


ORIGINAL ARTICLE

Are solidarity and identification as people of color distinct? Validating new measures across Asian, Black, Latino, and Multiracial Americans

Efrén Pérez¹ , Seth K. Goldman², Yuen J. Huo³, Tatishe Nteta⁴ and Linda R. Tropp⁵

¹Departments of Political Science and Psychology, UCLA, Los Angeles, CA, USA, ²Department of Communication and Commonwealth Honors College, University of Massachusetts, Amherst, MA, USA, ³Department of Psychology, UCLA, Los Angeles, CA, USA, ⁴Department of Political Science, University of Massachusetts, Amherst, MA, USA and ⁵Department of Psychological and Brain Sciences, University of Massachusetts, Amherst, MA, USA

Corresponding author: Efrén Pérez; Email: pereze@ucla.edu

(Received 10 January 2024; revised 19 April 2024; accepted 7 July 2024)

Abstract

Mounting U.S. research suggests many non-White individuals feel solidarity with, and identify as, people of color (PoC). Yet measurement limitations prevent scholars from testing whether these constructs are empirically different. We explain why these concepts diverge and evaluate our claims with an expanded battery of measures across U.S. Asian, Black, Latino, and Multiracial adults ($N = 3402$). Using multi-group confirmatory factor analysis, we show these items capture related but distinct concepts among PoC (*configural invariance*). We then establish that these items uniformly measure each construct across PoC groups (*metric invariance*), with mean level differences validly reflecting actual heterogeneity between groups, rather than measurement artifacts (*scalar invariance*). Finally, consistent with our conceptualization, we show that solidarity among PoC mediates the association between PoC identification and support for policies that implicate various communities of color. We end with practical advice for using these items in surveys of racially diverse populations.

Keywords: latent variable models; people of color; solidarity; identity

The U.S. Census Bureau has been heralding news of racial demographic change for several years now. Our nation is increasingly comprised of *people of color* (PoC), with the latest estimates placing this figure at nearly 40 percent—and rising (Craig and Richeson, 2014; McClain and Johnson Carew, 2017; Pérez, 2021; Sirin *et al.*, 2022). This development is generating exciting research opportunities and newfound challenges for political scientists, psychologists, sociologists, and other scholars who study these populations. On the side of opportunities, the growth in these minoritized groups is opening fresh research frontiers, as social scientists develop new theories and produce new knowledge about the politics (Wilkinson, 2015; Benjamin, 2017), psychology (Zou and Cheryan, 2017; Craig *et al.*, 2022), and sociological relations between these groups (Abascal, 2015 and 2020). On the side of challenges, however, theories about PoC rest on proliferating concepts whose measures have been loosely validated in racially heterogeneous settings. This tension is aptly captured by two major constructs: self-identification as a *person of color* and solidarity among PoC. Mounting research shows both variables are significantly associated with greater support for policies that implicate racially minoritized groups who are not one's own—as in greater Black support for flexible policies toward unauthorized Latino immigrants

(e.g., Eidgahy and Pérez 2023; Pérez *et al.*, 2023a, 2023b, 2023c). This begs a key question: are these concepts really distinct?

Three obstacles stand in the way of a firm answer. First, PoC identification and PoC solidarity have been insufficiently conceptualized and distinguished from each other. Published research documents a robust and positive association between these variables (Pérez, 2021), as well as positive and robust associations between these variables and political outcomes (for meta-analytic evidence, see Pérez *et al.*, 2023a). However, these empirical patterns cannot determine whether identification and solidarity are different points in an underlying process of identity formation and expression (Leach *et al.*, 2008) or simply two ways of capturing attachment to PoC (Brown, 2007).

A second challenge is the sparse number of measures available to appraise PoC identification and solidarity. While the former has been traditionally measured with a four-item battery of identity centrality items (Pérez, 2021), the latter has been measured with a simpler two-item battery, with one item displaying suboptimal performance (Pérez *et al.*, 2023a). This narrow set of items makes it difficult to evaluate these measures psychometrically because such analyses require at least three items per construct to estimate a measurement model (Bollen, 1989). Moreover, current measures of PoC identification and solidarity are usually not present in the same datasets (cf. Chin *et al.*, 2023; Pérez *et al.*, 2023a), further limiting comprehensive testing. Without more extensive, simultaneous measurement, PoC identification and solidarity exist as two concepts in search of greater conceptual definition and empirical distinction.

Finally, even with improved conceptualization and expanded instrumentation, there are doubts about whether relevant measures can capture the same variables, to the same degree, across such highly heterogeneous populations of color. As Linda Zou, Sapna Cheryan, and other scholars teach us (Sidanius *et al.*, 1997; Kim 2003; Masuoka and Junn, 2013; Zou and Cheryan, 2017), although all PoC experience discrimination based on their minoritized status, the wellsprings of this discrimination (e.g., slavery, voluntary immigration) and its modalities (e.g., police brutality, immigrant surveillance) vary systematically across groups. This gives rise to extensive heterogeneity in the perspectives, beliefs, and attitudes of individuals who self-identify as PoC. Thus, when researchers observe that some groups (e.g., Black adults) identify more strongly as PoC than other groups (e.g., Asian and Latino adults; see Pérez, 2021), it is hard to determine whether those nuances reflect real mean differences in a construct, rather than methodological artifacts. For example, since Black, Asian, and Latino individuals consider Black people to be the prototypical *person of color* (Pérez, 2021; Chin *et al.*, 2023), it is plausible that the wording of relevant survey items makes it easier for Black adults to agree more with them than Asian and Latino adults (Bollen, 1989; Brown, 2007). This makes it difficult to discern whether mean differences in survey responses reflect variation in the interpretation of items, rather than actual variation in the underlying variable.

Our paper advances beyond these impasses in three specific ways. First, we provide a sharper conceptualization of self-identification as a *person of color* and expressed solidarity among PoC. Drawing on social identity theory and its offshoots (Tajfel and Turner, 1986; Turner *et al.*, 1987), we characterize these constructs as two nodes within a larger process of ingroup identity formation and expression (Leach *et al.*, 2008). Specifically, we construe PoC identity as a more stable precursor to PoC solidarity (Pérez, 2021: 80–81), with individual differences in identification reflecting the degree to which the category, PoC, is central to one's sense of self (e.g., Ellemers *et al.*, 1997). Accordingly, minoritized individuals who more strongly identify as PoC will view members of this ingroup as interchangeable (Turner *et al.*, 1987), which expands the benefits of ingroup favoritism to this shared category (e.g., Pérez *et al.*, 2024). One way this ingroup favoritism manifests is through solidarity among PoC, where the act of identifying with this group leads one to feel a collective bond and sense of common fate in particular settings (Leach *et al.*, 2008). This conceptualization implies that these variables are conceptually distinct, with solidarity sometimes mediating identification's impacts on downstream outcomes.

Building on this refined conceptualization, we validate an original six-item battery designed to measure self-identification as PoC and solidarity among PoC in a large-scale survey of various populations of color in the U.S. This broader set of items lets us test more formally whether these constructs are empirically distinct and whether their performance is equivalent across four major adult populations of color: Black Americans ($n = 985$), Asian Americans ($n = 678$), Latinos ($n = 975$), and Multiracials ($n = 764$) (total $N = 3402$). Our evidence from multi-group confirmatory factor analyses yields three conclusions. First, PoC identification and PoC solidarity are positively related but empirically distinct across all four populations under study (*configural invariance*), consistent with our conceptualization. Second, all six items measure identification and solidarity to the same degree across these populations, thus establishing that members of each group similarly interpret these survey measures (*metric invariance*). This means that observed mean differences on these measures are real, rather than methodological artifacts (*scalar invariance*). Finally, consistent with our conceptualization, we show that PoC solidarity mediates the association between PoC identification and support for policies implicating these populations (e.g., slavery reparations). We end with practical advice about using these validated items in applied research, especially where space constraints prevent the use of full item batteries.

1. Poc identification and PoC solidarity as conceptually distinct

Synthesizing insights from social identity theory (SIT) (Tajfel, 1981) and its offshoot, self-categorization theory (SCT) (Turner *et al.*, 1987), we reason that PoC ID and PoC solidarity are related but distinguishable variables in the expression of ingroup behavior, with PoC identification preceding PoC solidarity (Ellemers *et al.*, 1997; Doosje *et al.*, 2002). This research shows that across many laboratory and non-laboratory settings, *categorization* is key to determining which identity category—out of numerous ones—becomes salient and relevant for collective behavior (Tajfel *et al.*, 1971). Psychological and political scientists have documented the role of institutions and leaders, among other factors, in triggering *categorization* by highlighting more substantive distinctions between individuals, such as *race*, *ethnicity*, *gender*, and *party* (e.g., Chandra, 2004; Posner, 2004). Once *categorization* makes an identity category mentally accessible, individuals use intergroup comparisons to minimize the perceived differences between those affiliated with the ingroup, while maximizing the perceived space between the ingroup and an outgroup (Turner *et al.*, 1987; see also Enos, 2017). This produces what is broadly known as *ingroup favoritism*—an affective, cognitive, and behavioral bias toward members of one's own ingroup relative to an outgroup.

This research also teaches us that broad groups (e.g., *Americans*) are often defined by specific subgroups (i.e., Whites) (Devos and Banaji, 2005; Danbold and Huo, 2015). Because these superordinate groups encapsulate several subgroups, it is not uncommon for one of these subgroups to define the superordinate category by projecting its values, norms, and perspectives onto the shared category (Hornsey and Hogg 2000; Waldzus *et al.*, 2004; see Wenzel *et al.*, 2008 for a review). This means there will be meaningful variation in the degree to which ingroup members see themselves as prototypical reflections of the superordinate category. For example, research consistently finds that Black individuals perceive themselves as defining the category, PoC, with Latino and Asian individuals viewing themselves as less prototypical (Chin *et al.*, 2023). In-depth interviews further suggest that PoC prototypicality is defined in terms of worldviews (i.e., racism as systemic and structural) and politics (i.e., support for progressive policies benefitting racially minoritized groups), rather than phenotypic characteristics (e.g., skin tone) (Pérez, 2021).

Within this process of ingroup formation, a person's degree of identification with a salient group shapes their tendency to engage in *ingroup favoritism* (Ethier and Deaux, 1994; Ellemers *et al.*, 1997, 2002; Ellemers and Jetten, 2013). This degree of identification captures

how central a category is to one's sense of self. As Leach *et al.*, stipulate (2008: 147), “[w]here the centrality...of ingroup identification is...specified as the salience and importance of ingroup membership, centrality should lead individuals to be sensitive to ingroup events and intergroup events.” Indeed, as Ellemers *et al.* (1997: 618) articulate, “strength of ingroup identification can be seen as an important cause of people’s inclination to engage in...intergroup behavior.” Viewed from this angle, ingroup identification in general—and PoC identification, in particular—is a relatively stable disposition that sharpens attention toward downstream attitudes and actions involving an ingroup. With few exceptions (e.g., Doosje *et al.*, 2002; Agadjanian and Lacy, 2021), it is primarily considered a “first mover” in intergroup politics. For example, research establishes that Latino identification structures individual reactions to political rhetoric criticizing their ethnic group, leading them to subsequently display more pro-Latino political attitudes (Pérez, 2015; Gutierrez *et al.*, 2019).

In contrast, solidarity can be seen as a downstream consequence of identity expression (Ellemers *et al.*, 2002). As Leach and associates (2008) characterize it, solidarity entails behavioral commitment to one’s ingroup, which involves coordination with fellow ingroup members. In this way, “solidarity should be associated with approaching the ingroup and group-based activity” (Leach *et al.*, 2008: 147). This emphasis on personal investment in behavioral coordination with fellow ingroup members means that solidarity is more malleable and variable than ingroup identification, since it is highly dependent on the intergroup context: who is the outgroup (Tajfel, 1981); how are they a threat to the ingroup (Branscombe *et al.*, 1999); and what menu of options exist to minimize or eliminate that threat (Tajfel and Turner, 1986)?

This situation-specific aspect of solidarity implies that this construct is the outcome of antecedent influences, suggesting it will often operate as a mediating variable. A mediating variable captures an intervening process that connects an independent variable and dependent variable (Hayes, 2022). For example, Dawson (1994) long ago established that the political unity displayed by a socioeconomically diverse Black population in the U.S. (dependent variable) is a downstream consequence of their continued systemic oppression (independent variable), with racial solidarity between Black people (i.e., *linked fate*) mediating this relationship. Indeed, consistent with our reasoning about solidarity, *linked fate* reflects personal investment in collective activity—in this case, with Black individuals coordinating with other Black individuals to achieve a greater degree of political unity in American politics.

Distilled to its core, then, our discussion yields a simple but crucial hypothesis: although PoC identification and solidarity are related (because they are involved in intragroup behavior), *these variables should be empirically distinct (H1)*, because they reflect different aspects of the identity expression process.

2. Equivalence tests of new measures of PoC identification and solidarity

To fully evaluate (H1), three assumptions must be tested about any proposed instrumentation to measure these constructs. Without validating these assumptions, researchers are hard-pressed to say whether any differences (or lack thereof) between PoC identification and PoC solidarity are reflective of actual relationships between these variables or driven by measurement artifacts arising from a lack of shared understanding of available items (Byrne *et al.*, 1989; Meredith, 1993; Davidov, 2009).

Formally, a true test of (H1) requires that scholars appraise measurement equivalence. Conditional on the *true* score, measurement equivalence occurs when *observed* scores on a survey item do not vary significantly by group membership (Meredith, 1993). If two people from distinct groups have the same true score, they will report the same observed score on an item regardless of group membership (Pérez and Hetherington, 2014). To verify this, it is recommended that researchers establish three forms of measurement equivalence: (1) *configural* equivalence; (2) *metric* equivalence; and (3) *scalar* equivalence.

Configural equivalence is the most basic, as it requires that measures of constructs display the same pattern of item loadings across different units (e.g., racial groups) (Byrne *et al.*, 1989; Meredith, 1993). In the case of PoC identification and solidarity, this means that items designed to tap each construct should only tap its intended variable and little else. *Configural* equivalence is confirmed when (i) a measurement model displays excellent fit; (ii) item loadings are substantively and statistically significant; and (iii) the correlation between PoC identification and solidarity is less than 0.850, thus indicating discriminant validity between concepts (Brown, 2007). In these ways, the establishment of *configural* equivalence will allow us to also test (H1), with the observed correlation between PoC identification and solidarity being key to this inference.

If *configural* equivalence is observed, then the next step is to appraise *metric* equivalence. *Metric* equivalence evaluates whether different units (i.e., racial groups) understand individual measures of constructs in the same way. This is evaluated by constraining item loadings between units, with loadings capturing the degree of relationship between an underlying construct (e.g., PoC identification) and an observed measure (i.e., survey item). *Metric* equivalence is established when constraining item loadings to equality between units fails to deteriorate a measurement model's fit compared to a model where all loadings are freely estimated between units.

The most stringent form of equivalence then follows: *scalar* equivalence. This level of equivalence allows researchers to make valid comparisons in mean levels of a construct(s) between different units (i.e., racial groups). *Scalar* invariance requires equal intercepts between units, suggesting they all start from the same "origin." If an analyst can constrain these intercepts to equality without significantly deteriorating a measurement model's fit, then *scalar* invariance is achieved.

These sequential degrees of invariance are important to establish when working with multi-item scales, as is the case here. As Davidov (2009: 69) explains, "[o]nly if all three types of invariance are supported can we assume that scores [on a construct] are not biased, thus allowing us to confidently carry out mean comparisons."

3. Data: The 2023 American multiracial panel study (AMPS)

We test our expectations about the conceptualization and measurement of PoC identification and PoC solidarity by drawing on Wave 1 of the 2023 American Multiracial Panel Study (AMPS) (Goldman *et al.*, 2023). We collected these unique data between 10 June and 21 2023 through YouGov, which uses propensity score matching to build nationally representative samples of target populations from its extensive U.S. respondent panel. Because these samples closely approximate target population(s) on key census metrics, they are considered higher-quality in comparison to other opt-in online survey platforms. Wave 1 of the AMPS consists of large adult samples of Black Americans ($n = 985$), Asian Americans ($n = 678$), Latinos ($n = 975$), Multiracials ($n = 764$), and White Americans ($n = 1000$), for a total $N = 4402$. Our analyses draw on the samples of Black, Asian, Latino, and Multiracial adults ($n = 3402$).

Within this 18-minute survey, we administered a six-item battery designed to capture PoC identification and PoC solidarity, respectively. All six items were statements answered on a scale from 1-strongly agree to 5-strongly disagree. The wording for all six items and their intended construct is provided in Table 1. In principle, each set of three items reflects its anticipated concept. All three items designed to capture PoC identification reference the centrality of the category, PoC, to an individual's sense of self, thus reflecting "the salience and importance of ingroup membership," as stipulated by Leach *et al.* (2008: 147). In contrast, all three solidarity measures are designed to capture the sense of camaraderie and perceived common fate that this construct is theorized to reflect. This aligns with Leach *et al.*'s (2008: 147) view of solidarity as "investment of the self in coordinated activity with those to whom one feels committed."

Table 2 permits a close look at the correlation matrix for these six items, which are robustly associated with each other, suggesting they are likely measuring something in common. These

Table 1. Question wording for PoC identification and solidarity items

| PoC Identification | PoC Solidarity |
|--|---|
| 1. The fact that I am a person of color is an important part of my identity (<i>Important ID</i>). | 4. I feel solidarity with people of color, which include Black, Asian, and Latino people (<i>Feel bond</i>). |
| 2. Being a person of color is an important part of how I see myself (<i>See myself</i>). | 5. The problems of Black, Latino, Asian, and other people of color are similar enough for them to be allies (<i>See allies</i>). |
| 3. I often think about the fact that I am a person of color (<i>Think about</i>). | 6. What happens to people of color in this country has something to do with what happens in my life as a [Black, Asian, Latino, multiracial] person (<i>Common fate</i>). |

Note: All items were answered on a scale from 1-strongly disagree to 5-strongly agree. Items were embedded in the 2023 NMPS. For convenience, brief item labels are provided parenthetically in italics.

entries are polychoric correlations given the categorical nature of our items. These correlations estimate the association between two or more latent variables that are defined as normally distributed (Long, 1997; Finney and DiStefano, 2006). The practical challenge here is that by simply eyeballing these data it is difficult to tell whether these high correlations emerge because all six items measure one concept in common, rather than the two we stipulated. This underlines a need for more systematic and extensive testing of these survey measures, which we turn to next.

4. Research design

The preceding correlation matrix is critical to our research design, which uses multi-group confirmatory factor analysis (MG-CFA) to evaluate our measures and validate key assumptions behind them. In MG-CFA with categorical items, one estimates a measurement model that, in essence, compares the observed variance-covariance matrix to the one hypothesized by a researcher’s model. Our hypothesis is that all six items capture two distinct constructs, PoC identification and PoC solidarity (H1). The model’s fit is assessed by global fit indices (Comparative Fit Index, Tucker-Lewis Index), parsimony-based indices (Root Mean Square Error of Approximation), and the substantive significance of item loadings, which capture the degree of relationship between an overarching concept and individual survey items.

We hypothesize that our six items capture two constructs - PoC identification and PoC solidarity (H1). Evidence of this hypothesis will also affirm the assumption of *configural equivalence*, where each item taps into the hypothesized construct consistently across Asian, Black, Latino, and Multiracial adults. If we find a well-fitting model where our measures distinguish PoC identification from PoC solidarity, we will then move to testing for *metric* and *scalar* invariance. These two properties assume that each of our measures captures its intended construct to a comparable degree among all four populations of color (“equal interpretation”), and that any mean level comparisons on these constructs are valid and real (“equal intercepts”). Because our survey measures are categorical, thresholds attend each item instead of intercepts (Long, 1997; Finney and DiStefano, 2006). Thus, *metric* and *scalar* invariance are tested in tandem by constraining item

Table 2. Polychoric correlation matrix: PoC Identification and solidarity items

| | Important ID | See myself | Think about | Feel bond | See allies | Common fate |
|---------------------|--------------|------------|-------------|-----------|------------|-------------|
| <i>Important ID</i> | – | | | | | |
| <i>See myself</i> | 0.924 | – | | | | |
| <i>Think about</i> | 0.737 | 0.738 | – | | | |
| <i>Feel bond</i> | 0.587 | 0.559 | 0.485 | – | | |
| <i>See allies</i> | 0.529 | 0.536 | 0.458 | 0.706 | – | |
| <i>Common Fate</i> | 0.570 | 0.571 | 0.574 | 0.602 | 0.625 | – |

Note: All correlations are significant at $p < 0.01$ or better.

loadings and thresholds to equality across samples and comparing the fit of that constrained model to the one establishing *configural* invariance.

We follow this bottom-up strategy by estimating our MG-CFA models with the WLSMV estimator (weighted least squares mean and variance adjusted) included in Mplus software (version 8). Although more computationally intensive than estimators used for continuous measures, WLSMV has the advantage of minimizing the likelihood of uncovering high but artificial correlations between factors when coarser categorical data are treated as continuous (Finney and DiStefano, 2006). The computational intensity of this estimator is overridden by the large sample sizes at our disposal. We use unweighted data throughout our analyses since it requires fewer assumptions.¹

5. Results

We begin with a direct test of (H1) by appraising our items' *configural* equivalence. Table 3 displays the results of an MG-CFA model where all six items are construed as indicators of PoC identification and PoC solidarity. In each battery, one item is set to 1.0 to identify the model and provide a metric for the loadings, which capture the relationship between a concept (e.g., solidarity) and a survey item (e.g., *feel bond*). Our loadings (to the right of an item's name) have 1-point units across a 5-point scale. Values labeled T indicate item thresholds. Since our items are scored on a 5-point scale, each item has four thresholds, T1 – T4. The upper-most panels in table 3 contain the loadings and thresholds for PoC ID on an item-by-item basis, while the lower-most panels contain the same quantities, but for PoC solidarity.

The model in table 3 has all indications of a strong fit, with global fit indices near their maxima (CFI/TLI: 0.999/.997), a parsimony-based index in a desired range (RMSEA [90 percent CI]: 0.062 [0.050, 0.074]), and minimal model residuals (SRMR: 0.009) (Brown, 2007). Consistent with (H1), our *configural* equivalence model reveals that all six items capture two distinct concepts, with the degree of correlation between PoC identification and solidarity coming in at 0.47, 0.64, 0.51, and 0.61 among Black, Asian, Latino, and Multiracial adults, respectively (all correlations $p < 0.001$). This degree of correlation affirms that these items capture two constructs that are robustly related, since they are both components of intragroup processes (i.e., convergent validity), but not so highly correlated that they appear to be the same construct (i.e., discriminant validity). As a benchmark for the latter, psychometricians recommend a correlation lower than 0.85 to confidently conclude that two constructs are distinguishable from each other empirically (Brown, 2007). By this standard, our 6-item battery crisply distinguishes our two focal variables, PoC identification and PoC solidarity. In fact, compared to this 2-factor *configural* model, a simpler 1-factor solution displays a relatively inferior fit (CFI/TLI: 0.973/.958, RMSEA [90 percent CI]: 0.248 [0.239, 0.257]) and signs of large model residuals (SRMR: 0.068). Thus, we continue with our hypothesized 2-factor solution.

Looking at the loadings in table 3, we see more promising signs about the *configural* equivalence of our items, which increases support for (H1). Across all sampled populations, the loadings range from a low of 0.70 to a high of 1.09 and all are statistically significant ($p < 0.05$, two-tailed), as indicated by the substantially smaller standard errors in parentheses below each loading. This indicates that these items are validly reflecting their underlying construct. For example, consider the item, *See myself*, which is theorized to tap PoC identification. The loadings for this item suggest that for Black American adults, a 1-point increase in latent PoC identification increases agreement with this item by nearly one point (0.91), a hearty effect that also characterizes the loadings for Asian American (1.02), Latino (1.04), and Multiracial (1.00) adults in our sample. With a few italicized exceptions, the thresholds attending each item are also statistically reliable

¹Our results are largely insensitive to weighting. As reported in (A.1), any differences between (un)weighted loadings and their standard errors are generally very small.

Table 3. MG-CFA Results for configural equivalence test

| | B | A | L | M | | B | A | L | M | | B | A | L | M |
|----------------|-------------------|--------------|--------------|--------------|------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|
| Imp. ID | 1.00 | 1.00 | 1.00 | 1.00 | See myself | 0.91 (0.03) | 1.02 (0.01) | 1.04 (0.01) | 1.00 (0.01) | Think about | 0.70 (0.05) | 0.83 (0.02) | 0.91 (0.03) | 0.87 (0.01) |
| T1 | −1.87 (0.08) | −1.26 (0.07) | −1.18 (0.05) | −0.67 (0.05) | | −1.77 (0.07) | −1.19 (0.06) | −1.08 (0.05) | −0.59 (0.05) | | −1.23 (0.05) | −1.00 (0.06) | −0.81 (0.05) | −0.36 (0.05) |
| T2 | −1.65 (0.07) | −0.87 (0.06) | −0.87 (0.05) | −0.42 (0.05) | | −1.40 (0.06) | −0.78 (0.05) | −0.76 (0.05) | −0.32 (0.05) | | −0.80 (0.05) | −0.44 (0.05) | −0.42 (0.04) | −0.04 (0.05) |
| T3 | −1.03 (0.05) | −0.18 (0.05) | −0.09 (0.04) | 0.24 (0.05) | | −0.59 (0.04) | −0.05 (0.05) | 0.04 (0.04) | 0.38 (0.05) | | −0.14 (0.04) | 0.28 (0.05) | 0.42 (0.04) | 0.71 (0.05) |
| T4 | −0.25 (0.04) | 0.57 (0.05) | 0.50 (0.04) | 0.83 (0.05) | | −0.02 (0.04) | 0.66 (0.05) | 0.66 (0.04) | 0.90 (0.05) | | 0.48 (0.04) | 1.00 (0.06) | 0.98 (0.05) | 1.22 (0.06) |
| Feel bond | 1.00 | 1.00 | 1.00 | 1.00 | See allies | 1.00 (0.04) | 0.86 (0.02) | 1.04 (0.01) | 0.94 (0.03) | Common fate | 0.92 (0.06) | 0.79 (0.02) | 0.97 (0.03) | 1.09 (0.04) |
| T1 | −1.69 (0.07) | −1.36 (0.07) | −1.56 (0.06) | −1.14 (0.06) | | −1.67 (0.07) | −1.19 (0.06) | −1.45 (0.06) | −0.99 (0.05) | | −1.56 (0.06) | −1.29 (0.07) | −1.13 (0.05) | −0.73 (0.05) |
| T2 | −1.24 (0.05) | −0.93 (0.06) | −1.05 (0.05) | −0.73 (0.05) | | −1.16 (0.05) | −0.65 (0.05) | −0.94 (0.05) | −0.57 (0.05) | | −1.09 (0.05) | −0.82 (0.05) | −0.72 (0.04) | −0.36 (0.05) |
| T3 | −0.41 (0.041) | 0.05 (0.05) | −0.14 (0.04) | 0.08 (0.05) | | −0.28 (0.04) | 0.22 (0.05) | 0.01 (0.04) | 0.26 (0.05) | | −0.35 (0.04) | 0.22 (0.05) | 0.20 (0.04) | 0.42 (0.05) |
| T4 | 0.47 (0.042) | 0.91 (0.06) | 0.64 (0.04) | 0.86 (0.05) | | 0.59 (0.04) | 1.10 (0.06) | 0.79 (0.05) | 1.02 (0.06) | | 0.46 (0.04) | 1.09 (0.06) | 0.98 (0.05) | 1.09 (0.06) |
| CFL/TLI | 0.99/.99 | | | | | | | | | | | | | |
| RMSEA [90% CI] | 0.06 [0.05, 0.07] | | | | | | | | | | | | | |

B, Black adults; A, Asian adults; L, Latino adults; M, Multiracial adults; T, item thresholds.
Correlations between PoC ID and PoC Solidarity for Black, Asian, Latino, and Multiracial adults are 0.47, 0.64, 0.51, and 0.61, respectively. Italicized entries indicate $p > 0.05$, two-tailed.

Table 4. Tests of metric and scalar equivalence for PoC identification and solidarity

| | Configural equivalence | Metric equivalence | Scalar equivalence |
|---------------------------|------------------------|----------------------|--------------------|
| CFI | 0.999 | 0.996 | |
| TLI | 0.999 | 0.997 | |
| RMSEA [90% CI] | 0.062 [0.050, 0.074] | 0.065 [0.059, 0.072] | |
| ΔX^2 significant? | – | $p < 0.001$ | |

Note: Given the categorical nature of the items under analysis, tests of metric (“equal loadings”) and scalar (“equal thresholds”) equivalence occur in tandem by constraining loadings/thresholds simultaneously.

at the 0.05 level of significance or better. This evidence further supports our items’ *configural* equivalence. Across four distinct populations of color, our two batteries of items validly reflect PoC identification and PoC solidarity, respectively.

With the well-fitting model reported in [table 3](#) as our baseline, we next move to test the *metric* and *scalar* equivalence of our items. Establishing this property will allow us to conclude that both item batteries have similar meaning for respondents from these highly heterogeneous populations (i.e., *metric* equivalence), as indicated by statistically similar item loadings. In turn, establishing *scalar* equivalence will allow us to conclude that any mean differences in these items reflect true differences in an underlying construct rather than measurement artifacts, as indicated by statistically similar item thresholds. Given our categorical items, tests of these two forms of equivalence happen in tandem by constraining the loadings and thresholds for all four sampled populations to equality. We will conclude that these two properties are met in our data if, in comparison to [table 3](#)’s *configural* equivalence model, constraining these loadings and thresholds to equality across groups does not significantly deteriorate its strong fit.

[Table 4](#) reports the fit indices for our *configural* equivalence model alongside those that constrain to equality the item loadings across groups. While some changes in fit indices are to be expected given the differences in these models, psychometricians recommend minimal changes in fit indices that keep a constrained model in a well-fitting zone. Specifically, methodologists recommend decreases in CFI/TLI greater than -0.01 and increases in RMSEA greater than 0.015 as cutoffs to infer significant deterioration in model fit (Cheung and Rensvold, 2002; Chen, 2007). While some researchers also recommend appraising the change in global fit of a constrained model via a change in its chi-square, this test is known to be “overly sensitive to small, unimportant deviations from a “perfect” model in large samples (Patrick and Bornstein, 2016: 78),” as is the case here. For the sake of transparency, we include the change in chi-square in [table 4](#).

There one finds evidence affirming the *metric* and *scalar* equivalence of our PoC identification and solidarity items. Compared to our *configural* equivalence model, where all loadings and thresholds are freely estimated across groups, the fit indices for our *metric/scalar* invariance model, which constrain all loadings and thresholds to equality, hardly budge and remain in a zone that would characterize most models as displaying strong fit. For example, in our constrained model, the CFI is 0.996, which is 0.003 less than the baseline value of 0.999. Similarly, the TLI for our constrained model is 0.997, for an even smaller decrease of 0.002. Finally, relative to our baseline model, constraining our loadings and thresholds to equality very mildly increases our RMSEA by 0.003. Each of these changes in CFI/TLI and RMSEA fall below the recommended -0.015 and 0.015 thresholds recommended by methodologists (Cheung and Rensvold, 2002; Chen 2007). Indeed, the only evidence suggesting that *metric* and *scalar* equivalence is unmet is the change in X^2 , which is unsurprising for an over-powered test in a large sample size exceeding 3400 observations. We conclude that *metric* and *scalar* equivalence are met by these items, which means they are interpreted similarly by Black, Asian, Latino, and Multiracial adults. This frees researchers from concerns that mean differences in levels of PoC identification and solidarity are measurement artifacts.

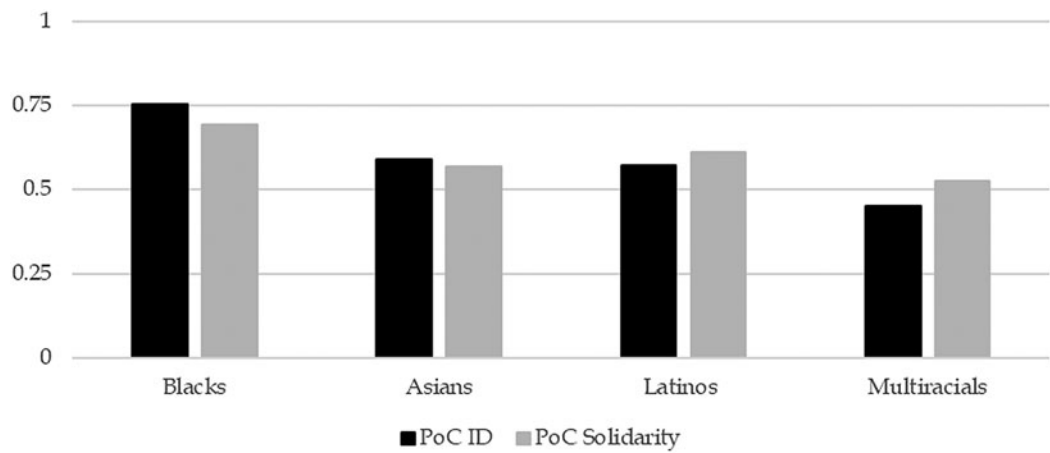


Figure 1. Mean levels in PoC identification and PoC solidarity.

To this end, Figure 1 reveals substantial and meaningful variation in levels of PoC identification and PoC solidarity, with scores on these scaled measures normed to a 0–1 range. We estimate a linear regression model using Ordinary Least Squares (OLS), with PoC identification as the outcome and a series of dichotomous variables for each population under study (with Black respondents as the baseline). Accordingly, Figure 1 shows that average levels of PoC identification are highest among Black Americans ($M = 0.752$), followed by significantly lower levels among Asian Americans ($M = 0.588$), Latinos ($M = 0.571$), and Multiracials ($M = 0.451$), respectively, with these differences being significantly different from Black individuals at the 0.01 level. This pattern is consistent with prior work, which shows that Black individuals consider themselves—and are considered by other racially minoritized groups—to be the prototypical member of the category, PoC (e.g., Pérez, 2021; Chin *et al.*, 2023).

We follow the same estimation strategy for PoC solidarity. Figure 1 shows more muted differences in expressed solidarity between PoC. This pattern supports the view of solidarity as reflecting greater investment in group-level activity in a setting (Leach *et al.*, 2008). Indeed, this smaller degree of intragroup variation is what one should expect when individuals begin to see themselves more as interchangeable exemplars of a shared group that is engaged in collective behavior (Turner *et al.*, 1987; see also Chin *et al.*, 2023). Here, we see again that Black adults report the highest level of solidarity with PoC ($M = 0.692$), followed by Latinos ($M = 0.609$), Asians ($M = 0.568$), and Multiracials ($M = 0.525$), with each comparison to Black individuals being significantly different from zero at the 0.01 level.

6. Do PoC ID and solidarity operate as conceptualized?

Our last analysis provides correlational evidence that aligns with our view of PoC identification and solidarity as distinct, but related, variables that influence intragroup behavior. Our goal here is not to make causal claims about the interrelationships between PoC identification and PoC solidarity. Instead, our more modest objective is to show that these two concepts behave as we have conceptualized them, with evidence from more tightly controlled designs supporting this view (for a meta-analysis, see Pérez *et al.*, 2023a).

The reader will recall that we conceptualized PoC identification as a “first mover” in the process of identification expression (e.g., Ellemers *et al.*, 1997). In turn, we conceptualized PoC solidarity as a mediating variable that would transmit the influence of PoC identification on political outcomes. Accordingly, we examine whether these two variables influence PoC’s support for

slavery reparations for African Americans, a policy proposal targeting Black individuals, specifically. We measure preferences for this policy proposal on a scale from 1-strongly oppose to 5-strongly favor, with the respective item asking respondents whether they supported “The federal government making cash payments to the descendants of slaves?”

Our analyses use a basic mediation design (Hayes, 2022) where we first predict support for reparations based on one’s reported level of PoC identification. We then re-run the same analysis with PoC solidarity entered into the equation. Evidence of mediation emerges if, after including PoC solidarity as a mediator, the influence of PoC identification shrinks in size and/or statistical significance. We also adjust these regression models for levels of liberal ideology, which can independently lead to more progressive political views among racially minoritized groups (Pérez, 2021). We run the analyses below separately for each sampled population, with all variables rescaled to a 0–1 range, which allows us to interpret our coefficients as percentage-point shifts. The direct path between PoC identity and each outcome, without inclusion of our proposed mediator, is denoted by *c*. The same direct path, with inclusion of our proposed mediator is denoted by ‘*c*’.

Figure 2 reveals evidence that aligns with our conceptualization of PoC ID and PoC solidarity. Each panel in this figure reports our analyses for a specific population. For example, the topmost panel shows that going from the lowest to highest level of PoC identification increases Black individuals’ solidarity with PoC by 48 percentage points. Moreover, an additional unit shift in PoC solidarity increases downstream support for slavery reparations by another 26 percentage points, with the direct path from PoC ID to policy dropping substantially in size once this indirect path is estimated. A highly comparable set of findings emerges for Asian, Latino, and Multiracial respondents. We also find similar evidence for two other outcomes in the AMPS: support for Deferred Action on Childhood Arrivals (DACA), a policy that strongly implicates Latino individuals; and support for H1-B visas, a proposal that strongly implicates Asian Americans. In the interest of space, we provide these results in section 2 of our Appendix (A.2.).

Although Figure 2 reveals a set of significant associations that are highly consistent with solidarity mediating the influence of PoC identification on support for policies that implicate specific racially minoritized groups, the correlational nature of these analyses also raises doubts because neither PoC identification nor solidarity are manipulated here (but see Pérez *et al.*, 2023a). Thus, to increase confidence in these results (Cinelli and Hazlett 2020), we report sensitivity analyses for each of the mediated patterns in Figure 2.

These sensitivity analyses, reported in table 5, suggest our mediation results possess a healthy degree of robustness to confounding across outcomes and racial groups. For example, consider Asian Americans’ support for reparations. The robustness value ($RV_{\alpha=.05}$) for Asian respondents means that unobserved confounders would need to explain at least 27.34 percent of the residual variance of solidarity and support for DACA to bring solidarity’s downstream influence to zero (0). This general pattern repeats itself across other outcomes and groups of respondents. Although these sensitivity analyses do not imply a causal relationship (Cinelli and Hazlett 2020), they do help to establish the viability of this mediation network between identification as PoC, solidarity between PoC, and support for policies that affect racially minoritized groups, thus underlining the value in performing more stringent tests in the future that manipulate PoC identification and solidarity directly. Sensitivity analyses for our other outcomes under analyses are reported in (A.3)

Finally, since all items in our analyses are positively worded, it is quite possible that acquiescence bias impacts the correlations between PoC identity and PoC solidarity, which can then influence the mediating relationships we have reported. We directly address this in the Appendix (A.4) by modeling a method factor to disentangle acquiescence bias from the substantive correlations between PoC identity and PoC solidarity (cf. Savalei and Falk, 2014). These analyses reveal that some acquiescence bias is present in our measures of *PoC identity* and *PoC solidarity*, which reduces the correlations between these two variables. However, filtering out this method artifact still leaves intact our original inference about the mediated relationship

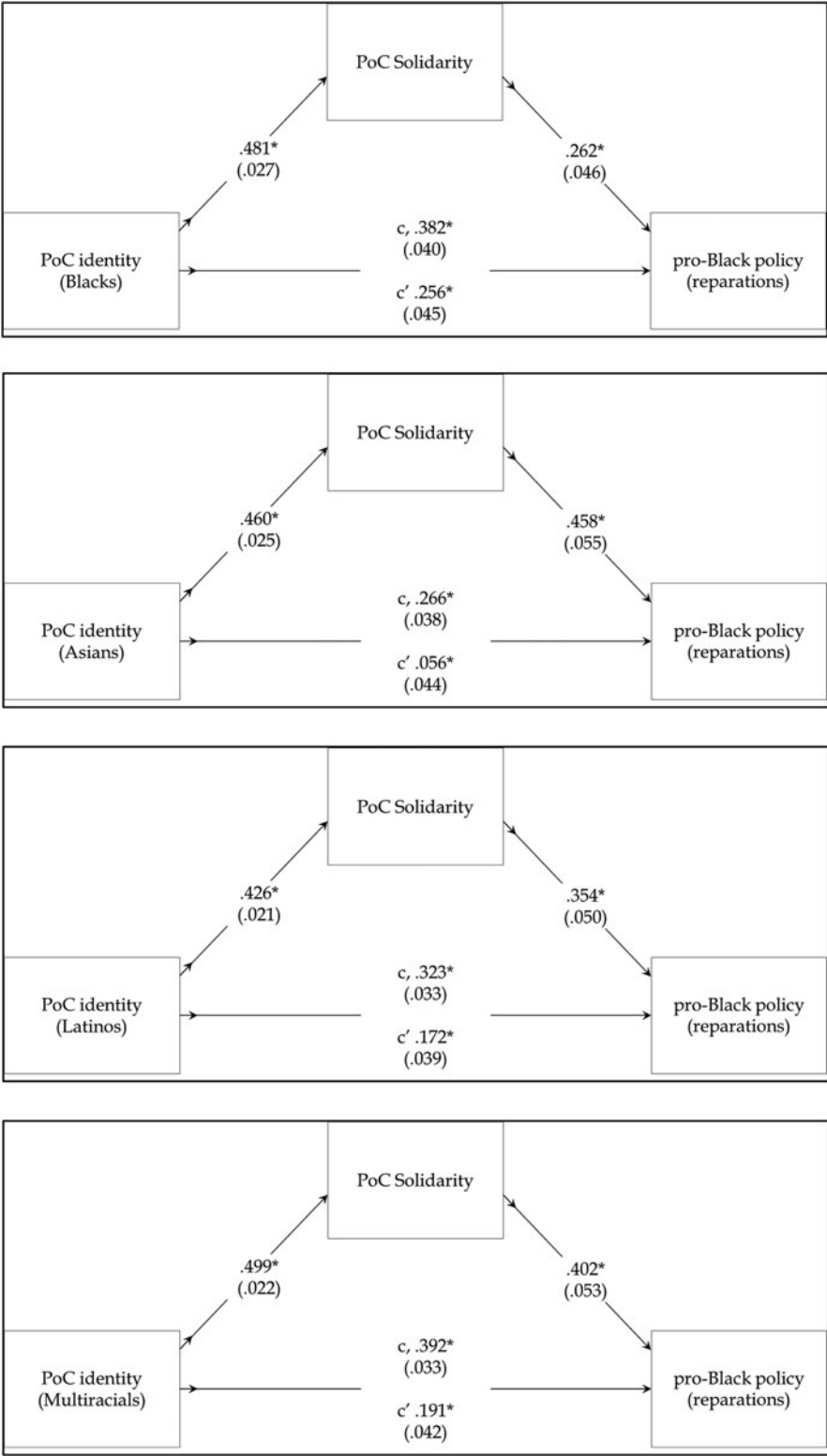


Figure 2. Solidarity mediates the influence of PoC Identification on support for policies.

Table 5. Sensitivity analyses by racial group

| | Support reparations |
|--------------------|---------------------|
| Blacks | |
| $RV_{\alpha=0.05}$ | 16.61% |
| Asians | |
| $RV_{\alpha=0.05}$ | 27.34% |
| Latinos | |
| $RV_{\alpha=0.05}$ | 20.30% |
| Multiracials | |
| $RV_{\alpha=0.05}$ | 21.58% |

Note: $RV_{\alpha=0.05}$ is the robustness value for the point estimate of PoC solidarity’s influence on support for slavery reparations. The interpretation of this statistic is explained in the text.

between PoC identity, PoC solidarity, and policy support. As discussed in the Appendix (A.4), the acquiescence bias in these items is a stronger concern when analysts have granular hypotheses about the size of the point estimates for this mediated relationship in specific populations of color.

7. Summary and implications

What have we learned and how can these results be used to move research forward? In terms of the evidence-based lessons of this paper, we see three that we wish to underline for readers. The first lesson is conceptual. We began the paper by lamenting the lack of data to determine whether PoC identification and PoC solidarity are really two distinct concepts, rather than different ways of measuring the same thing, i.e., attachment to PoC. Our expanded batteries of items and extensive set of tests indicate, with little doubt, that when more extensive measures are available, PoC identification and PoC solidarity are really two related but separable constructs, consistent with our refined conceptualization of them. This evidence is important, as it encourages scholars working on inter-minority relations in the U.S. to be more specific about which of these two variables they mean to study, since they are not interchangeable. Indeed, instead of merely just choosing one over the other on theoretical grounds, our mediation results imply that the two likely belong in many analyses of PoC politics, since they capture a more complete identification-to-politics process (cf. Lee, 2008).

The second lesson from our results is methodological. One of the biggest challenges in studying the opinions of racially diverse populations, like PoC, is ensuring that measures for intended concepts are interpreted in a comparable way in these heterogeneous settings (e.g., Davidov, 2009; Stegmuller, 2011). These populations not only display enormous diversity *between* each other; they also display an incredible amount of diversity *internally*. For all the nuances between Black, Asian, Latino, and Multiracial people, each of these populations varies enormously in terms of age, language use, generational status, and many other attributes (Wong *et al.*, 2008; Abrajano and Alvarez, 2010; Davenport, 2018; White and Laird, 2020). Thus, scholars should ensure that they make “apples to apples” comparisons, not “apples to oranges” comparisons. Our set of measurement models established that, insofar as PoC identification and PoC solidarity are concerned, our items have very similar meaning for PoC, regardless of whether they are Black, Asian, Latino, or Multiracial. This equivalence in meaning is critical to making comparisons between these groups on such important concepts, especially when investigating heterogeneity in the levels and impacts of these variables on the perspectives and behaviors of PoC. However, when scholars wish to make valid comparisons within a group based on specific strata or attributes (e.g., language, generational status, age), our methodology is flexible enough to accommodate and test these differences, which can also be supplemented by additional techniques (e.g., MIMIC models; see Muthén, 1989; Pérez, 2011).

The third lesson from our results is theoretical. We proposed that PoC solidarity mediates PoC identification’s influence on support for policy measures that implicate various groups under this

superordinate group. Our correlational results provided highly consistent and robust evidence for this view of both variables and their role in ingroup behavior. Although this evidence cannot rule out the possibility that PoC solidarity can have a reciprocal influence on PoC identity, we think it helps avoid the temptation of treating these variables as interchangeable in applied work, when only scattered measures are available. We also think it helps to clear some wrinkles in the published record. For example, studies of *linked fate*—a form of ingroup solidarity—demonstrates its prevalence in mass Black politics (Dawson, 1994), yet studies of the same concept in other minoritized groups, such as Asians and Latinos, finds more mixed evidence for this variable's influence on the politics of these groups (e.g., Gay *et al.*, 2016; Masuoka and Junn, 2008; Sanchez and Masuoka, 2010; for reviews, see McClain *et al.*, 2009 and Pérez and Cobian, 2024). It is notable that in many of the latter studies, *linked fate* is treated as a form of identification. But this form of solidarity is not actually identification, as our results suggest. This implies that the many null or mixed results that often emerge in studies of (non-)Black populations could also be driven by using the wrong measures to operationalize one's focal concept (i.e., identification). At minimum, our results join this chorus of authors in encouraging scholars working on identification and its underlying process to be clearer about how they conceptualize identification and its related components—and how they operationalize any aspect of this complex process (for a review, see McClain *et al.*, 2009).

We conclude with two pieces of practical advice regarding our validated items. The first one involves the use of our new six-item battery. Scholars of racially minoritized groups in the U.S., like other scholars of public opinion, often face a key pressure in applied work: to reliably measure key concepts in the least amount of time possible. This often leads to scholars vastly reducing the number of items to measure complex concepts like the ones we studied here. Our factor analytic results indicate that, for researchers who only have space for one item to measure PoC identification or solidarity, they can rely on any two of the six that we validated, as all items in these batteries displayed substantively strong and precisely estimated loadings. The challenge is that, by relying on single items, reliability will be suboptimal, decreasing the robustness of findings in the long run by making it harder to consistently replicate them (Brown, 2007). This suggests that scholars will be better served to use at least two items from each of our batteries to measure PoC identification and solidarity, respectively. Because any pair of items from our batteries are highly correlated and strongly tapping into its respective variable, the use of at least two items (instead of the full three) allows applied researchers to vastly enhance the reliable measurement of these two concepts, while only modestly increasing the time it takes to answer these four questions (i.e., less than a minute vs. more than a minute).

The second piece of practical advice is that, inasmuch as our evidence suggests our six items are valid measures of PoC identification and solidarity, measuring latent variables such as these is an arduous and ongoing endeavor. Yes, our items can be confidently used to appraise these two concepts, but given that these are indirectly observed (i.e., latent), more measures must be developed and tested to capture a fuller range of the latent distributions underlying each concept. This highlights the need to view our items as one installment in what should be an ongoing effort to develop healthier banks of measures of these and other concepts (Montgomery and Rossiter, 2020, 2022). With gains in computing power and software efficiencies, these expanded item banks can help applied researchers choose fewer items to broadly capture a latent variable, like PoC identification or solidarity, while giving researchers more granular information about how well—and where on an underlying distribution—a set of items perform best. This takes a piece-meal, collective effort and we hope that our contribution of six new items spurs further efforts at optimizing measurement of PoC identification and solidarity: two increasingly relevant concepts in the study of U.S. mass politics.

Supplementary material. The supplementary material for this article can be found at <https://doi.org/10.1017/psrm.2024.61>. To obtain replication material for this article, <https://doi.org/10.7910/DVN/X4YIDO>

References

- Abascal M** (2015) Us and them: Black–White relations in the wake of Hispanic population growth. *American Sociological Review* **80**, 789–813.
- Abascal M** (2020) Contraction as a response to group threat: demographic decline and Whites’ classification of people who are ambiguously White. *American Sociological Review* **85**, 298–322.
- Abrajano M and Alvarez RM** (2010) *New Faces, new Voices: The Hispanic Electorate in America*. Princeton: Princeton University Press.
- Agadjanian A and Lacy D** (2021) Changing votes, changing identities? Racial fluidity and vote switching in the 2012–2016 US presidential elections. *Public Opinion Quarterly* **85**, 737–752.
- Benjamin A** (2017) *Racial Coalition Building in Local Elections: Elite Cues and Cross-Ethnic Voting*. New York: Cambridge University Press.
- Bollen KA** (1989) *Structural Equations with Latent Variables*. New York: Wiley.
- Branscombe NR, Ellemers N, Spears R and Doosje B** (1999) The context and content of social identity threat. In Ellemers N, Spears R and Doosje B (eds). *Social Identity Context, Commitment, and Content*. Oxford: Blackwell, pp. 35–58.
- Brown TA** (2007) *Confirmatory Factor Analysis for Applied Research*. New York: Guilford Press.
- Byrne BM, Shavelson RJ and Muthén B** (1989) Testing for the equivalence of factor covariance and mean structures: the issue of partial measurement invariance. *Psychological Bulletin* **105**, 456–466.
- Chandra K** (2004) *Why Ethnic Parties Succeed: Patronage and Ethnic Head Counts in India*. New York: Cambridge University Press.
- Chen FF** (2007) Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal* **14**, 464–504.
- Cheung GW and Rensvold RB** (2002) Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal* **2**, 233–255.
- Chin JC, Mártir GA, Huo Y and Perez EO** (2023) Motivating collective action in diverse groups: person of color identity, prototypicality perceptions, and environmental attitudes. *Social Psychological and Personality Science* **14**, 751–762.
- Cinelli C and Hazlett C** (2020) Making sense of sensitivity: extending omitted variable bias. *Journal of the Royal Statistical Society, Series B (Statistical Methodology)* **82**, 39–67.
- Craig MA and Richeson JA** (2014) On the precipice of the a “majority-minority” America: perceived status threat from the racial demographic shift affects White Americans’ political ideology. *Psychological science* **25**, 1189–1197.
- Craig MA, Zou LX, Bai H and Lee MM** (2022) Stereotypes about political attitudes and coalitions among U.S. racial groups: implications for strategic political decision-making. *Personality and Social Psychology Bulletin* **48**, 1349–1366.
- Danbold F and Huo Y** (2015) No longer “all American”? Whites’ defensive reactions to their numerical decline. *Social Psychological and Personality Science* **6**, 210–218.
- Davenport LD** (2018) *Politics Beyond Black & White: Biracial Identity and Attitudes in America*. New York: Cambridge University Press.
- Davidov E** (2009) Measurement equivalence of nationalism and constructive patriotism in the ISSP: 34 countries in a comparative perspective. *Political Analysis* **17**, 64–82.
- Dawson MC** (1994) *Behind the Mule: Race and Class in African American Politics*. Princeton: Princeton University Press.
- Devos T and Banaji MR** (2005) American = White? *Journal of Personality and Social Psychology* **88**, 447–466.
- Doosje B, Spears R and Ellemers N** (2002) Social identity as both cause and effect: the development of group identification in response to anticipated and actual changes in the intergroup status hierarchy. *British Journal of Social Psychology* **41**, 57–76.
- Eidgahy K and Pérez EO** (2023) How wide is the arc of racial solidarity? People of color and Middle Easterners and North Africans. *Political Research Quarterly* **76**, 239–252.
- Ellemers N and Jetten J** (2013) The many ways to be marginal. *Personality and Social Psychology Bulletin* **17**, 3–21.
- Ellemers N, Spears R and Doosje B** (1997) Sticking together or falling apart: ingroup identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology* **72**, 617–626.
- Ellemers N, Spears R and Doosje B** (2002) Self and social identity. *Annual Review of Psychology* **53**, 161–186.
- Enos RD** (2017) *The Space Between us: Social Geography and Politics*. New York: Cambridge University Press.
- Ethier K and Deaux K** (1994) Negotiating social identity when contexts change: maintaining identification and responding to threat. *Journal of Personality and Social Psychology* **67**, 243–251.
- Finney SJ and DiStefano C** (2006) Non-normal and categorical data in structural equation modeling. In Hancock GR and Mueller RO (eds). *Structural Equation Modeling: A Second Course*. Greenwich: Information Age Publishing, pp. 269–314.
- Gay C, Hochschild J and White A** (2016) Americans’ belief in linked fate: does the measure capture the concept? *Journal of Race, Ethnicity, and Politics* **1**, 117–144.
- Goldman SK, Huo YJ, Nteta T, Pérez E and Tropp LR** (2023) American Multiracial Panel Study (AMPS). Dataset. University of Massachusetts, Amherst.
- Gutierrez A, Ocampo AX, Barret M and Segura G** (2019) *Somos más: how racial threat and anger mobilized Latino voters in the Trump era*. *Political Research Quarterly* **72**, 960–975.

- Hayes AF (2022) *Introduction to Mediation, Moderation, and Conditional Process Analysis*. New York: Guilford Press.
- Hornsey M and Hogg M (2000) Assimilation and diversity: an integrative model of subgroup relations. *Personality and Social Psychology Review* 4, 143–156.
- Kim CJ (2003) *Bitter Fruit: The Politics of Black-Korean Conflict in New York City*. New Haven: Yale University Press.
- Leach CW, van Zomeren M, Zebel S, Vliek MLW, Ouwerkerk JW and Spears R (2008) Group-level self-definition and self-investment: a hierarchical (multicomponent) model of ingroup identification. *Journal of Personality and Social Psychology* 95, 144–165.
- Lee T (2008) Race, immigration, and the identity-to-politics link. *Annual Review of Political Science* 11, 457–478.
- Long JS (1997) *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks: Sage Publications, Inc.
- Masuoka N and Junn N (2008) Asian American identity: shared racial status and political context. *Perspectives on Politics* 6, 729–740.
- Masuoka N and Junn J (2013) *The Politics of Belonging: Race, Public Opinion, and Immigration*. Chicago: University of Chicago Press.
- McClain PD and Johnson Carew J (2017) *Can we all get Along? Racial and Ethnic Minorities in American Politics*. New York: Routledge.
- McClain PD, Johnson Carew J, Walton E and Watts CS (2009) Group membership, group identity, and group consciousness: measures of racial identity in American politics? *Annual Review of Political Science* 12, 471–485.
- Meredith W (1993) Measurement invariance, factor analysis and factorial invariance. *Psychometrika* 58, 525–543.
- Montgomery J and Rossiter E (2020) So many questions, so little time: adapting inventories into public opinion research. *Journal of Survey Statistics and Methodology* 8, 667–690.
- Montgomery J and Rossiter E (2022) *Adaptive Inventories: A Practical Guide for Applied Research*. New York: Cambridge University Press.
- Muthén BO (1989) Latent variable modeling in heterogeneous populations. *Psychometrika* 54, 557–585.
- Patrick DL and Bornstein MH (2016) Measurement invariance conventions and reporting: state of the art and future directions for psychological research. *Developmental Review* 41, 71–90.
- Pérez EO (2011) The origins and implications of language effects in multilingual surveys: a MIMIC approach with application to Latino political attitudes. *Political Analysis* 19, 434–454.
- Pérez EO (2015) Xenophobic rhetoric and its political effects on immigrants and their co-ethnics. *American Journal of Political Science* 59, 549–564.
- Pérez EO (2021) *Diversity's Child: People of Color and the Politics of Identity*. Chicago: University of Chicago Press.
- Pérez E and Cobian J (2024) Latino opinion and action in the struggle for America's political future. *Annual Review of Political Science* 27, 87–106.
- Pérez EO and Hetherington MJ (2014) Authoritarianism in black and white: testing the cross-racial validity of the child rearing scale. *Political Analysis* 22, 398–412.
- Pérez EO, Vicuña B and Ramos A (2023a) Taking stock of solidarity between people of color. *American Political Science Review*. FirstView.
- Pérez EO, Vicuña B and Ramos A (2023b) Shared status, shared politics? Evaluating a new pathway to Black solidarity with other people of color. *Political Behavior* OnlineFirst.
- Pérez EO, Vicuña B, Ramos A, Phan K, Solano M and Tillett E (2023c) Bridging the gaps between us: explaining when and why people of color express shared political view. *Political Behavior* 45, 1813–1835.
- Pérez EO, Vicuña B and Ramos A (2024) Shared status, shared politics? Evaluating a new pathway to black solidarity with other people of color. *Political Behavior* 46, 1151–1170.
- Posner DN (2004) The political salience of cultural difference: why Chewas and Tumbukas are allies in Zambia and adversaries in Malawi. *American Political Science Review* 98, 529–545.
- Sanchez GR and Masuoka N (2010) Brown utility heuristic? The presence and contributing factors of Latino linked fate. *Hispanic Journal of Behavioral Sciences* 32, 519–531.
- Savalei V and Falk CF (2014) Recovering substantive factor loadings in the presence of acquiescence bias: a comparison of three approaches. *Multivariate Behavioral Research* 49, 407–425.
- Sidanius J, Feshbach S, Levin S and Pratto F (1997) The interface between ethnic and national attachment: ethnic pluralism or ethnic dominance? *Public Opinion Quarterly* 61, 102–133.
- Sirin CV, Valentino NA and Villalobos JD (2022) *Seeing us in Them: Social Divisions and the Politics of Group Empathy*. New York: Cambridge University Press.
- Stegmüller D (2011) Apples and oranges? The problem of equivalence in comparative research. *Political Analysis* 19, 471–487.
- Tajfel H (1981) *Human Groups & Social Categories: Studies in Social Psychology*. Cambridge: Cambridge University Press.
- Tajfel H and Turner JC (1986) The social identity theory of intergroup behavior. *Psychology of Intergroup Relations* 5, 7–24.
- Tajfel H, Billig MG, Bundy RP and Flament C (1971) Social categorization and intergroup behavior. *European Journal of Social Psychology* 1, 149–178.

- Turner JC, Hogg MA, Oakes PJ, Reicher SD and Wetherell MS** (1987) *Rediscovering the Social Group: A Self-Categorization Theory*. Oxford: Basil Blackwell.
- Waldzus S, Mummendey A, Wenzel M and Boettcher F** (2004) Of bikers, teachers, and Germans: Groups' diverging views about their prototypicality. *British Journal of Social Psychology* **43**, 385–400.
- Wenzel M, Mummendey A and Waldzus S** (2008) Superordinate identities and intergroup conflict: The ingroup projection model. *European Review of Social Psychology* **18**, 331–372.
- White IK and Laird CN** (2020) *Steadfast Democrats: How Social Forces Shape Black Political Behavior*. Princeton: Princeton University Press.
- Wilkinson BC** (2015) *Partners or Rivals? Power and Latino, Black, and White Relations in the Twenty-First Century*. Charlottesville: University of Virginia Press.
- Wong J, Ramakrishnan SK, Lee T and Junn J** (2008) *Asian American Political Participation: Emerging Constituents and Their Political Identities*. New York: Russell Sage Foundation.
- Zou LX and Cheryan S** (2017) Two axes of subordination: a new model of racial position. *Journal of Personality and Social Psychology* **112**, 696–717.