power evasion (PE)	–	–	–	.39***
Exoticization (EX)	–	–	–	–

*** $p < .001$; ** $p < .01$; * $p < .05$

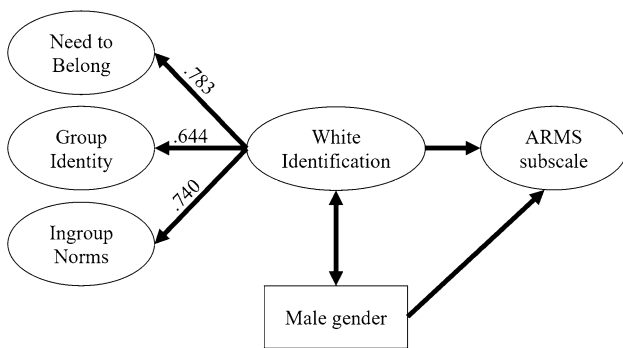


Fig. 1 Structural model used for hypothesis testing

Table 5 Structural model goodness-of-fit summary statistics

Index	Dependent variable			
	Victim blaming	Power evasion	Color evasion	Exoticization
χ^2	651.94	687.51	576.70	815.41
df	319	319	294	294
χ^2/df	2.04	2.16	1.96	2.77
CFI	.89	.90	.92	.83
TLI	.88	.90	.91	.84
RMSEA	.07	.08	.07	.09
90% CI for RMSEA	(.06, .08)	(.07, .08)	(.06, 0.08)	(.08, 0.1)
SRMR	.07	.07	.07	.07

CFI comparative fit index, TLI Tucker-Lewis Index, RMSEA root mean square error of approximation, 90% CI 90% confidence interval, SRMR standardized root mean residual

χ^2/df ratio = 2.28, Comparative Fit Index (CFI) = .89, Tucker-Lewis Index (TLI) = .88, root mean square error of approximation (RMSEA) = .08, 90% confidence interval (CI) = .07, .09, standardized root mean residual (SRMR) = .07; however, one item did not load significantly onto its factor. Removing one item from the Need to Belong scale (*I seldom worry about whether other people in my group care about me*) resulted in similar model fit, $\chi^2(116) = 272.98, p < .001, \chi^2/df$ ratio = 2.35, CFI = .90, TLI = .88, RMSEA = .08, 90% CI = (.07, .09), SRMR = .07; however, all items then loaded significantly onto their first-order factor (standardized loadings ranged from .467 to .935; all p values < .001), and all first-order factors loaded significantly onto the second-order white identity factor (Fig. 1).

Structural Models

To test the second hypotheses, four structural equation models with maximum likelihood parameter estimation were fit to the data (Fig. 1). All models indicated a good fit: fit information is presented in Table 5. In the first model, male gender ($\beta = 0.39, p < .001$) and White identification ($\beta = 0.19, p = .023$) were positively related to higher

acceptability of victim blaming racial microaggressions.

In the second model, only White identification ($\beta=0.33$, $p<.001$) was positively related to acceptability of color evasion microaggressions; gender ($\beta=0.11$, $p=.122$) was not. In the third model, both male gender ($\beta=0.21$, $p<.001$) and White identification ($\beta=0.34$, $p<.001$) were associated with higher acceptability of power evasion microaggressions. In the fourth model, male gender ($\beta=0.34$, $p<.001$) was associated with higher acceptability of exoticization racial microaggressions, but White identification ($\beta=0.06$, $p=0.501$) was not. On the whole, results support our second hypothesis.

Discussion

The purpose of this study was to replicate and extend the work of Mekawi and Todd (2018) on the ARMS. We validated the four-factor structure of the ARMS in a new sample of White participants located in a politically conservative state. Additionally, the results mostly supported the hypothesis that participants who identified highly with Whiteness would be more likely than those who identified less with Whiteness to rate microaggressions as more acceptable. We found identification with Whiteness was associated with three of the four microaggression types: victim blaming, color evasion, and power evasion. In contrast, White identification was not associated with exoticization. We review these findings and their implications next.

While Mekawi and Todd (2018) noted that results of their original scale development study may differ in a more politically conservative sample, this was not the case. In our sample of White college students from a more politically conservative state, we observed similar average scores of microaggression acceptability as those obtained in the original study. This suggests that political orientation in a higher education setting may not be a strong determining factor in evaluations of racial/ethnic microaggressions. It is possible that the collegiate environment, one which is notable for its emphasis on valuing diversity and inclusion and for its intolerance of racial bias (American Council on Education, 2012), reduces differences that might have emerged had the ARMS been examined in non-college residents of more conservative and liberal states.

In terms of descriptive findings, Victim Blaming and Exoticization microaggressive statements were rated as the least acceptable statements in comparison to the other types of microaggressions. We expand on the meaning of the Exoticization scores below. Regarding victim blaming, which had the lowest average acceptability ratings of any of the types of microaggressions, this may suggest a growing understanding from White people, especially during the current racial reckoning in the United States, that systemic racism is real and negatively impacts people of color. These

systemic issues have been increasingly discussed online and in the media during the past few years, especially with the inequities highlighted by the pandemic and the murders of George Floyd and Breonna Taylor at the hands of the state. These events and subsequent discussions may be raising awareness and creating change in the way that White people view the position of people of color in the United States.

In contrast to Victim Blaming and Exoticization, the Evasion subscales were rated on a more neutral or at the midpoint of the Likert scale (i.e., as neither acceptable nor unacceptable to say). The two evasion subscales of the ARMS seem to be strategies that we might predict would be preferred by people who endorse a colorblind racial ideology (Neville et al., 2013). White people benefit from the racial structure in place in the United States (that is, from white supremacy), even if they are not active perpetrators of oppression, and therefore are less likely to challenge the existing system. However, some indeed blame people of color for their position in life or for their struggles (Tarca, 2005). In the current study, we found that Color Evasion statements were rated as the most acceptable forms of microaggressions, which seems to be consistent with previous research on colorblind ideology being a predominant ideology amongst White Americans (Bonilla-Silva, 2017). Similar results regarding White participants' increased likelihood of saying color-blind statements were found by Williams (2021) using a different microaggressions likelihood measure, the Cultural Cognitions and Actions Scale (CCAS). Additionally, the trend to rate Color Evasion statements as more acceptable than unacceptable is also consistent with work showing colorblindness is a preferred strategy used by White people to improve race relations compared to the multiculturalism strategy preferred by people of color (Tarca, 2005). In fact, study 2 by Kanter et al. (2020) found that White participants did engage in significantly more colorblind statements compared to other forms of microaggressions during a live interaction possibly indicating comfort with this strategy.

We replicated the construct validity of the ARMS: our confirmatory factor analysis validated the original four-factor structure (Power Evasion, Color Evasion, Victim Blaming, and Exoticizing) proposed by Mekawi and Todd (2018). While we confirmed the four distinct factors, at the bivariate level we did find that Power Evasion and Color Evasion were highly correlated. This may be because the strategy used in both sets of items is to *avoid* making mention of race, color, and power differentials. In contrast, the conversational examples in the other two scales were explicit mentions of race (and, in the case of exoticization, of sexualized aspects of the other person). Exoticization's lower correlations with the other ARMS subscales could be an indication of its conflation of racism and sexism. Nevertheless, we believe it is critical to maintain this subscale as part of

the ARMS, consistent with an emphasis on intersectionality (Crenshaw, 1989). It may also be important to consider how other oppressed identities may interact with race to produce additional shifts in the acceptability of racial microaggressions. For instance, items that focus on both race and class (*You graduated college? Wow, that's surprising!*) or race and heterosexism (*You can't be gay, you're Black.*) might be useful to include in a future expansion of the ARMS.

We found participants' identification with Whiteness was associated with higher acceptability scores of Power Evasion, Victim Blaming, and Color Evasion microaggressions. While previous research suggested White people are more likely to hold racist beliefs (Carter, 1990; Pope-Davis & Ottavi, 1994), there has also been research suggesting that White individuals in both student and community samples rate the likelihood of engaging in microaggression similarly (Williams, 2021). This suggests that individual differences (e.g., how much someone identifies with whiteness or the other identities they hold) within a single (White) racial group may be important to assess and measure. In the current study, White identification was conceptualized as encompassing three major components: being proud to be White, a strong need to belong to one's White racial group, and a strong sense that White people should be loyal to one another. One aspect of being proud to be White included a question: "How often do you think of yourself as a member of this racial/ethnic group: White?" While one of the privileges that come with Whiteness is not having to spend much time thinking about being White, this item still correlated highly with other items in the measure. It is possible that in this political context where we have seen a push from politicians encouraging White people to be proud of their whiteness and stop feeling bad about their race (e.g., passage of bills to ban discussion of topics that make White people feel bad, such as banning critical race theory from public education curricula), identifying with Whiteness has become normalized. Additionally, researchers have found that when people do actively think about themselves as White, they may develop more of an ingroup mindset and endorse more negative views of multiculturalism (Rios & Mackey, 2022). Furthermore, White identification that solidifies the ingroup and outgroup dichotomy can foment a sense of grievance justification for overt violence (Reyna et al., 2022).

With this conceptualization of White identification and its association with higher acceptability of microaggressions, there may be additional constructs and outcomes related to racist behavior and beliefs that should be explored. Microaggression acceptability may indeed be only the tip of the iceberg as we continue to see a rise in White nationalist and White pride events like the Proud Boys rallies and the Capitol insurrection. However, other models of White racial identity focus instead on developing an interconnected and responsible sense of whiteness

in a world that privileges whiteness over other racial groups. As Helms (1995) theorized, there are stages of identity development whereby a White person can develop an anti-racist identity. The methods we used to assess White identification were not focused on developing a greater sense of awareness of White privilege and oppression of people of color; instead, it captured what might be considered the earlier stages of Helm's model of White identity development. If we had instead assessed White identity from the framework of greater awareness of White privilege and an increased commitment to anti-racism, we expect we would have obtained the opposite results.

In addition to White identification, we found that participants who identify as men were more likely than women to rate Victim Blaming, Power Evasion, and Exoticization microaggressions as acceptable to say, controlling for White identification. This relation was strongest in the Victim Blaming and Exoticization categories. As prior research on gender differences in racist beliefs and attitudes suggests (Carter, 1990; Carter et al., 2004; Pope-Davis & Ottavi, 1994), it is possible that women may be less likely than men to find these statements acceptable because of their own experiences with marginalization, gaslighting, and victim blaming from men. This is further supported by research from Williams and Sharif (2021) which found that allies are often more likely to come from marginalized backgrounds. In their work to develop a racial allyship scale, women participants had significantly higher allyship scores than men. In addition, as we noted above, the exoticization category seems to highlight a more intersectional form of microaggression (racism and sexism). Given women's position as lower in the patriarchy-based system, it is very likely that they would rate some of the Exoticization statements as less acceptable to say. Interestingly, however, at the bivariate level women were *more* likely to report higher scores on the White identification scales than were men. It is possible that being in a marginalized group on one social dimension (gender) is associated with a need to be more identified with a higher status group on another social dimension (race). Previous literature on White feminism and its history, highlights how White women while fighting for equality for women often engaged in racism (Schuller, 2022). For instance, in the past White women have actively used their Whiteness to advocate for their right to vote and deny Black men (considered the next in line) the right to vote. They have also excluded women of color from their feminism and suffrage movements. In fact, Williams (2021) and other researchers have highlighted White feminism's role as a racist ideology that claims to promote equality for all women while actively ignoring and suppressing the needs of women of color (Liu, 2020). With this longstanding history, it would be interesting to see whether these results replicate in new samples.

Strengths, Limitations, and Future Directions

We were able to replicate and extend Mekawi and Todd's (2018) initial validation of the ARMS. One of the strengths of this study was the more politically conservative sample we used; Mekawi and Todd (2018) indicated a need for this in their original study. We also further confirmed that the Power Evasion and Color Evasion microaggressions seem to be the type of microaggressions that White participants find as acceptable to say. This finding has been shown in both the original Mekawi and Todd (2018) study and using a different type of measure in Williams' study (2021). Given the continued relevance of this finding, future research should explore how tailoring interventions to the evasion type of microaggressions may affect acceptability and engagement rates from White people. Additionally, we found conceptually relevant links between strong identification with Whiteness and greater acceptability of racial microaggressions in most of their forms. Furthermore, there are not many comprehensive measures of racial identification that can be reliably used with White people. While the MEIM-R (Phinney & Ong, 2007) is often used as a measure of ethnic identity, research suggests that ethnic identity is often more salient in people of color compared to White people and may be more beneficial for cross-cultural research than for within group comparisons (Brown et al., 2014; Chakawa et al., 2015). Additionally, other studies focused on White identification measured identification with just one item which has the potential to miss important aspects of what identification with Whiteness might mean (Earle & Hodson, 2022; Rios & Mackey, 2022).

However, our study's findings should be considered in light of its limitations. For instance, while comprehensive, our measurement of White identification, based in a collective identity model, was a novel approach and may not generalize to new samples. Further testing of the validity and reliability of this White identification approach is needed. It is also important to note that while the existing literature on microaggressions highlights many themes (e.g., "Where are you really from?" to an Asian person), the ARMS only assesses 34 microaggressions across four subscales. The ARMS is restricted in that it does not include broader microaggressions or those that target other minoritized groups, such as sexual or religious minorities. Future microaggressions research should consider varying power dynamics and other contextual factors, in addition to expanding the types of microaggressive behaviors that are being rated. Additionally, the sample used in this study was limited in terms of gender identity as we did not have non-binary participants. Future research should make efforts to include participants on all places of the gender spectrum; we may find differences in acceptability of microaggressions due to a marginalized gender status. Finally, while the ARMS holds much promise

for studies of racial microaggressions, we did not include measures of actual microaggressive behavior. Future studies would benefit from a multi-trait, multi-method approach, such as the approach in Study 2 from Kanter et al. (2020) to further understand proclivities for race-based discrimination.

Conclusion

Our study replicates and extends evidence of the utility of the ARMS. Using a more politically conservative sample, we found no differences between our sample and the original White sample in Mekawi and Todd's (2018) original study. We confirmed the four-factor structure of the ARMS, created a White identification measure, and found that higher White identification was related to finding microaggressions more acceptable to say. Our data suggests that identification with Whiteness may predict how likely White people are to voice racial/ethnic microaggressions toward people of color.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s12552-022-09369-0>.

References

- Abdullah, T., Graham-LoPresti, J. R., Tahirkheli, N. N., Hughley, S. M., & Watson, L. T. J. (2021). Microaggressions and posttraumatic stress disorder symptom scores among Black Americans: Exploring the link. *Traumatology*, 27, 244–253. <https://doi.org/10.1037/trm0000259>
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84, 888–918. <https://doi.org/10.1037/0033-2909.84.5.888>
- American Council on Education. (2012). *On the importance of diversity in higher education*. Retrieved December 9, 2021, from <https://www.acenet.edu/Documents/BoardDiversityStatement-June2012.pdf>
- Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin*, 130, 80–114. <https://doi.org/10.1037/0033-2909.130.1.80>
- Auguste, E. E., Cruise, K. R., & Jimenez, M. C. (2021). The effects of microaggressions on depression in young adults of color: Investigating the impact of traumatic event exposures and trauma reactions. *Journal of Traumatic Stress*, 34, 985–994. <https://doi.org/10.1002/jts.22675>
- Bird, C. M., Webb, E. K., Schramm, A. T., Torres, L., Larson, C., & deRoos-Cassini, T. A. (2021). Racial discrimination is associated with acute posttraumatic stress symptoms and predicts future posttraumatic stress disorder symptom severity in trauma-exposed Black adults in the United States. *Journal of Traumatic Stress*. <https://doi.org/10.1002/jts.22670>
- Bonilla-Silva, E. (2017). *Racism without Racists: Color-blind racism and the persistence of racial inequality in America* (5th ed.). Rowman & Littlefield.
- Brown, S. D., Unger Hu, K. A., Mevi, A. A., Hedderson, M. M., Shan, J., Quesenberry, C. P., & Ferrara, A. (2014). The multigroup ethnic identity measure—revised: Measurement

- invariance across racial and ethnic groups. *Journal of Counseling Psychology*, 61(1), 154–161. <https://doi.org/10.1037/a0034749>
- Carter, R. T. (1990). The relationship between racism and racial identity among White Americans: An exploratory investigation. *Journal of Counseling & Development*, 69, 46–50. <https://doi.org/10.1002/j.1556-6676.1990.tb01455.x>
- Carter, R. T., Helms, J. E., & Juby, H. L. (2004). The relationship between racism and racial identity for White Americans: A profile analysis. *Journal of Multicultural Counseling and Development*, 32, 2–17. <https://doi.org/10.1002/j.2161-1912.2004.tb00357.x>
- Chakawa, A., Butler, R. C., & Shapiro, S. K. (2015). Examining the psychometric validity of the Multigroup Ethnic Identity Measure-Revised (MEIM-R) in a community sample of African American and European American adults. *Cultural Diversity and Ethnic Minority Psychology*, 21(4), 643.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 1989 issue 1 article 8, 139–167.
- Earle, M., & Hodson, G. (2022). Dealing with declining dominance: White identification and anti-immigrant hostility in the US. *Group Processes & Intergroup Relations*, 25(3), 727–745. <https://doi.org/10.1177/13684302211032274>
- Grzanka, P. R., Frantell, K. A., & Fassinger, R. E. (2020). The White Racial Affect Scale (WRAS): A measure of white guilt, shame, and negation. *The Counseling Psychologist*, 48(1), 47–77. <https://doi.org/10.1177/0011000019878808>
- Helms, J. E. (1995). An update of Helm's white and people of color racial identity models. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 181–198). Sage Publications Inc.
- Kanter, J. W., Williams, M. T., Kuczynski, A. M., Corey, M. D., Parigoris, R. M., Carey, C. M., Manbeck, K. E., Wallace, E. C., & Rosen, D. C. (2020). The measurement and structure of micro-aggressive communications by White people against Black people. *Race and Social Problems*, 12(4), 323–343. <https://doi.org/10.1007/s12552-020-09298-w>
- Kanter, J. W., Williams, M. T., Kuczynski, A. M., Manbeck, K. E., Debreaux, M., & Rosen, D. C. (2017). A preliminary report on the relationship between microaggressions against Black people and racism among White college students. *Race and Social Problems*, 9(4), 291–299. <https://doi.org/10.1007/s12552-017-9214-0>
- Kirkinis, K., Pieterse, A. L., Martin, C., Agiliga, A., & Brownell, A. (2021). Racism, racial discrimination, and trauma: A systematic review of the social science literature. *Ethnicity & Health*, 26(3), 392–412. <https://doi.org/10.1080/13557858.2018.1514453>
- Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct validity of the need to belong scale: Mapping the nomological network. *Journal of Personality Assessment*, 95, 610–624. <https://doi.org/10.1080/00223891.2013.819511>
- Lee, R. T., Perez, A. D., Boykin, C. M., & Mendoza-Denton, R. (2019). On the prevalence of racial discrimination in the United States. *PLoS ONE*, 14, e0210698. <https://doi.org/10.1371/journal.pone.0210698>
- Lilienfeld, S. O. (2017). Microaggressions: Strong claims, inadequate evidence. *Perspectives on Psychological Science*, 12, 138–169. <https://doi.org/10.1177/1745691616659391>
- Liu, H. (2020). *Redeeming leadership: An anti-racist feminist intervention*. Bristol University Press. <https://doi.org/10.2307/j.ctvtv93zk.11>
- Major, B., Gramzow, R. H., McCoy, S. K., Levin, S., Schmader, T., & Sidanius, J. (2002). Perceiving personal discrimination: The role of group status and legitimizing ideology. *Journal of Personality and Social Psychology*, 82, 269. <https://doi.org/10.1037/0022-3514.82.3.269>
- McConahay, J. B. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91–125). Academic Press.
- Mekawi, Y., & Todd, N. R. (2018). Okay to say?: Initial validation of the acceptability of racial microaggressions scale. *Cultural Diversity and Ethnic Minority Psychology*, 24, 346–362. <https://doi.org/10.1037/cdp0000201>
- Nadal, K. L., Griffin, K. E., Wong, Y., Davidoff, K. C., & Davis, L. S. (2017). The injurious relationship between racial microaggressions and physical health: Implications for social work. *Journal of Ethnic & Cultural Diversity in Social Work*, 26, 6–17. <https://doi.org/10.1080/15313204.2016.1263813>
- Neville, H. A., Awad, G. H., Brooks, J. E., Flores, M. P., & Bluemel, J. (2013). Color-blind racial ideology: Theory, training, and measurement implications in psychology. *American Psychologist*, 68(6), 455–466. <https://doi.org/10.1037/a0033282>
- Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology*, 54(3), 271–281. <https://doi.org/10.1037/0022-0167.54.3.271>
- Pierce, C. (1970). Offensive mechanisms. In F. B. Barbour (Ed.), *The Black seventies* (pp. 265–282). Porter Sargent.
- Pope-Davis, D. B., & Ottavi, T. M. (1994). The relationship between racism and racial identity among White Americans: A replication and extension. *Journal of Counseling & Development*, 72, 293–297. <https://doi.org/10.1002/j.1556-6676.1994.tb00937.x>
- Reyna, C., Bellovary, A., & Harris, K. (2022). The psychology of White nationalism: Ambivalence towards a changing America. *Social Issues and Policy Review*, 16(1), 79–124. <https://doi.org/10.1111/sipr.12081>
- Rios, K., & Mackey, C. D. (2022). “White” self-identification: A source of uniqueness threat. *Social Psychological and Personality Science*, 13(2), 416–424. <https://doi.org/10.1177/19485506211031082>
- Roberts, S. O., Bareket-Shavit, C., Dollins, F. A., Goldie, P. D., & Mortenson, E. (2020). Racial inequality in psychological research: Trends of the past and recommendations for the future. *Perspectives on Psychological Science*, 15(6), 1295–1309. <https://doi.org/10.1177/1745691620927709>
- RStudio Team. (2019). *RStudio: Integrated development for R*. RStudio, PBC.
- Schuller, K. (2022). *The trouble with white women: A counter history of feminism*. Bold Type Books.
- Spanierman, L. B., & Smith, L. (2017). Roles and responsibilities of white allies: Implications for research, teaching, and practice. *The Counseling Psychologist*, 45(5), 606–617. <https://doi.org/10.1177/0011000017717712>
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist*, 62, 271–286. <https://doi.org/10.1037/0003-066X.62.4.271>
- Tarca, K. (2005). Colorblind in control: The risks of resisting difference amid demographic change. *Educational Studies*, 38(2), 99–120. https://doi.org/10.1207/s15326993es3802_3
- Williams, M. T. (2020). Microaggressions: Clarification, evidence, and impact. *Perspectives on Psychological Science*, 15, 3–26. <https://doi.org/10.1177/1745691619827499>

- Williams, M. T. (2021). How white feminists oppress black women. In B. Labate & C. Cavnar (Eds.), *Psychedelic justice: On gender, diversity, sustainability, reciprocity, and cultural appropriation* (pp. 21–27). Synergetic Press.
- Williams, M. T., & Sharif, N. (2021). Racial allyship: Novel measurement and new insights. *New Ideas in Psychology*, 62(100865), 1–10. <https://doi.org/10.1016/j.newideapsych.2021.100865>
- Williams, M. T., Sharif, N., Strauss, D., Gran-Ruaz, S., Bartlett, A., & Skinta, M. D. (2021). Unicorns, leprechauns, and White allies:

Exploring the space between intent and action. *The Behavior Therapist*, 44(6), 272–281.

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