



Applying the Bystander Intervention Model to Racial Microaggressions in College Students

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Abstract

We propose an innovative approach to studying interventions in racial microaggression by applying the five-step bystander intervention model (i.e., Notice the Event, Interpret the Event as Needing Intervention, Accept Responsibility, Know How to Intervene, and Act). The goals were to develop a measure of bystander intervention in racial microaggressions, explore support for a conceptual model, and measure differences between Black, Indigenous, and People of Color (BIPOC) and White college students. The sample consisted of 336 BIPOC and 191 White participants ages 18 to 25. Participants completed online surveys reporting their engagement in each of the five steps. We found that—overall—BIPOC and White participants have similar experiences with bystander intervention in racial microaggressions. There was evidence of measurement invariance across BIPOC and White participants for the survey, similar paths between the steps on the conceptual model, and similar frequency of engagement on each of the steps. Implications for practice, research, teaching, and advocacy are provided.

Keywords Bystander intervention · Racial microaggressions · Microinterventions · BIPOC · Microaggression

Racial microaggressions are frequent and damaging verbal, behavioral, and environmental messages that are experienced by Black, Indigenous, and other People of Color

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(BIPOC; Marks et al., 2022; Nadal et al., 2014; Sue et al., 2007, 2009, 2019). Racial microaggressions have been concurrently associated with poorer adjustment in BIPOC emerging adults (ages 18 to 25 years; e.g., Liao et al., 2016; Marks et al., 2022; Nadal et al., 2014; Sue et al., 2009). Specifically, research with BIPOC emerging adults has demonstrated that experiences with racial microaggressions are negatively associated with mental health ($r = -.11$; Nadal et al., 2014). Other scholars have demonstrated that racial microaggressions are associated positively with anxiety ($r = .28$; Liao et al., 2016), depression ($r = .23$ to $.35$ for different types of racial microaggressions; Marks et al., 2021), traumatic stress ($r = .42$; Nadal et al., 2019), as well as risky behaviors, such as sexual risk behaviors ($\beta = .556$; Marks et al., 2022), and alcohol misuse ($\beta = .219$; Blume et al., 2012). Despite these findings, little empirical research has focused on ways to prevent or intervene when they occur. In this study, we apply the bystander intervention theory (Latané & Darley, 1970) to the context of racial microaggressions. As a foundation for this work, psychometrically sound measurement tools are needed. Hence, the goal of the current study was to first examine the psychometric properties of a measure of bystander intervention in

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racial microaggression, then explore support for the five-step model and examine differences between BIPOC and White emerging adult college students.

Racial Microaggressions

The term “microaggression” was first coined by Pierce (1970) to highlight implicit bias and its manifestation as subtle acts of discrimination towards BIPOC populations. In 2007, Sue and colleagues proposed three types of microaggressions: microassaults (i.e., an intentionally negative verbal or non-verbal racial attack; e.g., calling an Asian American student a racial slur), microinvalidations (i.e., an often, unintentional message that minimizes the lived experiences of BIPOC individuals; e.g., “I don’t see race”), and microinsults (i.e., an often, unintentional comment that communicates rudeness and degrades a person’s racial identity; e.g., “How did you get in to this doctoral program?”).

Today, more overt forms of discrimination have become less socially acceptable, but in their place, racial microaggressions have emerged (Sue et al., 2007). These sometimes daily forms of racial discrimination manifest in diverse ways, and they tend to come from friends and individuals that the target trusts and holds in high esteem (Sue et al., 2007) making them less easy to discount. Often racial microaggressions can take the form of a seemingly well-intentioned compliment, which leads the target to question their hurt feelings (Sue et al., 2007). For example, a Black student is being told that they are a credit to their race by their course instructor. This comment may be meant to compliment the student, but the underlying communication is that Black students are not often strong students. Comments such as these may confuse the target because they are unsure if the statement is indeed a compliment or the opposite. Solórzano et al. (2000) noted that the insidious and ambiguous nature of racial microaggressions can be related to more adverse outcomes than more overt forms of discrimination because these experiences are more frequent, and their ambiguity leads targets to ruminate on these experiences (Solórzano et al., 2000).

Racial microaggressions are described as daily, suggesting a high prevalence, but surprising prevalence rates have not received much attention in the literature. A Gallup poll in 2020 indicated that Black adults were disproportionately affected by microaggressions (Lloyd, 2020). The poll asked Black, Hispanic, Asian, and White adults to indicate

the frequency with which seven different microaggressions occurred in the past year. For nearly all questions, Black adults had the highest rates of endorsement, followed by Hispanic adults, Asian adults, then White adults with the lowest rates of frequency. For example, 5% of White adults compared to 32% of Black adults reported people acting like they were better than them, 5% of White and 25% of Black adults reported that people acted like they were not smart, and 4% of White and 20% of Black adults perceived that they were treated with more disrespect than others. The poll also found that Black adults under the age of 55 reported many more microaggression experiences than Black adults over the age of 56. Despite evidence that microaggressions are frequent (e.g., Lloyd, 2020; Nadal et al., 2014) and have been associated with negative health outcomes for BIPOC college students, there are key gaps in our understanding of how racial microaggressions can be disrupted by bystanders, or third parties witnessing a racial microaggression.

Role of Bystanders in Racial Microaggressions: Theoretical Frameworks

The role of bystanders in social situations has been under investigation in empirical literature for several decades. The classic work from social psychologists Latané and Darley (1970) explored bystander behavior in emergency situations. Through their work, Latané and Darley became known for conceptualizing the bystander effect (i.e., the likelihood of someone intervening in an emergency decreases as the number of bystanders increases) and outlining the five-step bystander intervention model. The five steps are Notice the Event, Interpret the Event as Needing Intervention, Accept Responsibility, Know How to Intervene, and Act. See Fig. 1 for a graphical representation of the model.

To our knowledge, the five-step bystander intervention model has not been used as a framework for intervening in racial microaggressions, but there are existing empirical findings that map onto the five steps. The first step is to notice the event. Potential interveners need to notice the racial microaggressions. Latané and Rodin (1969) noted that situational ambiguity can pose a challenge to noticing events. A challenge for noticing is the sometimes unintentional or covert nature of the microaggressions (Sue et al., 2007) may make it difficult for individuals to notice and identify actions as a microaggression.

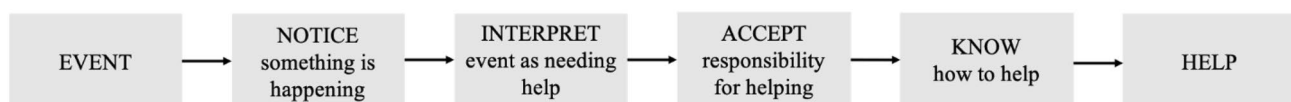


Fig. 1 Bystander intervention model diagram

The second step is to interpret the event as one warranting intervention. Interpretation can be impeded through situational ambiguity as well as pluralistic ignorance (Latané & Darley, 1970). When a person is uncertain about whether an event is potentially problematic, they look to other witnesses to determine if a response is needed. If others are uncertain and do not seem to be reacting, then no one intervenes. Racial microaggressions are subtle, thus this may enhance the lack of response and continued pluralistic ignorance. Witnesses to racial microaggressions who do not understand and know how to identify them as such may not proceed to the next step of the model if their interpretation of the event is that it is benign.

The third step is to accept responsibility for intervening. When in the presence of others, some witnesses may assume that somebody else will intervene. Latané and Darley (1970) refer to this as diffusion of responsibility. Due to the subtle nature of racial microaggressions, people may be more likely to ignore or pretend not to see these events (Sue et al., 2019). Moreover, the current sociopolitical climate in the USA (Adames et al., 2022) could scare people away from intervening since they may be uncertain about how the target or perpetrator may react, which may be especially true if the people involved are of different races.

The fourth step is to know how to intervene or know how to help either due to lack of skill or lack of knowledge. Lacking skill or knowledge about how to intervene could be a barrier to intervening. Yet, if these are malleable, then they could be addressed with training. A review of the literature did not reveal trainings specific to teaching multiple intervention options, but there is support for teaching potential interveners about racial microaggressions (e.g., Banks et al., 2022).

The final step is to act or implement the intervention decision. With this last step, we draw upon the conceptual work of Sue et al. (2019). Sue and colleagues proposed the idea of microinterventions which are “everyday words or deeds.... that communicates to targets of microaggressions (a) validation of their experiential reality, (b) value as a person, (c) affirmation of their racial or group identity, (d) support and encouragement, and (e) reassurance that they are not alone” (Sue et al., 2019, p. 132). Sue and colleagues (2019) propose four strategic goals for microinterventions. The first strategic goal is to “make the invisible visible” by choosing not to ignore the microaggression but to point it out to the perpetrator. The second strategic goal is to “disarm the microaggression/macroaggression” by stopping the comment or behavior. This may include showing disagreement, challenging what was said or done, or by highlighting its negative impact. The third strategic goal is to “educate the perpetrator” by engaging the perpetrator in a dialogue about the harmful comment or action. Finally, the fourth strategic goal is

“seek external reinforcement or support” by reaching to institutional authorities for support.

Related Bystander Intervention Work

Though the five-step bystander intervention model has not been used to understand the role of bystanders in racial microaggressions, the theory has been applied to related socially aggressive experiences, such as bullying and sexual harassment. Bullying (i.e., unwanted, repeated physical, verbal, relational, and /or cyber aggressive behavior(s) that involves an observed or perceived power imbalance; Gladden et al., 2014) and sexual harassment (i.e., unwanted sexual behavior that interferes with a person’s life; American Association of University Women, 2001) are socially-oriented aggressive acts, much like racial microaggressions. Though there are key differences between racial microaggressions, bullying, and sexual harassment (e.g., intentionality, may not be racially charged), there are similarities that make reasonable comparisons possible. For example, these aggressions can take different forms (such as physical, verbal, or social), can be committed in person or online, and can cause social, emotional, and academic difficulties. This alignment positions these bodies of literature to inform each other.

The literature on bystander intervention in bullying and sexual harassment has been growing. Since 2014, there has been a specific focus on the application of the five-step bystander intervention model to these types of aggressive behavior. In 2014, Nickerson and colleagues created and validated a measure to assess engagement in all five steps of the bystander intervention model for bullying and sexual harassment among high school youth. They tested a “proof of concept” model using path analysis to determine if each step of the model predicted the following step. Their work was replicated and extended to younger age groups. Jenkins and Nickerson (2017, 2019) adapted the survey to focus on the five-step model for bullying among elementary and middle school youth, which was further validated by Jenkins et al. (2018). Across these studies, there has been strong support for the idea that the five-step bystander intervention model is a useful framework for conceptualizing bystander behavior which can be measured using a survey with robust evidence of reliability and validity.

For the current study, we used the five-step bystander intervention framework (Latané & Darley, 1970) and the empirical work of Jenkins and Nickerson (e.g., Jenkins & Nickerson, 2017, 2019; Jenkins et al., 2018; Nickerson et al., 2014) to inform the development of a measure of bystander intervention in racial microaggressions. Bystander intervention in racial microaggressions has received little empirical attention. Accordingly, we developed a new survey instrument as a next step to advancing the literature. Adapting

an existing bystander intervention measure that is built on a strong theoretical framework and is already validated with elementary-high school youth provides a head start to this challenge. The adaptations we made to the existing Bystander Intervention Measure (Nickerson et al., 2014) are outlined in the [Method](#) section.

Bystander Intervention in Racial Microaggressions: Differences Across Racial Groups

It is important to examine the bystander experiences in racial microaggressions of BIPOC and White people separately for two primary reasons. First, Spanierman et al. (2021) noted that racial microaggressions are unique to people belonging to minoritized groups. This means that White people are very unlikely to be the targets of racial microaggressions given the broader context of White Supremacy. Thus, a White person would intrinsically have a distinct experience with intervening in racial microaggressions compared to BIPOC.

Second, some research suggests that the racial identities of the target and bystander may shape how the interventions are perceived by a perpetrator. For example, when a target and the bystander have a shared racial identity, the bystander who intervenes is more likely to be seen negatively and their intervention discounted by the perpetrator in future similar interactions (Gulker et al., 2013).

Additional research has demonstrated that White perpetrators are more likely to seriously consider their words and actions when the bystander who intervened is White instead of Black (Rasinski & Czopp, 2010). In the case of microaggressions, Zou and Dickter (2013) found that a White witness perceived a Black bystander who responded to a microaggression more negatively than a White bystander when the incident they witnessed with the target and perpetrator rated highly on ambiguity, which racial microaggressions often are. Overall, decisions to intervene as a bystander may be influenced by the racial identities of the target and the bystander. Moreover, the ways in which the bystander is perceived when they intervene are also dependent on the racial identities of the parties involved.

Because of these differences in experiences, it is important to examine whether measurement tools, models, and experiences of bystander intervention in racial microaggressions are similar for White and BIPOC individuals. We acknowledge that BIPOC individuals likely experience unique racial microaggressions depending on their specific racial and ethnic identities. For this first psychometric analysis of how the bystander intervention perspective can explain

intervention in racial microaggressions, however, we focus only on a comparison between BIPOC and White students for the current study.

The Current Study

There is extensive evidence regarding the harmful effects of racial microaggressions (Marks et al., 2021; Nadal et al., 2014), but empirical evidence about how to stop or intervene in racial microaggressions is lacking. Sue et al. (2019) outlined options for microinterventions to combat racial microaggressions, but the specific role of bystanders in addressing racial microaggressions has received limited empirical attention. As a first step in addressing this gap in the literature, the current investigation had three primary aims. The first aim was to examine the psychometric properties of an adapted version of the Bystander Intervention Model (Jenkins et al., 2018; Nickerson et al., 2014). The second aim was to test the conceptual model associated with the five-step bystander intervention model where each step of the model predicts the subsequent step for White and BIPOC individuals. This mirrors work done in the bystander intervention in bullying and sexual harassment spheres (e.g., Nickerson et al., 2014). Finally, the third aim of the study was to examine whether White and BIPOC young adults differed on the frequency with which they reported engaging in the five steps of the bystander intervention model.

Method

Participants

There was a total of 536 participants. Participants reported their race and ethnicity as American Indian, Native American, and/or Alaska Native ($N=39$), Asian ($N=67$), Black ($N=102$), Native Hawaiian or Other Pacific Islander ($N=2$), Multiracial ($N=41$), White Hispanic or Latino/a/x ($N=85$), and White Non-Hispanic ($N=191$). For analyses, the White group consisted of the 191 individuals who identified their race as White and did not endorse a Hispanic or Latino/a/x ethnicity. The BIPOC group consisted of all other participants ($N=336$). Participants ranged from 18 to 25 years of age (2.4% 18 years, 5.8% 19 years, 13.7% 20 years, 14.4% 21 years, 9.2% 22 years, 12.5% 23 years, 14.2% 24 years, and 27.7% 25 years). Regarding sexual orientation, 75.5% were straight, 3% gay or lesbian, 16.5% bisexual, 2.6% asexual, 1.1% not sure, 0.9% preferred not to respond, and 0.4% did not provide a response. One quarter (25.8%) were married, 56.4%

single, and 17.3% in a long-term committed partnership. Approximately a third (36.7%) were international students living in the USA.

Measures

The Bystander Intervention Measure for Racial Microaggressions (BIM-RM) was created for this study by adapting a previously published scale that measures the five-step bystander intervention model in relation to bullying and sexual harassment among high school students (Nickerson et al., 2014). The scale was adapted to the racial microaggression context by changing the wording of the items to reflect racial microaggressions and providing a definition of racial microaggressions. The race or ethnicity of potential perpetrators or victims is not mentioned in the directors or items. The adapted scale consists of 26 items across the five subscales: Notice (3 items, e.g., “Racial microaggressions are a problem that I see,” which in the original scale was “Bullying and sexual harassment are problems that I see”), Interpret (3 items, e.g., “Racial microaggressions can hurt someone, even if it was unintentional,” which was originally worded “Bullying and sexual harassment can hurt someone, even if it was unintentional”), Accept Responsibility (3 items, e.g., “I believe that my actions can help stop racial microaggressions,” originally worded “I believe that my actions can help stop bullying and sexual harassment”), Know (3 items, e.g., “I know what to do to get someone to stop engaging in racial microaggressions,” originally worded “I know what to do to get someone to stop engaging in bullying and sexual harassment”), and Act (14 items, e.g., “If I saw a racial microaggression, I would indicate that the perpetrator said something offensive”). For the Act step, the items were drawn from the list of possible microinterventions suggested by Sue et al. (2019). All items are rated on a four-point scale ranging from 1 (really disagree) to 4 (really agree). Psychometric properties of this new version in relation to racial microaggressions among young adults are reported below as part of Aim 1.

Procedures

Prior to data collection, the study and its procedures were approved by the Institutional Review Board (IRB). The revised BIM-RM was created prior to submitting the application to the IRB. A draft of the revised questions was created by the first two authors, then the full research team (i.e., all authors and some members of our respective research teams) reviewed the items and made additional revisions. Participants for the study were recruited using two mechanisms to increase the racial diversity of the sample. First, data was collected using the undergraduate subject pool in the authors’ college, which was located at a predominantly

White institution. Students received course credit for completing the online survey and were entered into a drawing for an Amazon gift card. Second, data was collected using Amazon Mechanical Turk (MTurk). Buhrmester et al. (2011) noted that an advantage to using MTurk is the racial and ethnic diversity of potential participants. Participants were paid \$1.00 for completing the online survey. Participants from the subject pool and MTurk completed the same survey, which was delivered via a link to a Qualtrics survey. Consent was gathered electronically prior to the participants beginning the survey. The average time to complete the questionnaires (i.e., demographic survey and BIM-RM) was 8.6 min.

Data Analysis

Data cleaning, item-level analyses (i.e., skewness, kurtosis), internal consistency calculations, and ANOVAs were conducted using SPSS Statistics version 24, and all other analyses were in Mplus 8.0 (Muthén & Muthén, 2017). In Mplus, data analysis occurred in three stages: (1) initial confirmatory factor analysis with the whole sample, (2) measurement invariance testing of the model across White and BIPOC participants, and (3) structural equation modeling for the conceptual model. Measurement invariance testing is used to determine if the items and underlying structure of a given survey are measured equally across groups; in this case, across the participants who were White and BIPOC. As noted by Pendergast et al. (2017), it is important to conduct measurement invariance testing when comparing groups, which is a key focus of this study. If measurement invariance is established, then researchers can be assured that the underlying foundation of their measurement tool is working similarly for different groups and any differences that are found are not due to measurement error.

Measurement invariance testing of the Bystander Intervention Model for Racial Microaggressions (BIM-RM) scale began by testing a confirmatory factor analysis for the whole sample. This model included all BIM-RM steps (Notice, Interpret, Accept, Know, Act) as latent variables with respective items as indicators (see Fig. 1 for a diagram of this model). For identification purposes, the scale was set by fixing the factor variances to one, as recommended by Little (2013). Model fit was evaluated using χ^2 , root mean square error of approximation (RMSEA), comparative fit index (CFI), and Tucker-Lewis Index (TLI). The χ^2 is sensitive to large sample sizes, so it is recommended that additional fit indices be considered (Hooper et al., 2008; Little, 2013). RMSEA from .08 to .10 and CFI and TLI .85 to .90 indicates mediocre fit, while RMSEA of .05 to .08 and CFI and TLI above .90 indicates acceptable fit (Little, 2013). With applied and/or exploratory work, mediocre and acceptable fit is common and reasonable (Little, 2013).

After the initial confirmatory factor analysis with the whole sample, guidelines presented by Pendergast et al. (2017) and Little (2013) were followed to continue measurement invariance testing. This procedure involves evaluating changes in model fit (particularly changes in RMSEA and CFI) when more constraints to the model occur across three phases: configural invariance, metric (also referred to as weak) invariance, and scalar (also referred to as strong) invariance. In the configural model, factor loadings and intercepts can differ across groups, but in the metric model, these values were constrained across groups. Then, both factor loadings and item thresholds are constrained in the final scalar model. At each step, the model fit of the more restrictive model is compared to the less restrictive model. If the more restrictive model had a better model fit than the less restrictive model, then there is support for measurement invariance. Little (2013) recommends that the change in CFI (Δ CFI) and RMSEA (Δ RMSEA) should be less than .01 and .015, respectively, to have evidence of measurement invariance. If there is measurement invariance, future models can include the entire sample, or if the groups are tested separately, then differences between groups would not be attributed to measurement differences.

Results

Aim 1: Psychometric Properties of Bystander Intervention Model for Racial Microaggressions

To explore the psychometric properties of the newly adapted scale (Aim 1), item-level analyses, a confirmatory factor analysis for the full sample, item-to-subscale correlations, internal consistency, and measurement invariance testing were conducted.

Item-level Analyses

Based on guidelines from DeVellis (2003), characteristics of individual items as well as the entire scale were examined. Item-level analyses included examining the range of item responses, and the mean, skewness, and kurtosis of all items, as well as the item-to-subscale correlations. To conserve space, tables reporting on all data are not included, but the table is available from the first author. The full range of possible scores (i.e., minimum of 1 and maximum of 4) was observed for all items. The mean of the items ranged from 2.91 to 3.23. Skewness values ranged from $-.793$ to $-.247$, and kurtosis values ranged from $-.608$ to 1.487 . Overall, skewness and kurtosis values were low and well under the acceptable ranges for all items.

Confirmatory Factor Analysis

Since the individual items seemed to perform well, a confirmatory factor analysis was conducted with the whole sample in Mplus to examine the overall fit of the model. Little et al. (1999) suggested that exploratory factor analysis is not necessary when a hypothesized factor structure is used to create the items. They also noted that the fit will be better in exploratory factor analysis since all items are allowed to load on all factors. Therefore, exploratory factor analysis was not conducted, as previous work suggested that the measure performed well in situations measuring bystander intervention in bullying and sexual harassment. The Chi-square was significant, $\chi^2(199) = 462.38$, $p < .001$. CFI and TLI were acceptable (.93 and .92, respectively), and RMSEA was good .050 [CI .040 to .056]. All path coefficients between observed variables and the respective latent variable were significant and positive with all standardized path coefficients above .502. The confirmatory factor analysis results suggest good overall fit to the data for the full sample and that measurement invariance testing can be conducted.

Item-to-Subscale Correlations

Since the model fit well and items were well-aligned to their intended subscales, item-to-subscale correlations were examined for each step (i.e., subscale) of the model. The subscale scores were summed scores from the items intended to measure each step. For the Notice subscale, correlations were .743, .758, and .782, all significant at $p < .001$. For Interpret, correlations were .765, .740, and .781, $p < .001$ for all. For Accept, correlations were .759, .789, and .744 ($p < .001$), and for Know, correlations were .772, .795, and .790 ($p < .001$). Finally, the Act step has 14 items, and item-to-subscale correlations ranged from .523 to .687 ($p < .001$).

Internal Consistency

Despite the well-fitting model in the CFA described above, internal consistency was not high, but was acceptable. Alpha coefficients were .634, .638, .644, .690, and .877 for the Notice, Interpret, Accept, Know, and Act steps, respectively. Alpha coefficients between .60 and .80 are moderate but acceptable (Hair, 2009; Nunnally & Bernstein, 1994; Pallant, 2001).

Measurement Invariance

Using the procedures described in the Data Analysis Plan above, measurement invariance was tested for the Bystander Intervention Model in Racial Microaggressions scale. Refer to Table 1 for details. The configural model indicated

Table 1 Tests of measurement invariance between BIPOC and White students for the Bystander Intervention Model in Racial Microaggressions

	χ^2	<i>df</i>	$\Delta\chi^2$	Δdf	RMSEA	CFI	$\Delta RMSEA$	ΔCFI
Overall sample	462.28	199			.05	.93		
Measurement invariance								
Configural	906.41	484			.057	.906		
Metric	935.25	507	28.84	23	.056	.904	.002	.002
Scalar	977.71	531	71.30	24	.056	.900	.000	.004

acceptable fit (χ^2 [484]=906.41, $p < .001$, RMSEA = .057 [CI .052-.063], CFI = .906, TLI = .893). For the BIPOC and White groups, factor loadings were positive and significant. The metric model was then evaluated, and model fit was acceptable (χ^2 [507]=935.25, $p < .001$, RMSEA = .056 [CI .051-.060], CFI = .904, TLI = .896), and this model was compared to the configural model. There was support for the more restrictive model given that the CFI and RMSEA values changed less than .01 and .015, respectively, so there was continued support for measurement invariance. Finally, scalar invariance was evaluated, and model fit was acceptable (χ^2 [531]=977.71, $p < .001$, RMSEA = .056 [CI .051-.062], CFI = .900, TLI = .890). Again, the CFI and RMSEA values changed less than the criteria, so there was support for scalar invariance across groups (see Table 1). The results of the measurement invariance testing suggest that the constructs are being measured in the same way for both BIPOC and White participants in the sample.

Aim 2: Conceptual Model

A multi-group (BIPOC vs. White) structural equation model was conducted to examine the degree to which each step of the five-step bystander intervention model predicted the subsequent step (Aim 2). Results were similar for BIPOC and White participants with the path between each step being positive and significant. For BIPOC and White participants, coefficients from Notice to Interpret were $\beta = .789$, $p < .001$ and $\beta = .846$, $p < .001$, Interpret to Accept $\beta = .660$, $p < .001$ and $\beta = .807$, $p < .001$, Accept to

Know $\beta = .909$, $p < .001$ and $\beta = .956$, $p < .001$, and Know to Act $\beta = .800$, $p < .001$ and $\beta = .828$, $p < .001$, respectively. See Fig. 2 for a diagram of the model with standardized path coefficients and Table 2 for more details.

Aim 3: Comparisons for BIPOC and White Students on Model Steps

To examine group (BIPOC and White) differences in average levels of engagement in the five steps of the bystander intervention model (Aim 3), an ANOVA was conducted. Refer to Table 3 for detailed results of the ANOVA. For Notice the Event, the mean for BIPOC participants ($M = 9.52$, $SD = 1.72$) was higher than White participants ($M = 9.12$, $SD = 1.86$), which is a small effect size. For all other steps, there was not a significant difference between the groups.

Discussion

Bystander intervention in racial microaggressions has received little empirical attention in the literature, though stakeholders agree that preventing, reducing, and intervening in racial microaggressions is important for ameliorating the negative effects for targets (Sue et al., 2019). The current study took an innovative approach to addressing this gap in the literature by drawing from the bystander intervention theory (Latané & Darley, 1970) to study bystander

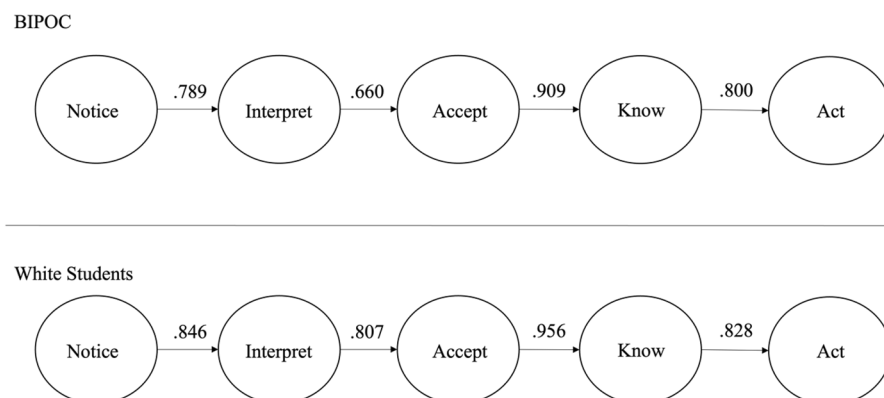
Fig. 2 Diagram of the bystander intervention model with standardized path coefficients for BIPOC and White students

Table 2 Unstandardized and standardized coefficients, standard error, and *p*-values for BIPOC and White students proof of concept model

	BIPOC				White			
	<i>b</i>	β	<i>SE</i>	<i>p</i>	<i>b</i>	β	<i>SE</i>	<i>p</i>
Notice → Interpret	1.285	.789	.058	<.001	1.588	.846	.046	<.001
Interpret → Accept	.540	.660	.058	<.001	.727	.807	.044	<.001
Accept → Know	1.639	.909	.040	<.001	1.928	.956	.032	<.001
Know → Act	.556	.800	.039	<.001	.432	.828	.033	<.001

interventions in racial microaggressions. We first developed a measure of bystander intervention in racial microaggressions by adapting an existing survey that used the Latané and Darley (1970) five-step bystander intervention framework to study bystander intervention in bullying and sexual harassment (Nickerson et al., 2014).

Development of Measurement Tool

Results of the current study provided evidence of reliability and validity for subscale scores derived from the Bystander Intervention Model in Racial Microaggressions (BIM-RM). At the item-level, the full range of possible scores was observed, and skewness and kurtosis values were acceptable for all items. A confirmatory factory analysis suggested strong evidence for a five-factor structure which corresponds to the five steps of the bystander intervention model. Item-to-subscale correlations were acceptable, and the internal consistency alpha coefficients were moderate, but acceptable. Finally, there was evidence of measurement invariance across the White and BIPOC groups, which suggests that the BIM-RM tool works similarly for both groups. Though additional work is needed to explore evidence of validity and other forms of reliability, these results present an important first step towards increasing our understanding of the role of bystanders in racial microaggressions. The availability of a quantitative tool will facilitate future research in this area.

Conceptual Model

For both BIPOC and White college student participants, there were strong positive path coefficients between each step and

its subsequent step. A strength of our innovative approach to studying bystander intervention in racial microaggressions is that we are building our empirical investigation upon two sound theoretical frameworks, namely, the bystander intervention model (Latané & Darley, 1970) and microintervention framework (Sue et al., 2019). The bystander intervention model has been used to study bystander intervention in bullying and sexual harassment in adolescents (e.g., Jenkins & Nickerson, 2017, 2019; Nickerson et al., 2014). Though there are key differences between bullying, sexual harassment, and racial microaggressions, collectively, evidence is mounting about the usefulness of this framework in understanding how to intervene in aggressive social situations. Researchers are currently developing a bystander intervention training built upon this five-step model, and the results of a pilot study are promising (Nickerson et al., 2024). Lessons learned from these studies suggest that the power of bystanders can be harnessed to prevent or reduce aggressive acts.

Comparisons on Bystander Steps

When comparing average levels of engagement in the five steps of the model, few differences emerged between BIPOC and White participants. BIPOC participants had statistically significantly higher scores for Notice compared to White participants, but no other statistically significant differences emerged. In the follow-up analyses, there were no significant differences between Asian, Indigenous, Native American, and/or Alaska Native, Black, and Multiracial participants. It is not surprising that BIPOC participants noticed racial microaggressions more than White young adults, since they are likely more attuned to the possibility of them occurring and how they manifest from their own subjective

Table 3 Means, standard deviations, and ANOVA results for BIPOC and White participants

	BIPOC (<i>N</i> =336)		White (<i>N</i> =191)		<i>F</i>	<i>p</i>	<i>d</i>
	Mean	SD	Mean	SD			
Notice	9.52	1.72	9.12	1.87	.058	.011	.22
Interpret	9.70	1.78	9.71	1.66	1.37	.955	.01
Accept	8.86	1.91	8.83	1.81	.558	.839	.02
Knowledge	8.51	2.01	8.42	1.91	.267	.631	.05
Help	42.21	7.08	42.46	6.82	.017	.690	.04

Effect sizes were calculated with $d > .80$ representing a large effect, $d = .50-.80$ representing a medium effect, $d = .20-.50$ representing a small effect, and $d < .2$ representing a negligible effect (Cohen, 1988)

experiences and the experiences of their family members and peers. No other studies have explored differences in the bystander intervention steps.

Summary of Findings

Overall, BIPOC and White participants have similar experiences with bystander intervention in racial microaggressions. There was evidence of measurement invariance across BIPOC and White participants for the survey, similar paths between the steps on the conceptual model, and similar frequency of engagement on each of the steps. In this study, BIPOC participants noticed racial microaggressions more than White participants, but there were few other statistically significant differences. However, it is important to consider that statistical differences do not always capture practical differences and differences in lived experiences. Due to the way that experiences with bystander intervention were assessed (i.e., survey responses to a predetermined set of items), there may be some restriction in the range of experiences assessed and differences in those experiences. Mixed methods work is needed to continue to explore potential differences in bystander interventions across different racial groups. Qualitative work may help researchers to answer these questions in deeper and more nuanced ways.

Limitations

The study had notable strengths and the potential to ignite empirical study in an emerging area of the literature; however, there are also limitations that should be noted. First, all BIPOC participants were combined into a single group for the analyses. Though this was necessary to have a sufficient sample size for the planned analyses, future studies should aim for having large samples of racial/ethnic groups represented in the US population. While there is a precedent for comparing BIPOC and White groups (e.g., Crisp & Nuñez, 2014; Duffy et al., 2018; Moradi et al., 2010), exploring the experiences of bystander intervention in racial microaggressions separately for different racial and ethnic groups may reveal important contextual influences that are hidden when aggregating BIPOC participants into a single group. Second, this investigation only focused on young adults, nearly all of which were enrolled in college currently or recently. Their experiences may not align with those of children and adolescents, older adults, or even other young adults not enrolled in college. Third, the study relies on self-report measures from surveys without other ratings or other sources of data. Relatedly, participants responded to hypothetical situations about what they would do, not the frequency of their actual bystander intervention behavior. Fourth, we recognize that most published studies have not considered whether individuals with mental health challenges might be more likely

to perceive and report exposure to racial microaggressions; future studies could include racial microaggressions and mental health variables, using longitudinal designs to analyze moderators and mediators of these associations over time. Finally, the measurement tool did not parse out experiences based on the racial or ethnic characteristics of the victim, perpetrator, or bystander. Understanding bystander actions within the context of the intersection of the socio-demographic characteristics of the individuals involved is an important future direction for this research.

Implications for Practice, Research, Advocacy, and Training Programs

Mental health practitioners should be mindful not only of the negative impact of racial microaggressions, but that intervening in racial microaggressions is a multi-step process. Knowledge of this process can be helpful for both clients as well as practitioners. BIPOC practitioners may have to handle racial microaggressions directed towards themselves from clients. White practitioners can intervene if their clients engage in racial microaggressions or may be able to teach the process garnered from this research to clients. For both BIPOC and White clients, there may be distress around witnessing and intervening in racial microaggressions, though the exact nature of this distress has not been explored empirically. In each of these instances, practitioners can think through the five-step model to confront racial microaggressions and teach these skills to both their BIPOC and White clients.

The availability of a survey that measures bystander intervention in racial microaggressions fills a gap in the research literature. The results of this study show some initial support for the Bystander Intervention Model in Racial Microaggression Scale. To continue to improve this scale, future studies should focus on recruiting larger samples of different racial groups to test measurement invariance across all groups, rather than having one BIPOC group. This would recognize the distinct experiences by people of different racial backgrounds. Combining quantitative and qualitative work would also improve our understanding of bystander experiences for all racial groups. Finally, additional indicators of reliability (e.g., test-retest) and validity (e.g., convergent and divergent validity) should be explored. The Act step included 14 intervention options, which were drawn from the microinterventions suggested by Sue et al. (2019). Future studies could explore the utility of having the 14 intervention options for the Act step, or whether they could be parsed into fewer options.

The positive role that bystanders can play by intervening in and preventing racial microaggressions is accepted by many, but related work in the bullying literature has identified some potential negative effects of bystander intervention,

both for the bystander and the victim they are hoping to assist. If someone chooses to intervene, they may be taking a social risk or experience retaliation by the perpetrator they are hoping to stop (Lambe et al., 2017). Healy (2020) raised questions about whether some bystander actions may actually stigmatize victims. Future work is needed to more fully understand these potential iatrogenic effects (i.e., unintended negative effects).

Overall, little is known about how to explicitly teach the skills necessary for intervening. The five-step bystander intervention model (i.e., Notice, Interpret, Accept Responsibility, Know, Act) can be used for developing advocacy efforts. For example, to increase people's awareness of racial microaggressions (i.e., Notice), we should continue teaching students, faculty, staff, and the general public about the definition of racial microaggressions, so they can accurately identify when these situations occur. We should teach them about the importance of intervening and the negative outcomes associated with racial microaggressions to increase the likelihood that they will interpret the situation correctly and accept responsibility for intervening. Explicitly teaching options for intervention can increase people's knowledge and efficacy for intervening.

Future studies should further explore using the bystander intervention model to improve and eventually teach more about how to intervene in racial microaggressions in counseling psychology training programs. Banks et al. (2022) conducted a study that measured changes in knowledge about racial microaggressions for participants in a microaggression workshop. They found significant improvements in participant knowledge about microaggressions. Based on the findings of this study, one way to continue the important work about training witnesses may be to use the bystander intervention model as a framework to break down the steps that lead to intervention.

Subsequent research can examine what predicts engagement in each step and determine if skills or knowledge can be taught to young adults that may help them overcome barriers to intervention. For example, counseling psychologists in training may not know how to identify racial microaggressions or the negative effects that they can have. Moreover, there may be personal characteristics or contextual characteristics that promote or inhibit accepting personal responsibility for intervening, or young adults may lack knowledge about what to do to help. In each scenario, potential interveners could be taught information or skills to help them overcome their respective barrier(s). Training programs should integrate such lessons into their diversity-focused courses and/or through program-wide diversity events, allowing the space to also practice ways of intervening through role plays and in clinical settings.

Conclusion

In this study, we developed an innovative approach to studying racial microaggression interventions by drawing from the scholarship on bystander intervention. We applied the five-step bystander intervention model consisting of Notice the Event, Interpret the Event as Needing Intervention, Accept Responsibility, Know how to Intervene, and Act. We found that BIPOC and White participants have similar experiences with bystander intervention in racial microaggressions. There was evidence of measurement invariance across BIPOC and White participants for the scale, similar paths between the steps on the conceptual model, and similar frequency of engagement on each of the steps. Implications for practice, research, teaching, and advocacy are rooted in anti-racist efforts that can be implemented at multiple levels.

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Data Availability Not applicable.

Data, Materials, and/or Code Availability Available upon request.

Declarations

Ethics Approval IRB approval was provided prior to data collection.

Research Involving Human Participants All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Consent to Participate Active consent was obtained for all individual participants included in the study. Passive parental consent and student assent were obtained as described in the [Procedures](#) section.

Conflict of Interest The authors declare no competing interests.

References

- Adames, H. Y., Chavez-Dueñas, N. Y., Lewis, J. A., Neville, H. A., French, B. H., Chen, G. A., & Mosley, D. V. (2022). Radical healing in psychotherapy: Addressing the wounds of racism-related stress and trauma. *Psychotherapy, Advance Online Publication*. <https://doi.org/10.1037/pst0000435>
- American Association of University Women. (2001). *Hostile hallways: The AAUW survey of sexual harassment in America's schools*. Washington, DC.
- Banks, B. M., Adams, D. F., AuBuchon, S., Hynes, K., & Torres Gonzalez, N. (2022). Factors influencing satisfaction with a microaggression bystander intervention. *Journal of Human Behavior in the Social Environment*, 33(4), 1–17. <https://doi.org/10.1080/10911359.2022.2027316>
- Blume, A. W., Lovato, L. V., Thyken, B. N., & Denny, N. (2012). The relationship of microaggressions with alcohol use and anxiety among ethnic minority college students in a historically White

- institution. *Cultural Diversity and Ethnic Minority Psychology*, 18(1), 45–54. <https://doi.org/10.1037/a0025457>
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high quality, data? *Perspectives on Psychological Science*, 6(1), 3–5. <https://doi.org/10.1177/1745691610393980>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Lawrence Erlbaum.
- Crisp, G., & Nuñez, A. (2014). Understanding the racial transfer gap: Modeling underrepresented minority and nonminority students' pathways from two-to four-year institutions. *The Review of Higher Education*, 37(3), 291–320. <https://doi.org/10.1353/rhe.2014.0017>
- De Vellis, R. F. (2003). *Scale development: Theory and applications* (2nd ed., Vol. 26). Thousand Oaks, CA: Sage Publications.
- Duffy, R. D., Velez, B. L., England, J. W., Autin, K. L., Douglass, R. P., Allan, B. A., & Blustein, D. L. (2018). An examination of the Psychology of Working Theory with racially and ethnically diverse employed adults. *Journal of Counseling Psychology*, 65(3), 280–293. <https://doi.org/10.1037/cou0000247>
- Gladden, R. M., Vivolo-Kantor, A. M., Hamburger, M. E., & Lumpkin, C. D. (2014). *Bullying surveillance among youth: Uniform definitions for public health and recommended data elements, version 1.0*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention and U.S. Department of Education.
- Gulker, J. E., Mark, A. Y., & Monteith, M. J. (2013). Confronting prejudice: The who, what, and why of confrontation effectiveness. *Social Influence*, 8(4), 280–293. <https://doi.org/10.1080/15534510.2012.736879>
- Hair, J. F. (2009). *Multivariate data analysis* (7th ed.). Prentice Hall.
- Healy, K. L. (2020). Hypotheses for possible iatrogenic impacts of school bullying prevention programs. *Child Development Perspectives*, 14(4), 221–228. <https://doi.org/10.1111/cdep.12385>
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6, 53–60.
- Jenkins, L. N., & Nickerson, A. (2019). Bystander intervention in bullying: Role of social skills and gender. *Journal of Early Adolescence*, 39, 141–166. <https://doi.org/10.1177/0272431617735652>
- Jenkins, L. N., & Nickerson, A. B. (2017). Bullying participant roles and gender as predictors of bystander intervention. *Aggressive Behavior*, 43, 281–290. <https://doi.org/10.1002/ab.21688>
- Jenkins, L., Fredrick, S. S., & Nickerson, A. (2018). The assessment of bystander intervention in bullying: Examining measurement invariance across gender. *Journal of School Psychology*, 69, 73–83. <https://doi.org/10.1016/j.jsp.2018.05.008>
- Lambe, L. J., Hudson, C. C., Craig, W. M., & Pepler, D. J. (2017). Does defending come with a cost? Examining the psychosocial correlates of defending behaviour among bystanders of bullying in a Canadian sample. *Child Abuse & Neglect*, 65, 112–123. <https://doi.org/10.1016/j.chiabu.2017.01.012>
- Liao, K. Y., Weng, C. Y., & West, L. M. (2016). Social connectedness and intolerance of uncertainty as moderators between racial microaggressions and anxiety among Black individuals. *Journal of Counseling Psychology*, 63(2), 240–246. <https://doi.org/10.1037/cou0000123>
- Latané, B., & Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help?* Prentice Hall.
- Latane, B., & Rodin, J. (1969). A lady in distress: Inhibiting effects of friends and strangers on bystander intervention. *Journal of Experimental Social Psychology*, 5(2), 189–202. [https://doi.org/10.1016/0022-1031\(69\)90046-8](https://doi.org/10.1016/0022-1031(69)90046-8)
- Little, T. D. (2013). *Longitudinal structural equation modeling*. Guilford Press.
- Little, T. D., Lindenberger, U., & Nesselroade, J. R. (1999). On selecting indicators for multivariate measurement and modeling with latent variables: When “good” indicators are bad and “bad” indicators are good. *Psychological Methods*, 4, 192–211. <https://doi.org/10.1037/1082-989X.4.2.192>
- Lloyd, C. (2020). Black adults disproportionately experience microaggressions. *Gallup poll*. Retrieved on January 5, 2024, from <https://news.gallup.com/poll/315695/black-adults-disproportionately-experience-microaggressions.aspx>
- Marks, L. R., Acuff, S. F., Withers, A. J., MacKillop, J., & Murphy, J. G. (2021). Adverse childhood experiences, racial microaggressions, and alcohol problems in Black and White emerging adults. *Psychology of Addictive Behaviors*, 35(3), 274–282. <https://doi.org/10.1037/adb0000597>
- Marks, L. R., Schimmel-Bristow, A., Harrell-Williams, L., & Hargons, C. (2022). Racial discrimination and risky sex: Examining cognitive-emotional factors in Black college students. *The Counseling Psychologist*, 50(5), 594–621. <https://doi.org/10.1177/00110000221092662>
- Moradi, B., Wiseman, M. C., DeBlaere, C., Goodman, M. B., Sarkees, A., Brewster, M. E., & Huang, Y.-P. (2010). LGB of color and white individuals' perceptions of heterosexist stigma, internalized homophobia, and outness: Comparisons of levels and links. *The Counseling Psychologist*, 38(3), 397–424. <https://doi.org/10.1177/0011000009335263>
- Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide* (6th ed.). Muthén & Muthén.
- Nadal, K. L., Erazo, T., & King, R. (2019). Challenging definitions of psychological trauma: Connecting racial microaggressions and traumatic stress. *Journal for Social Action in Counseling and Psychology*, 11(2), 2–16. <https://doi.org/10.33043/JSACP.11.2.2-16>
- Nadal, K. L., Griffin, K. E., Wong, Y., Hamit, S., & Rasmus, M. (2014). The impact of racial microaggressions on mental health: Counseling implications for clients of color. *Journal of Counseling & Development*, 92(1), 57–66. <https://doi.org/10.1002/j.1556-6676.2014.00130.x>
- Nickerson, A. B., Aloe, A. M., Livingston, J. A., & Feeley, T. H. (2014). Measurement of the bystander intervention model for bullying and sexual harassment. *Journal of Adolescence*, 37, 391–400. <https://doi.org/10.1016/j.adolescence.2014.03.003>
- Nickerson, A. B., Manges, M. E., Casella, J., Huang, Y., Livingston, J. A., Jenkins, L. N., & Feeley, T. H. (2024). Bystander Intervention in Bullying and Sexual Harassment Training: Mixed-Method Evaluation of NAB IT!. *Journal of Prevention and Health Promotion*. <https://doi.org/10.1177/2632077023120023>
- Nunnally, J. C., & Bernstein, I. R. (1994). *Psychometric theory*. McGraw-Hill.
- Pallant, J. (2001). *SPSS survival manual - A step by step guide to data analysis using SPSS for windows (version 10)*, Buckingham Open University Press.
- Pendergast, L. L., von der Embse, N., Kilgus, S. P., & Eklund, K. R. (2017). Measurement equivalence: A non-technical primer on categorical multi-group confirmatory factor analysis in school psychology. *Journal of School Psychology*, 60, 65–82. <https://doi.org/10.1016/j.jsp.2016.11.002>
- Pierce, C. (1970). Offensive mechanisms. In F. B. Barbour (Ed.), *The Black seventies* (pp. 265–282). Porter Sargent.
- Rasinski, H. M., & Czopp, A. M. (2010). The effect of target status on witnesses' reactions to confrontations of bias. *Basic and Applied Social Psychology*, 32(1), 8–16. <https://doi.org/10.1080/01973530903539754>
- Solorzano, D., Ceja, M., & Yosso, T. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *The Journal of Negro Education*, 69(1/2), 60–73. <http://www.jstor.org/stable/2696265>

- Spanierman, L. B., Clark, D. A., & Kim, Y. (2021). Reviewing racial microaggressions research: Documenting targets' experiences, harmful sequelae, and resistance strategies. *Perspectives on Psychological Science*, 16(5), 1037–1059. <https://doi.org/10.1177/17456916211019944>
- Sue, D. W., Lin, A. I., Torino, G. C., Capodilupo, C. M., & Rivera, D. P. (2009). Racial microaggressions and difficult dialogues on race in the classroom. *Cultural Diversity and Ethnic Minority Psychology*, 15(2), 183–190. <https://doi.org/10.1037/a0014191>
- Sue, D. W., Alsaidi, S., Awad, M. N., Glaeser, E., Calle, C. Z., & Mendez, N. (2019). Disarming racial microaggressions: Micro-intervention strategies for targets, White allies, and bystanders. *American Psychologist*, 74(1), 128–142. <https://doi.org/10.1037/amp0000296>
- 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. *American Psychologist*, 62(4), 271–286. <https://doi.org/10.1037/0003-066X.62.4.271>
- Zou, L. X., & Dickter, C. L. (2013). Perceptions of racial confrontation: The role of color blindness and comment ambiguity. *Cultural Diversity and Ethnic Minority Psychology*, 19(1), 92–96. <https://doi.org/10.1037/a0031115>

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