

## ARTICLE

# The psychology of colonial ideologies: Decoupling pro-egalitarian and neo-colonial sources of support for Puerto Rico statehood

Eduardo J. Rivera Pichardo<sup>1</sup>  | Salvador Vargas Salfate<sup>2</sup>  |  
Eric D. Knowles<sup>1</sup> 

<sup>1</sup>Department of Psychology, New York University, New York City, New York, USA

<sup>2</sup>Department of Psychology, University of Illinois at Urbana-Champaign, Champaign, Illinois, USA

## Correspondence

Eduardo J. Rivera Pichardo, 6 Washington Pl, New York, NY 10003, USA.

Email: erp295@nyu.edu

## Abstract

Among Puerto Ricans, support for U.S. statehood (i.e. the complete annexation of Puerto Rico as the 51st state of the United States) has been linked to an internalized sense of inferiority, colonial system justification and political conservatism. However, no research has explored this question from the perspective of U.S. Americans. We analyse the role that the dual colonial ideologies of historical negation (of colonial injustices) and symbolic exclusion (of the colonial subjects) have in explaining support for Puerto Rico's statehood and other political status options for Puerto Rico among U.S. Americans, applying a decolonial adaptation of the Dark Duo Model of Post-Colonial Ideology (DDM). Confirmatory factor analyses validate the factor structure of our adaptation of the DDM scale in an MTurk sample ( $N = 435$ ) and two student samples ( $N = 578$ ;  $N = 381$ ). Latent profile analyses uncover two distinct ideological groups that tend to support Puerto Rican statehood: a 'pro-egalitarian' group committed to both cultural inclusion and material aid for Puerto Rico and a 'neo-colonial' group equally open to cultural inclusion but opposed to material aid. We discuss how symbolic cultural politics, not an egalitarian commitment to material aid aimed at redressing colonial injustices, underlie support for the annexation of Puerto Rico among a significant group of U.S. Americans.

## KEYWORDS

colonialism, decolonization, historical negation, Puerto Rico, statehood, symbolic exclusion

## BACKGROUND

Social psychological scholarship has primarily treated colonialism as a historical phenomenon, mostly vivid today in the form of collective memories. Over the last 20 years, research has explored how different people and societies remember colonialist episodes (Cabecinhas & Feijó, 2010; Liu & Hilton, 2005); how attitudes about colonial history change across generations (Licata & Klein, 2010); and how specific beliefs about a colonial past influence group-based emotions, intergroup relations and processes of social identification (Licata et al., 2018). Meanwhile, contemporary colonialist phenomena and their ideological expressions have attracted less interest from social and political psychologists (Tomicic & Berardi, 2018).

One body of work, developed within the context of Aotearoa/New Zealand, stands out as an exception to this treatment of colonialism. The Dark Duo Model of Post-Colonial Ideology (DDM; Sibley & Osborne, 2016) explores how a pair of complementary ideologies function to (1) deny the relevance of colonial history to contemporary inequalities (*historical negation*) and (2) exclude colonial subjects' cultures from the superordinate national identity (*symbolic exclusion*; Newton et al., 2018). Although unique in its treatment of 'post-colonial' ideologies, we argue that the DDM's relevance to a larger decolonial enterprise has not been adequately explored.

Traditional applications of the DDM have focussed on efforts to reduce intergroup conflict and understand redistributive policy attitudes in putatively post-colonial settings—contexts in which the colonial period is seen to have ended. In contrast, little attention has been paid to *colonial* and *neo-colonial* settings, in which self-determination, sovereignty and liberation remain realistic answers to colonial dilemmas. Moreover, mistakenly treating ongoing colonial relations as *post*-colonial risks artificially privileging diversity and integration efforts—while excluding decolonial policy options (e.g. sovereignty and liberation; see Fanon, 1963; Martín-Baró, 1994). Nonetheless, the present research is animated by our belief that the DDM provides the theoretical tools necessary to address such questions.

The present studies represent a decolonial application of the DDM to an ongoing colonial enterprise: that of the island nation and U.S. territory of Puerto Rico. Specifically, we analyse distinct profiles of Dark Duo beliefs among U.S. Americans and trace these profiles to preferences for three political status options for Puerto Rico: national independence, continued territorial status and U.S. statehood. We pay special attention to the ways in which symbolic exclusion and historical negation combine to undergird pro-egalitarian and neo-colonial expressions of support for Puerto Rico statehood (i.e. the complete annexation of Puerto Rico as a state of the United States). In this research, we discuss how symbolic cultural efforts, more than egalitarian concerns or a commitment to decolonization, underlie support for the annexation of Puerto Rico for a significant group of U.S. Americans.

### The colonial case of Puerto Rico

The last 124 years of Puerto Rican history have been marked by the political, economic and cultural imposition of U.S. American hegemonic rule over the island. Under the *Jones-Shafroth Act* (Public Law No. 64-368, 1917) and the *Puerto Rican Federal Relations Act* (Public Law No. 81-600, 1950), the U.S. federal government unilaterally controls matter of defence, education, external trade and international relations in Puerto Rico (Meléndez, 1993). The establishment of the *Estado Libre Asociado* in 1952 granted Puerto Rico some autonomy in local matters by providing the island its first ever constitutional government. However, the arrangement guaranteed continued U.S. American sovereignty over the island.

The turn of the 21st century has witnessed an erosion of Puerto Rican political autonomy. The little authority the local government of Puerto Rico had in the island's internal fiscal affairs was curtailed in 2016 by the imposition of the Financial Oversight and Management Board, composed of seven members appointed unilaterally by the U.S. president (PROMESA, H.R. 4900, 2016). The Fiscal Control Board's power over the local government's financial decisions represents a clear extension of U.S. hegemony over the island (Zambrana, 2021), and as recently as 20 June 2022, the United Nations Special Committee on

Decolonization met and approved—for 40th straight year—a resolution in favour of Puerto Rico's right to self-determination and independence (UN Special Committee on Decolonization, 2022).

Historically, Puerto Ricans' attitudes regarding their political future have been distributed among three status options: (1) achieving political independence from the U.S. and becoming a sovereign nation; (2) becoming the 51st state of the U.S.; and (3) maintaining the territorial status quo. In terms of legal and political considerations, U.S. statehood and national independence for Puerto Rico represent alternatives to the current territorial arrangement. However, decolonial social psychological analyses suggest that pro-statehood and pro-independence sentiments differ significantly regarding ideological motives and objectives among Puerto Ricans (Rivera Pichardo et al., 2022).

Recent research shows that internalization of inferiority (characterized by a perception of in-group inferiority), political conservatism and the justification of the colonial system leads Puerto Ricans to either maintain the present territorial arrangement and others to support a complete annexation of the island via U.S. statehood. From a decolonial social psychological perspective, the preference for continued territorial status and statehood reproduces colonial ways of thinking rather than decolonial and system-challenging perspectives among island-dwelling Puerto Ricans (Rivera Pichardo et al., 2022). Thus, among Puerto Ricans, support for the territorial status quo and for U.S. statehood represents the continuation and the *culmination* of the American colonial project on the island, respectively (Grosfoguel, 2003; Zambrana, 2021).

U.S. Americans have also expressed opinions regarding the Puerto Rican political status. During the 1990s, for instance, U.S. Americans were evenly divided between the three status options when asked to nominate their preferred status for the island (Saad, 1998). However, approximately two-thirds of U.S. Americans express support for statehood when asked directly if they favour or oppose Puerto Rico's admission as a state of the union—a proportion that has remained relatively constant since 1962 (McCarthy, 2019). The same research indicates that most Democrats support statehood (83%), while Republicans are less supportive (45%). However, among Republicans, opposition to statehood is not an overwhelming majority (48%), suggesting that the drivers of political status preferences may go beyond partisanship and political orientation (i.e. liberalism vs. conservatism).

Although liberals in the U.S. tend to be strong supporters of Puerto Rico statehood, the opposite is true in Puerto Rico—where liberals and progressives strongly oppose the annexation of Puerto Rico and favour greater political sovereignty (Rivera Pichardo et al., 2022). Thus, the forces that shape U.S. Americans' and island-dwelling Puerto Ricans' status preferences defy simple categorization in left–right terms, creating the possibility that more nuanced and context-specific ideological dynamics are at play. We argue that a decolonial articulation of the DDM provides the theoretical tools necessary to understand U.S. Americans' attitudes in this contemporary colonial context.

## A decolonial application of the dark duo model

In the DDM, historical negation and symbolic exclusion are seen as ideological responses to two core dilemmas present in contemporary 'post-colonial' societies (Sibley & Osborne, 2016). The first dilemma concerns whether and how to address the objective history of injustice against the colonized group. On the one hand, the cultural and social descendants of colonizers may engage in historical *recognition*—acknowledging colonial injustices and supporting policies to redress their continued effects (Newton et al., 2018). Alternatively, colonizers' descendants can engage in historical *negation*—denying the relevance of colonial history to the present and transferring blame for present-day hardships from society to the individual (Sibley et al., 2008). Historical negation uniquely predicts opposition to material and reparative efforts to redress the harms wrought by the colonial project, such as Māori land ownership and rates exemptions on Māori land in Aotearoa/New Zealand (Newton et al., 2018). Research in Australia has also linked the denial of colonial history to the commemoration of national charter narratives (e.g. Australia Day), deeply rooted in material injustices committed against indigenous people (see Lipscombe et al., 2020; Selvanathan et al., 2022).

The second ‘post-colonial’ dilemma is about how (if at all) to incorporate the colonized group’s culture, symbols and practices into the superordinate national identity. Colonizer groups may elect to engage in symbolic *projection*, recognizing that colonizers and the colonized are coequal exemplars of the nation (Newton et al., 2018). By accepting that the colonized represent the collective, members of colonizer groups create a shared identity—the construction of which facilitates prejudice reduction across multiple contexts (Dovidio et al., 2009; Hornsey & Hogg, 2000; Mummendey & Wenzel, 1999). Symbolic *exclusion*, on the other hand, rejects the incorporation of colonial subjects’ culture into social representations of the nation. As such, symbolic exclusion uniquely predicts opposition to ‘multicultural’ policies, such as the singing of the national anthem in Māori and the use of Māori cultural icons to promote New Zealand tourism (Sibley & Osborne, 2016).

Decolonial articulations propose that colonial violence is not confined to events of the distant past (i.e. colonialism)—instead, it persists as hegemonic ways of thinking and being (i.e. coloniality) inherent in the Eurocentric modes of society (Decolonial Psychology Editorial Collective, 2021; Maldonado-Torres, 2017). In doing so, decolonial perspectives privilege the need to dismantle colonial hierarchies and reinstate colonial subjects’ agency to go beyond the strict boundaries of modern-day colonialist states (Bulhan, 2015; Fanon, 1963; Martín-Baró, 1994; Mignolo, 2007). A decolonial treatment of the DDM must therefore be elaborated to include consideration of an important third dilemma: *how to address colonized peoples’ right to sovereignty and self-determination*.

The DDM was developed in the context of a settler-colonial project that resulted in the expulsion of Māori people from their land and in their forced adoption of Eurocentric practices. In addressing this ‘post-colonial’ reality, the model focusses on the role of collective identity in reducing prejudice and encouraging tolerance among colonizers and colonized people (Mummendey & Wenzel, 1999). As such, the theory has yet to fully explore decolonial matters of sovereignty, liberation and *resistance* to collective identity in *colonial* contexts—concerns that cast symbolic projection in a more problematic light.

## Ideologically based moral credentialing

Even ‘benevolent’ colonial discourses may promote acculturation processes among the colonized group that foster assimilation, in-group derogation and colonial ways of being (Adams et al., 2018; David & Okazaki, 2006). In the contested colonial context of Puerto Rico, common expressions among U.S. Americans, such as ‘Puerto Ricans are Americans, too’ or ‘Puerto Rico is the United States’, may serve to suppress and eventually erase colonial subjects’ sovereign identity and struggle for self-determination—especially when acts of symbolic projection are not paired with material commitments to redress colonial injustices.

Researchers working within the DDM have suggested that such discourses may represent a ‘moral-credentialing’ process among some members of societally dominant groups. Although symbolic exclusion and historical negation are consistently positively correlated, Sibley and Osborne (2016) argue that a willingness to project symbolic aspects of the colonized group’s culture onto the overarching national identity (i.e. low levels of symbolic exclusion) may provide moral cover for opposing efforts to decolonize institutions and redress historical injustices. In short, some dominant group members may strategically endorse symbolic projection as a means of justifying high levels of historical negation—a process that Sibley and Osborne (2016) term *ideologically based moral credentialing*.

Seemingly egalitarian acts of symbolic projection, in which colonized groups’ symbols and practices are ostensibly honoured, can serve to justify the neglect of subordinate groups’ material needs and entitlements. When paired with an unwillingness to redress historical injustices, policy attitudes that reflect symbolic projection represent tokenistic concessions for which colonized groups are expected to be grateful—even though such symbolism comes at little or no cost to the dominant group (Sibley et al., 2010; Sibley & Osborne, 2016). Such acts of symbolic projection can create the illusion of equality, thus obviating the need to redistribute material resources more equitably (Chow et al., 2013; Knowles et al., 2009) and, in the Puerto Rican case, deter processes of material decolonization.

Symbolic projection might also directly facilitate historical negation through moral licensing processes, which occur when egalitarian behaviours instil in dominant group members a sense of freedom to discriminate against outgroups (Merritt et al., 2010). Consistent with this idea, upper-class liberals in the U.S. tend to express strong support for egalitarian principles—but weaker support for specific policies when their self-interest is at stake (e.g. contributing to gentrification by choosing more affordable apartments; Glasford, 2022). In such cases, it may be that the endorsement of abstract egalitarian principles ‘credentials’ liberals to pursue self-interest in their concrete behaviours—even when doing so exacerbates inequality.

## Ideological profiles and Puerto Rican status preferences

In extending the DDM to the Puerto Rican context, we theorize that different combinations of historical negation and symbolic exclusion will predict support for different options regarding the future political status of Puerto Rico. The central aims of the present work are to document the existence of distinct ideological profiles among U.S. Americans and trace these profiles to preferences for different status options. Because we were interested in the frequency with which various ideological combinations actually occur in the population, we adopted a ‘person-centered’ analytic approach—specifically, latent profile analysis (LPA). The goals of LPA are to identify the number of distinct subgroups in the data and to characterize each subset in terms of a unique profile of parameters (typically the means of one or more indicator variables). In so doing, we paid particular attention to a ‘moral-credentialed’ profile combining low levels of symbolic exclusion with high levels of historical negation, which is theorized to undergird neo-colonial (rather than decolonial) support for Puerto Rico statehood.

### Anti-egalitarian profile

U.S. Americans high in both symbolic exclusion and historical negation are expected to support Puerto Rican national independence or maintenance of the island as a commonwealth, but to reject statehood. Independence, but not statehood, may appeal to these ‘anti-egalitarians’ due to their high levels of symbolic exclusion, as this ideology entails viewing Puerto Rico as foreign to American national identity. At the same time, anti-egalitarians’ high levels of historical negation—a system-justifying ideology (Jost, 2020; Sibley & Osborne, 2016)—may lead them to support the colonial status quo. This group closely resembles Sibley and Liu’s (2013) ‘anti-bicultural’ profile when analysing support for bicultural policies in Aotearoa/New Zealand (i.e. opposition towards both symbolic and reparative policies in favour of Māori; Sibley & Osborne, 2016).

### Pro-egalitarian profile

We expect that U.S. Americans low in both symbolic exclusion and historical negation will support national independence or statehood for Puerto Rico but reject continued territorial status. These ‘pro-egalitarians’ embrace of historical *recognition*—a system-challenging ideology (Jost, 2020; Sibley & Osborne, 2016)—should render the maintenance of the colonial status quo unappealing. Because pro-egalitarians are anti-colonial in their outlook, however, they are expected to express relatively strong support for both independence and statehood as alternatives that island-dwelling Puerto Ricans could pursue as part of a self-determination process. Critically, for pro-egalitarians, support for statehood reflects genuine concern for Puerto Ricans’ prosperity and well-being and should be accompanied by a desire to provide material support for the island. The pro-egalitarian group provides a close match to Sibley and Liu’s (2013) ‘pro-bicultural’ profile when analysing support for bicultural policies in Aotearoa/New Zealand (i.e. support for both symbolic and material policies in favour of Māori; Sibley & Osborne, 2016).



## Moral-credentialer profile

A third group of U.S. Americans is theorized to pair high levels of historical negation with low levels of symbolic exclusion. This ideological combination, while incongruous at first glance, is plausible given the power of symbolic *projection* to provide moral cover for high levels of historical negation (Sibley & Osborne, 2016). These ‘credentialers’ closely resemble Sibley and Liu's (2013) ‘bivalent bicultural’ profile when analysing support for bicultural policies in Aotearoa/New Zealand (i.e. opposition towards reparative policies in favour of Māori combined with support for symbolic policies in favour of Māori) and should express interest in symbolic, rather than materially beneficial, overtures to island-dwelling Puerto Ricans. We predict that moral-credentialers will support statehood at levels comparable to pro-egalitarians; however, for moral-credentialers, support for statehood represents a symbolic (and potentially a politically instrumental) act not accompanied by a commitment to concrete aid or reparations for Puerto Ricans.

While other ideological profiles may emerge among U.S. Americans—such as a profile combining high symbolic exclusion and low historical negation, or profiles displaying middling levels of historical negation and/or symbolic exclusion—they are not the focus of our theorizing.

## The present research

In the present work, we seek to distinguish three subgroups of U.S. Americans defined by their ideological stances regarding Puerto Rico and to trace these profiles to support for various political status options for the island. These goals required us to first adapt existing measures of the two Dark Duo ideologies for use in a Puerto Rican context. Thus, we first report our validation of Puerto Rican-specific measures of these ideologies, showing that they form reliable and differentiable factors that converge with measures of theoretically related attitude dimensions.

We then use LPAs to test whether the theorized ideological profiles exist among U.S. Americans: *anti-egalitarians* high in both symbolic exclusion and historical negation, *pro-egalitarians* low in both symbolic exclusion and historical negation, and *moral-credentialers* low in symbolic exclusion but high in historical negation. These ideological subgroups are hypothesized to prefer different resolutions to the Puerto Rican status dilemma, with anti-egalitarians favouring national independence or continued commonwealth status over statehood, pro-egalitarians preferring national independence or statehood over commonwealth status, and moral-credentialers preferring statehood or commonwealth status over national independence.

These predictions highlight two ideological paths to support for Puerto Rican statehood. Insofar as Puerto Rico itself may choose to pursue full union with the United States, statehood represents a possible anti-colonial option attractive to pro-egalitarians. At the same time, the annexation of Puerto Rico represents both a potent symbol of cultural projection *and the culmination of the Puerto Rican colonial project*—and might therefore prove attractive to moral-credentialers. To distinguish empirically between the anti-colonial and neo-colonial motivations for statehood, we examine the degree to which pro-egalitarians and moral-credentialers support *material* reparations for the island. If support for statehood is accompanied by a strong desire for material reparations among pro-egalitarians but not among moral-credentialers, this would corroborate the idea that the latter group's support for statehood is largely symbolic and neo-colonial in nature.

## METHOD

All analyses were conducted using three independent samples of participants.

## Sample 1

Four hundred and thirty-five participants were recruited through MTurk (57% female and 43% male, with one participant identifying as another gender).<sup>1</sup> Their ages ranged from 18 to 72 years old ( $M = 35.68$ ,  $SD = 10.50$ ), and most identified as European American (64%), followed by Black/African American (15%), Latino (8%), East Asian/Asian American (8%), Native American (3%) and another race (3%).

## Sample 2

Five hundred and seventy-eight U.S. college undergraduates completed a survey as part of an initial screening questionnaire in an introductory psychology course (69% female and 30% male, with 1% identifying as another gender). One group of students completed the questionnaire in Spring 2020 ( $N = 384$ ) and another in Fall 2020 ( $N = 194$ ). Their ages ranged from 17 to 47 years old ( $M = 18.97$ ,  $SD = 1.66$ ), and most identified as European American (30%), followed by Asian/Asian American (28%), Latino/Hispanic (16%), Black/African American (14%), multiple races (9%) and another race (2%); two participants identified as Native Hawaiian/Pacific Islander and two as American Indian/Alaska Native. This questionnaire included a variety of measures intended for use in different studies.

## Sample 3

Three hundred and eighty-one U.S. college undergraduates completed an online questionnaire regarding the relationship between the U.S. and Puerto Rico in exchange for course credit. One group of participants completed the study at the beginning of the Summer 2020 term ( $N = 237$ ) and another at the end of the Summer 2020 term ( $N = 144$ ). In terms of gender, 76% self-identified as female, 23% as male and 1% as other, and their ages ranged from 18 to 49 years old ( $M = 19.92$ ,  $SD = 2.17$ ). Most self-identified as European American (35%), followed by Asian/Asian American (24%), Latino/Hispanic (13%) and African American (11%) or another race (16%).

## Measures

### Historical negation and symbolic exclusion

The 16 items of the Post-Colonial Ideology Scale (PCIS-2D; Sibley, 2010) were adapted to address colonial intergroup relations between Puerto Ricans and U.S. Americans.<sup>2</sup> The PCIS-2D comprises two dimensions corresponding to historical negation and symbolic exclusion. Example historical negation items include 'We should all move on as one nation and forget about past and current differences and conflicts between ethnic groups' and 'We as a nation have a responsibility to see that due settlement is offered to Puerto Rico in compensation for past injustices' (reverse-coded). Example symbolic exclusion items include 'Puerto Rico's culture is something that all U.S. Americans can share, even if they are not themselves Puerto Ricans by descent' (reverse-coded), and 'The United States would be a better place to live if we forgot about trying to promote Puerto Rican culture to everyone'. In Sample 3, we used items corresponding to the short form of the PCIS-2D (Sibley, 2010). All responses were rendered on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

<sup>1</sup>This sample was part of experimental research on the effects of the Hurricane Maria disaster in Puerto Rico; relevant analyses can be found in the Supporting Information (Table S1). Given that the manipulation did not affect other variables, we used the data in the present research.

<sup>2</sup>All items can be found in the Supporting Information.

## Favoured Puerto Rican political status option

In all samples, we asked respondents to choose their favourite option concerning Puerto Rico's political future. The choices were as follows: 'Statehood for Puerto Rico (Make Puerto Rico into the 51st State of the Union)', 'Puerto Rico Independence (Political Separation from the U.S.)' and 'Commonwealth/Territorial Status of Puerto Rico (Keep the current relationship with the United States)'.

## Attitudes towards Puerto Rican political status options

In Sample 1, we developed six items to measure support for the three different options regarding the Puerto Rican status dilemma (U.S. statehood, territorial status and national independence). In this sample, we obtained separate ratings of the favourability of each option for the U.S. and Puerto Rico: 'Granting Statehood for Puerto Rico (P.R. becoming the 51st state of the Union) would be a good thing for [Puerto Rico/The U.S.]', 'Political Independence (Separation from the U.S.) would be a good thing for [Puerto Rico/The U.S.]' and 'Maintaining the Commonwealth/Territorial status (Keeping the Actual relationship between P.R. and the U.S.) would be a good thing for Puerto [Puerto Rico/The U.S.]'.

Because Samples 2 and 3 were shorter studies than Sample 1, we developed more succinct items to measure how favourable participants thought the three options were in general: 'I believe Puerto Rico Political Independence (Separation from the U.S.) would be positive', 'I believe that maintaining the Commonwealth/Territorial status (Keeping the Actual relationship between P.R. and the U.S.) would be positive', and 'I believe that granting Statehood for Puerto Rico (P.R. becoming the 51st state of the Union) would be positive'. All responses across three samples were rendered on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

## Resource-specific policy evaluation

In Sample 3, we presented participants with a description of a hypothetical congressional bill that would address Puerto Rico's economic struggles: 'Calls on Congress to consider retiring Puerto Rico's (\$120 billion) debt and give the island billions in additional federal funding for transportation, health care and education are a present debate in the U.S. Congress. A U.S. congressional bill has been proposed, which would give \$62 billion to help the cash-strapped Puerto Rican government; \$51 billion for economic development; \$27 billion for infrastructure, including new energy infrastructure; and billions more for education and environmental remediation'. We then asked participants to rate their support for this (or a similar) bill on a Likert scale ranging from 1 (*strongly oppose*) to 7 (*strongly support*).

## Measures to assess construct validity of the dark duo model

### Political conservatism

Three items measured political conservatism in general, regarding social and cultural issues and regarding economic issues. Responses were rendered on Likert scales ranging from 1 (*extremely liberal*) to 11 (*extremely conservative*). The three items formed a reliable composite in each of our samples ( $a_{\text{sample 1}} = .93$ ;  $a_{\text{sample 2}} = .88$ ;  $a_{\text{sample 3}} = .86$ ).



## General system justification

To measure preference for the societal status quo, we administered the general system justification scale (e.g. 'In general, you find the American society to be fair'; Kay & Jost, 2003). Responses were rendered on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale was reliable in each sample ( $a_{\text{sample 1}} = .89$ ;  $a_{\text{sample 2}} = .85$ ;  $a_{\text{sample 3}} = .90$ ).

## Social dominance orientation

In Sample 3, we assessed support for intergroup hierarchies using an eight-item social dominance orientation (SDO) scale (e.g. 'Some groups of people are simply inferior to other groups'; Ho et al., 2015). Responses were rendered on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). This scale was reliable ( $a = .89$ ).

## National identification

In Sample 2, we included a single-item Likert measure of national identification ('I identify with the United States of America'), with responses rendered on a Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). In Sample 3, national identification was assessed using three items adapted the in-group identification scale (e.g. 'The fact that I am American is an important part of my identity'; Leach et al., 2008). All responses were rendered on Likert scales from 1 (*strongly disagree*) to 7 (*strongly agree*). This scale was reliable ( $a = .80$ ).

## Intergroup contact with Puerto Ricans

In Sample 3, two items asked participants how many Puerto Ricans they knew and how many Puerto Ricans friends they had. Respondents provided their responses on a scale ranging from 1 (*none*) to 4 (*five or more*).

# RESULTS

## Psychometric properties of the Puerto Rican dark duo scale

Our first data-analytic goal was to examine the psychometric properties of the Puerto Rican Dark Duo Scale (PRDDS), which modified the Post-Colonial Ideology Scale (PCIS-2D) to fit the Puerto Rican colonial context. Consistent with the DDM, we expected the items to form distinct but correlated factors representing historical negation and symbolic exclusion. We thus conducted a series of confirmatory factor analyses (CFAs) with the full 16-item scale in Samples 1 and 2. Three specifications were examined: (1) a single latent factor; (2) two correlated latent factors representing each post-colonial ideology (historical negation and symbolic exclusion); and (3) two correlated factors reflecting each post-colonial ideology and two correlated factors reflecting item wording (i.e. pro- and con-trait phrasing; Bishop et al., 1978; Ho et al., 2015). The third and most complicated specification is depicted in Figure 1. Because participants in Sample 3 were administered a short form of the scale, only the first two CFAs were estimated. All CFAs were conducted using *lavaan* (Rosseel, 2012) for R (R Core Team, 2021).

Primary CFA results are summarized in Table 1.<sup>3</sup> The final model showed adequate goodness of fit,  $\chi^2(86) = 245.13, p < .001, CFI = .964, TLI = .950, RMSEA = .053$ , and all factor loadings on the two substantive factors were significant and higher than .50. The covariance between the ideologies was .45,  $p < .001$ . In Sample 2, we found similar results in terms of the final model's goodness of fit,  $\chi^2(86) = 294.01, p < .001, CFI = .949, TLI = .928, RMSEA = .065$ . However, all factor loadings for our historical negation items were lower than .40 ( $\lambda_s \leq .24$ ). We therefore elected to evaluate the six-item short version of the scale in Sample 2. The two-factor model yielded adequate goodness of fit,  $\chi^2(8) = 26.62, p = .001, CFI = .978, TLI = .959, RMSEA = .064$ , and all factor loadings were higher than .50. The covariance between the ideologies was .41,  $p < .001$ . Finally, in Sample 3, the two-factor model also showed adequate goodness of fit,  $\chi^2(8) = 14.05, p = .081, CFI = .992, TLI = .985, RMSEA = .045$ , and all factor loadings exceeded .50. The covariance between ideologies was .45,  $p < .001$ . In all samples, the most complicated model showed significantly better fit than simpler models.

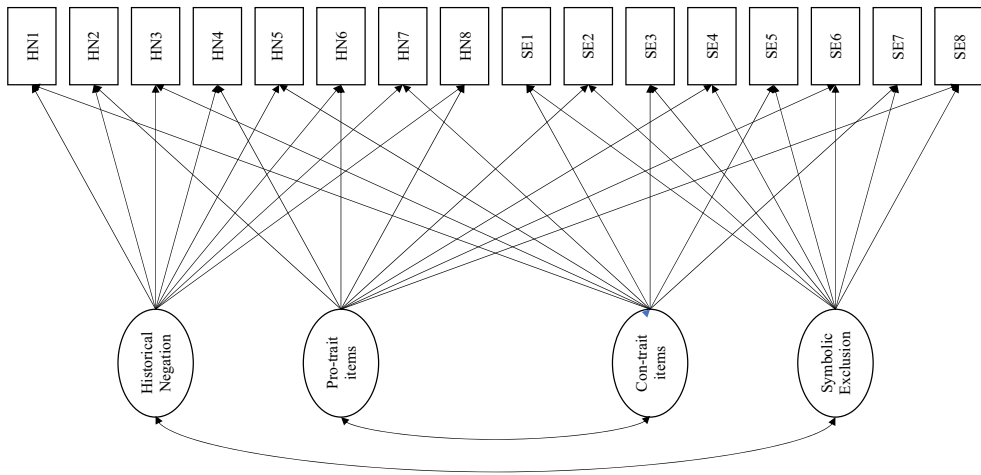


FIGURE 1 Data analysis approach for confirmatory factor analyses

TABLE 1 Summary of confirmatory factor analyses

Sample 1				Sample 2			
Model comparison	CFI	TLI	RMSEA	Model comparison	CFI	TLI	RMSEA
One-factor	.531	.457	.214		.628	.570	.158
Two-factors	.743	.700	.159		.868	.846	.095
$\Delta$	$\chi^2(1) = 994.32, p < .001$			$\chi^2(1) = 970.16, p < .001$			
Four-factors	.964	.95	.053		.949	.928	.065
$\Delta$	$\chi^2(17) = 995.12, p < .001$			$\chi^2(17) = 334.24, p < .001$			
Sample 2 (Short version)				Sample 3 (Short version)			
Model comparison	CFI	TLI	RMSEA	Model comparison	CFI	TLI	RMSEA
One-factor	.668	.447	.235		.703	.504	.258
Two-factors	.978	.959	.064		.992	.985	.045
$\Delta$	$\chi^2(1) = 268.26, p < .001$			$\chi^2(1) = 215.46, p < .001$			

<sup>3</sup>Complete results are shown in the Supporting Information (Tables S2–S5).

Consistent with previous work within the DDM, the PRDDS was found to consist of two substantive factors corresponding to historical negation and symbolic exclusion. As expected, these latent factors were moderately and positively intercorrelated. In Sample 1, the inclusion of two additional latent factors representing pro- and con-trait item wording further improved model fit.

## Construct validity

In previous research, the post-colonial ideologies of historical negation and symbolic exclusion have been theorized to covary with other ideological predispositions. We expected a similar profile of correlations to emerge with the PRDDS. Table 2 provides a summary of analyses relevant to our scale's construct validity.<sup>4</sup>

Consistent with the notion that post-colonial ideologies serve to buttress existing hierarchies between colonized people and colonizer groups (Sibley & Osborne, 2016), researchers working in Aotearoa/New Zealand have observed positive correlations between SDO and both historical negation and symbolic exclusion (Satherley & Sibley, 2018; Sibley & Osborne, 2016). Corroborating the construct validity of the PRDDS, we also observed positive associations between SDO and the post-colonial ideologies in Sample 3 (the only sample in which SDO was measured).

According to system justification theory (Jost & van der Toorn, 2012), many people are motivated to embrace ideologies that legitimize existing societal institutions and arrangements. Because post-colonial ideologies serve to buttress—rather than remediate—colonial relationships between colonizers and colonized groups, post-colonial ideologies tend to covary positively with system justification (Cardenas Castro et al., 2022). We replicate this pattern in the Puerto Rican context, such that general system justification was moderately associated with both historical negation and symbolic exclusion in all three of our samples.

Political conservatism has been theorized to have roots in system justification motives (Jost et al., 2003), and thus may correlate positively with historical negation and symbolic exclusion—ideologies that help to maintain the post-colonial status quo. Consistent with this expectation, Dark Duo researchers working in the context of Aotearoa/New Zealand have reported positive correlations between the post-colonial ideologies and support for conservative political parties (Greaves et al., 2014). Corroborating the validity

**TABLE 2** Summary of associations between colonial ideologies and other system-justifying and hierarchy-enhancing ideologies

	Sample 1		Sample 2		Sample 3	
	Historical negation	Symbolic exclusion	Historical negation	Symbolic exclusion	Historical negation	Symbolic exclusion
General System Justification	.34*	.33*	.49*	.33*	.51*	.41*
Political Conservatism	.51*	.48*	.49*	.41*	.45*	.39*
National Identification			.27*	.14*	.20*	.14*
Social Dominance Orientation					.47*	.52*
Intergroup contact with Puerto Ricans (general)					-.07	-.24*
Intergroup contact with Puerto Ricans (friends)					-.02	-.19*

Note. \* $p < .001$ .

<sup>4</sup>All details of these results can be found in the Supporting Information (Tables S6–S10).

of the PRDDS scale, conservatism was positively associated with both historical negation and symbolic exclusion in all our samples.

Finally, intergroup contact theory (Pettigrew, 1998; Pettigrew & Tropp, 2006) posits that interacting with members of an outgroup can alleviate one's prejudicial attitudes and promote harmonious intergroup relations. Because symbolic exclusion embodies cultural biases against colonized groups, we might expect this post-colonial ideology to be inversely related to intergroup contact. However, while intergroup contact may reduce prejudice, cross-group interaction does little to increase dominant-group members' willingness to remediate the subordinate group's disadvantaged status (Saguy et al., 2008). Thus, we expected historical negation to be weakly related or unrelated to U.S. Americans' levels of contact with Puerto Ricans. Corroborating the validity of the PRDDS, this is precisely the pattern of correlations we observed.

To summarize, the PRDDS was associated with other measures in theoretically coherent ways. Replicating prior research in other post-colonial contexts, historical negation and symbolic exclusion were positively correlated with a desire for hierarchy, support for the societal status quo and conservative political orientation. Moreover, symbolic exclusion—but not historical negation—was associated with personal contact with Puerto Ricans.<sup>5</sup> Considering this pattern of associations, the PRDDS appears to display good construct validity.

## Ideological profiles in the U.S. American population

Having examined the psychometric properties and construct validity of the PRDDS, we turn now to our primary hypotheses through LPAs. As a form of mixture modelling, LPA is premised on the notion that variables' observed distributions may reflect unobserved subgroups ('clusters') of individuals (Oberski, 2016). The goals of LPA are to identify the number of distinct subgroups in the data and to characterize each subgroup in terms of a unique profile of parameters—typically the means of one or more indicator variables. LPA bears similarities to other clustering techniques, such as cluster analysis and latent class analysis (LCA). However, unlike cluster analysis, LPA has the advantage of being model-based, with rigorous criteria for selecting an optimal solution; unlike LCA, in which cluster indicators must be dichotomous, LPA allows for dichotomous and continuous indicators (Pastor et al., 2007).

We used *tidy*LPA (Rosenberg et al., 2018) for R (R Core Team, 2021) to test LPA solutions for our two continuous profile indicators (i.e. historical negation and symbolic exclusion).<sup>6</sup> Models specifying from one to six clusters were examined, with the variances of the indicator variables, as well as the residual covariance between the indicators, constrained to zero across clusters.<sup>7</sup> Table 3 presents fit statistics for the various solutions. Following Nylund et al.'s (2007) recommendations, models were compared using the Akaike information criterion (AIC), Bayesian information criterion (BIC), Lo–Mendell–Rubin (LMR) likelihood ratio tests, and entropy. In interpreting the BIC and AIC, smaller values suggest that more variance has been accounted for (Posada & Buckley, 2004). Entropy values range from 0 to 1, with higher values representing improvements in prediction (Magidson & Vermunt, 2004). Results of all these analyses are shown in Table 3.

<sup>5</sup>We also conducted a series of analyses in which we examined the associations between the post-colonial ideologies and support for different Puerto Rican political status options, while adjusting for different ideological covariates. These results support our main conclusions and can be found in the Supporting Information (Tables S11–S26).

<sup>6</sup>Twenty (Sample 2; final  $N = 558$ ) and thirteen (Sample 3; final  $N = 368$ ) participants were excluded from our LPA analyses, given that they had incomplete answers to one or both of our continuous profile indicators. Without complete solutions to these two indicators, an estimation of distinct profiles is not possible.

<sup>7</sup>We attempted to run models that loosened these constraints. However, allowing the variances of historical negation and symbolic exclusion to differ across clusters resulted in widespread convergence problems, and the residual covariance failed to reach significance in most models we tested. We therefore report the results of more parsimonious models in which variances are constrained to equality and the residual covariance to zero.

TABLE 3 Fit statistics for latent profile analyses of *HN* and *SE* in the context of the U.S. and Puerto Rican relation

Clusters (k)	Sample 1				Sample 2				Sample 3			
	AIC	BIC	LMR test (k vs. k-1)	Entropy	AIC	BIC	LMR test (k vs. k-1)	Entropy	AIC	BIC	LMR test (k vs. k-1)	Entropy
1	2890	2906		1.00	3700	3717		1.00	2444	2459		1.00
2	2804	2832	$p < .001$	.571	3582	3612	$p < .001$	.754	2384	2411	$p < .001$	.551
3	2734	2775	$p < .001$	.806	3568	3611	$p < .001$	.794	2342	2381	$p < .001$	.751
4	2685	2738	$p < .001$	.803	<b>3538</b>	<b>3594</b>	<b><math>p &lt; .001</math></b>	.775	<b>2328</b>	<b>2378</b>	<b><math>p &lt; .001</math></b>	.705
5	<b>2671</b>	<b>2736</b>	<b><math>p &lt; .001</math></b>	.769	3550	3619	— <sup>a</sup>	.665	2328	2390	$p = .224$	.664
6	2673	2751	$p = .755$	.795	3556	3639	— <sup>a</sup>	.649	2334	2408	— <sup>a</sup>	.561

Note: Preferred solutions in bold.

Abbreviation: LMR, Lo–Mendell–Rubin.

<sup>a</sup>LMR test could not be performed because log-likelihood difference was negative.

## Sample 1

In Sample 1, inspection of the AIC and BIC suggested that a five-cluster solution was optimal (Table 3). Corroborating this choice of models, LMR likelihood ratio tests showed that the five-cluster solution fit the data significantly better than a four-cluster solution,  $\chi^2(4, 435) = 20.86, p < .001$ , but that six clusters were not superior to five,  $\chi^2(4, 435) = 1.90, p = .755$ . Further inspection of the five-profile solution appeared to fit the data very well, with an entropy value of .769. A four-profile solution also performed well, with a slightly higher entropy value (.803). However, we opted for the five-profile solution given that this solution displayed optimal model fit according to AIC and BIC and LMR tests. Figure 2 illustrates the historical negation and symbolic exclusion means for the five-profile model.

The preferred LPA solution in Sample 1 revealed five subgroups among our respondents. 25.7% of our respondents fit a pro-egalitarian profile of low historical negation and low symbolic exclusion. 9.4% of the sample displayed an anti-egalitarian profile of high historical negation and high symbolic exclusion. Critically, 12.9% of respondents exhibited the moral-credentialed profile of high historical negation but low symbolic exclusion. The analysis also revealed two additional subgroups of U.S. American respondents: an ‘ambivalent’ profile displaying moderate levels of historical negation and symbolic exclusion (38.4%) and a ‘history-ambivalent’ profile characterized by moderate levels of historical negation and low levels of symbolic exclusion (13.1%). This latter group was not hypothesized to emerge; however, it is consistent with our theorization that a significant group of individuals would express ambivalent levels of historical negation while expressing low levels of symbolic exclusion. In their higher levels of historical negation as compared to symbolic projection, these individuals qualitatively resemble the moral-credentialed profile, only with a less extreme gap between ideologies. We thus expect that this ideological subgroup will express fairly similar political attitudes to our core moral-credentialed profile (characterized by high historical negation and low symbolic exclusion). In terms of demographics, we also suspect these groups to resemble one another.

## Sample 2

In Sample 2, inspection of the AIC and BIC suggested that a four-profile solution was optimal (Table 3). Corroborating this choice of solutions, LMR tests indicate that the four-profile solution fit the data significantly better than a three-cluster solution,  $\chi^2(4, 558) = 34.20, p < .001$ . However, we were unable to conduct a LMR significance test between the five- and four-profile solutions, as the resulting log-likelihood

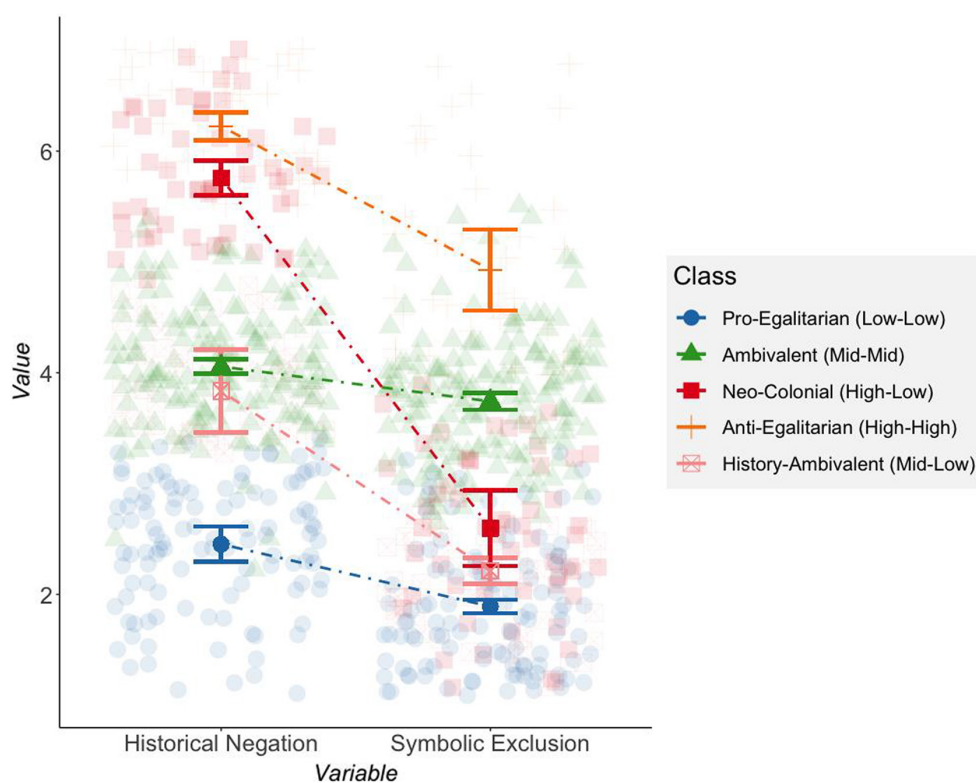


FIGURE 2 Sample 1 Latent profile analysis of historical negation and symbolic exclusion

difference was negative. A three-profile solution also performed well, with a slightly higher entropy value (.794). However, we opted for the four-profile solution because it met the criteria for optimal model fit according to AIC and BIC and LMR tests. Figure 3 illustrates the historical negation and symbolic exclusion means for the four-profile model.

The preferred LPA solution in Sample 2 revealed four subgroups among our respondents. 42.5% of our respondents fit a pro-egalitarian profile of low historical negation and low symbolic exclusion. 19.0% of the sample displayed an anti-egalitarian profile of high historical negation and high symbolic exclusion. Of particular interest, a small but identifiable moral-credentialed group (3.2% of respondents) emerged in the sample. An ‘ambivalent’ profile displaying moderate levels of historical negation and symbolic exclusion (33.9%) once again emerged.

### Sample 3

In Sample 3, inspection of the AIC and BIC again suggested that a four-profile solution was optimal (Table 3). Corroborating this choice of models, LMR tests showed that the four-profile solution fit the data significantly better than a three-cluster solution,  $\chi^2(4, 368) = 18.93, p < .001$ , but that five profiles were not superior to four,  $\chi^2(4, 368) = 5.68, p = .224$ . The four-profile solution also displayed a desirable entropy value (.705). Although a three-profile solution also performed well, with a slightly higher entropy value of .751, we opted for the four-profile solution rather because it met the criteria for optimal fit according to AIC and BIC and LMR tests. Figure 4 displays the historical negation and symbolic exclusion means for the preferred LPA solution.



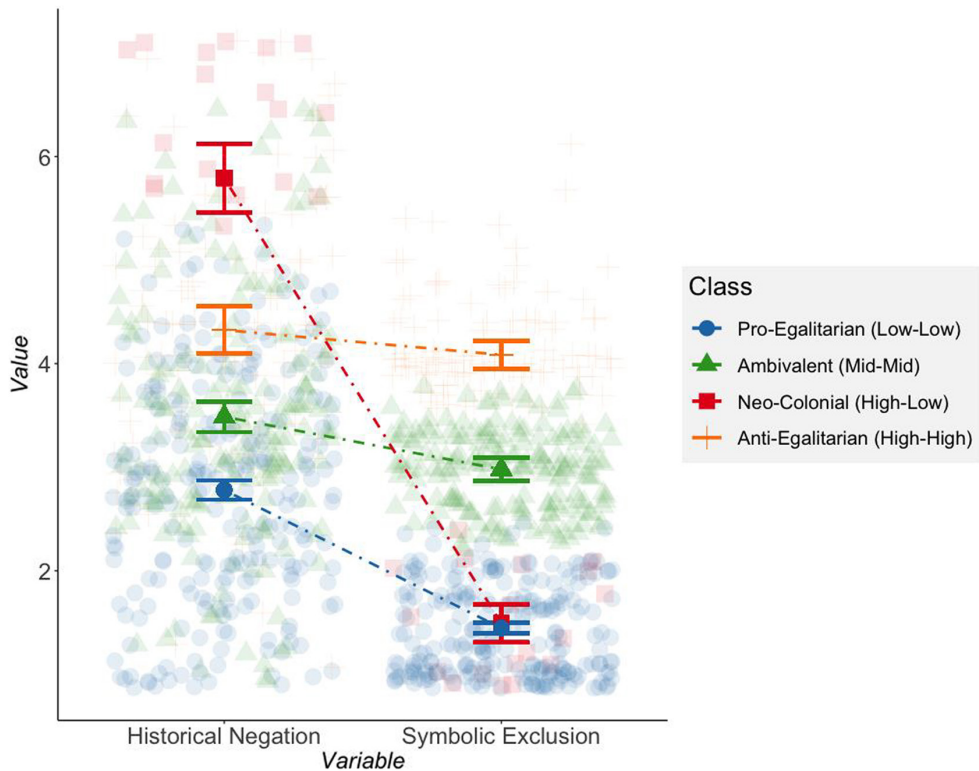


FIGURE 3 Sample 2 Latent profile analysis of historical negation and symbolic exclusion (short scale)

The preferred LPA solution in Sample 3 revealed four subgroups among our respondents. 40.5% of our respondents fit a pro-egalitarian profile of low historical negation and low symbolic exclusion. 22.8% of the sample displayed an anti-egalitarian profile of high historical negation and high symbolic exclusion. Importantly, we once again observed the moral-credentialed profile of high historical negation and low symbolic exclusion (9.5% of respondents). 26.9% of the sample fit an ambivalent profile characterized by moderate levels of historical negation and symbolic exclusion.

### Summary of selection of preferred solutions

Across our three samples, latent profile analyses uncovered distinct subgroups within the U.S. American population—each marked by a distinct pattern of means on measures of Puerto Rican historical negation and symbolic exclusion. Four of these profiles emerged in every sample: *pro-egalitarians* low in both historical negation and symbolic exclusion, *anti-egalitarians* high in both historical negation and symbolic exclusion, and *moral-credentialed* high in historical negation but low in symbolic exclusion, and an ‘ambivalent’ profile marked by middling levels of each post-colonial ideology. These findings—in particular, the existence of the moral-credentialed group across samples—demonstrate the usefulness of our decolonial application of the DDM to the context of Puerto Rico.

### Demographic characteristics of the ideological subgroups

Having selected LPA solutions, we sought to examine demographic and ideological correlates of the different ideological profiles in our non-student sample (Sample 1). Following Pastor et al.' (2007), we

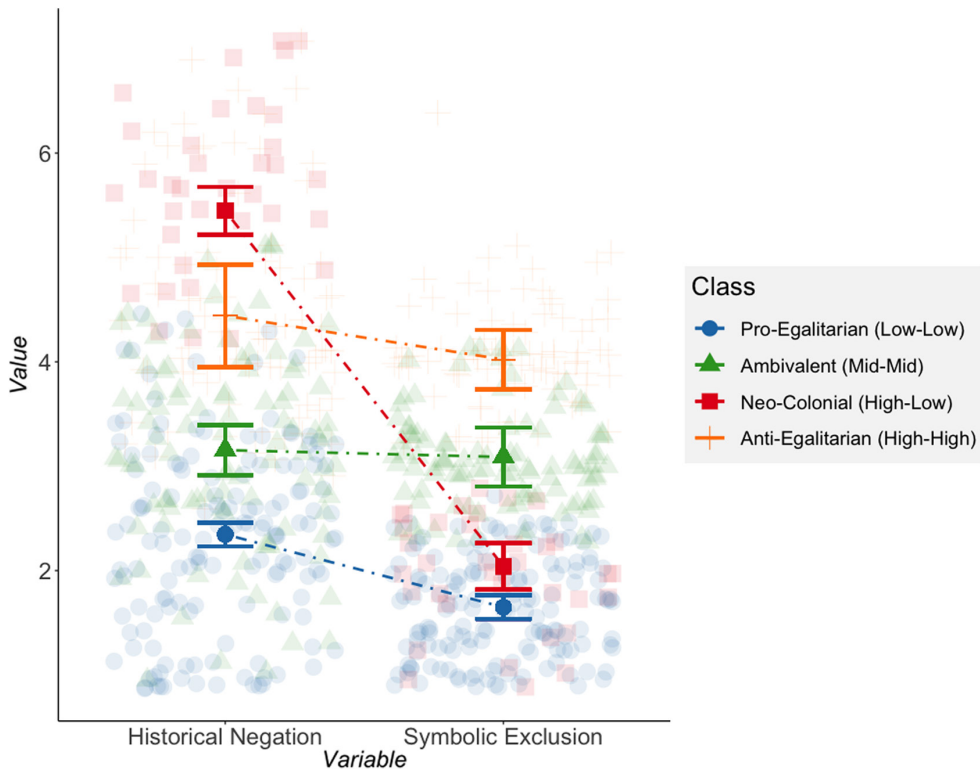


FIGURE 4 Sample 3 Latent profile analysis of historical negation and symbolic exclusion (short scale)

regressed variables of interest simultaneously on the clusters' posterior probabilities while constraining the intercept term to zero. On this approach, the resulting regression coefficients represent means of the variables in each cluster, weighted by the accuracy with which individuals can be assigned to a profile. To obtain significance tests of the difference between weighted cluster means, a Wald test is used to compare the fit of an unconstrained model to the fit of a model in which a pair of coefficients is fixed to zero. The results of this analysis are shown in Table 4.

We found that members of the ambivalent group tended to be younger than pro-egalitarians, anti-egalitarians or moral-credentialeds. Both ambivalent and anti-egalitarian respondents were more likely to be male than were ambivalents or moral-credentialeds. Moreover, moral-credentialeds and anti-egalitarians were more likely to be White than were pro-egalitarians or ambivalents. In terms of left-right ideology, pro-egalitarians tended to be the most left-leaning group, followed by relatively moderate ambivalents and moral-credentialeds, and finally by right-leaning anti-egalitarians.<sup>8</sup>

The 'history-ambivalent' profile found in our adult sample, which was characterized by moderate levels of historical negation and low levels of symbolic exclusion, displayed similar demographic and ideological features to the moral-credentialed profile (Table 4). Like members of the moral-credentialed (and anti-egalitarian) profiles, the history-ambivalent group tended to be mostly White. In terms of political ideology, the history-ambivalent group fell between the pro-egalitarians (the most left-leaning group) and the relatively moderate moral-credentialeds, with a predicted mean to the left of the scale midpoint. These results give us reason to suspect that this non-hypothesized group may represent an ambivalent

<sup>8</sup>Similar descriptive characteristics of our ideological profiles were found in both of our university student samples; these analyses can be found in the Supporting Information (Tables S27, S28).

TABLE 4 Demographic characteristics of ideological profiles adult sample 1

	Pro-egalitarian (low-low)	Ambivalent (mid-mid)	Anti-egalitarian (high-high)	Neo-colonial (high-low)	History- ambivalent (mid-low)
N of respondents (model-estimated)	112	167	59	56	41
% of respondents (model-estimated)	25.7	38.4	13.6	12.9	9.4
Predicted age	36.2 <sup>a</sup>	32.9 <sup>b</sup>	38.9 <sup>a</sup>	39.6 <sup>a</sup>	36.5 <sup>a</sup>
Likelihood female	.53 <sup>a</sup>	.34 <sup>b</sup>	.34 <sup>b</sup>	.44 <sup>a</sup>	.52 <sup>a</sup>
Likelihood white	.52 <sup>a</sup>	.47 <sup>a</sup>	.92 <sup>b</sup>	.86 <sup>b</sup>	.84 <sup>b</sup>
Left–Right ideology	2.46 <sup>a</sup>	5.88 <sup>c</sup>	7.06 <sup>d</sup>	5.94 <sup>c</sup>	4.19 <sup>b</sup>

Note: Demographic values represent the predicted characteristics of an individual whose identity type is known with certainty (i.e. a probability of 1). Values in a row not sharing a superscript are significantly different at  $p < .05$ .

expression of the moral-credentialling profile. It is possible that this profile emerged only in the adult sample because of this sample's high demographic heterogeneity relative to our student samples.

### Ideological profiles and the Puerto Rican political status dilemma

We theorized that three ideological subgroups of U.S. Americans—specifically, pro-egalitarians, anti-egalitarians and moral-credentialers—would express different preferences regarding the political future of Puerto Rico. We predicted that pro-egalitarians, as system challengers, would reject the colonial status quo of continued commonwealth status in favour of statehood or national independence. Anti-egalitarians, who both dismiss historical harms against Puerto Rico and devalue its culture, were expected to reject statehood in favour of national independence or continuing territorial status. Finally, we anticipated that moral-credentialers, who justify the rejection colonial history through expressions of openness to Puerto Rican culture, would endorse the annexation of Puerto Rico as a U.S. state in favour of the colonial status quo or national independence. For brevity, we will not discuss findings concerning the ambivalent profile—which consistently emerged in our LPAs but about which we had no theoretical expectations. Significance tests of the different profiles' preferences for each status option were obtained using the same regression method as was used to analyse demographic correlates (Pastor et al., 2007).

Our predictions imply that there are two very different ideological routes to statehood preferences. Pro-egalitarians likely support statehood as a means of extending political rights to the Puerto Rican people, whereas moral-credentialers tacitly regard statehood as the culmination of the American colonial project vis-à-vis the island. If this is so, then additional data are needed to distinguish pro-egalitarians' well-intended reasons for supporting statehood from moral-credentialers neo-colonial motivations. To this end, we analyse the relationship between the ideological profiles and support for a congressional bill proposing *material aid* to the people of Puerto Rico—predicting that, even if moral-credentialers and pro-egalitarians support statehood to equal degrees, the former will be significantly less supportive of material aid to the island.

#### *Puerto Rico independence*

On the forced-choice probe, anti-egalitarian respondents in Sample 1 preferred Puerto Rican national independence significantly more than did moral-credentialers or pro-egalitarians (Table 5). In Sample 2, however, no significant differences in independence preferences were observed (Table 6). Finally, in Sample 3, anti-egalitarians were significantly more favourable towards independence than were moral-credentialers, but did not differ from pro-egalitarians (Table 7). Taken together, these results provide tentative support for our hypothesis that the anti-egalitarian ideological profile, which is marked

by high historical negation and high symbolic exclusion, is associated with a desire to exclude Puerto Rico from the American orbit and identity.

#### *Puerto Rico territorial status*

Across our samples, pro-egalitarians were the least likely to support continued commonwealth status for Puerto Rico (Tables 5–7); however, in Sample 2, the difference in commonwealth preferences between pro-egalitarians and moral-credentialers was not significant. This finding corroborates our prediction that pro-egalitarians, who are low in the system-justifying ideologies of historical negation and symbolic exclusion, reject the colonial status quo.

#### *Puerto Rico statehood*

Across all samples, both pro-egalitarians and moral-credentialers were significantly more likely than anti-egalitarians to choose statehood as their preferred option for Puerto Rico (Table 5). In no sample did we observe a significant difference between pro-egalitarians' and moral-credentialers' likelihood of preferring statehood. Turning to attitudes towards statehood, pro-egalitarians and moral-credentialers supported statehood to an equal degree—with the exception of Sample 1, in which moral-credentialers supported statehood less than did pro-egalitarians when the item was framed in terms of consequences for the U.S. (Table 8).<sup>9</sup> Anti-egalitarians supported statehood significantly less than did pro-egalitarians or moral-credentialers across all sample and items. These findings support our expectation that the moral-credentialed profile, consisting of high historical negation but low symbolic exclusion, can underwrite a strong preference for Puerto Rico statehood—a preference as strong, in fact, as that of pro-egalitarians.<sup>10</sup>

TABLE 5 Political status forced choice by ideological profiles sample 1

	Pro-egalitarian (low-low)	Ambivalent (mid-mid)	Anti-egalitarian (high-high)	Neo-colonial (high-low)	History-ambivalent (mid-low)
Vote for independence	.11 <sup>a</sup>	.27 <sup>b</sup>	.48 <sup>c</sup>	.07 <sup>a</sup>	.04 <sup>a</sup>
Vote for territorial status	.13 <sup>a</sup>	.54 <sup>c</sup>	.49 <sup>b</sup>	.32 <sup>b</sup>	.28 <sup>a</sup>
Vote for statehood	.76 <sup>a</sup>	.17 <sup>b</sup>	.03 <sup>b</sup>	.62 <sup>a</sup>	.74 <sup>a</sup>

Note: Values represent the predicted likelihoods for an individual whose identity type is known with certainty (i.e. a probability of 1). The dependent variables were dummy coded to indicate voting response (No = 0; Yes = 1). Values in a row not sharing a superscript are significantly different at  $p < .05$ .

TABLE 6 Political status forced choice by ideological profiles sample 2

	Pro-egalitarian (low-low)	Ambivalent (mid-mid)	Anti-egalitarian (high-high)	Neo-colonial (high-low)
Vote for independence	.26 <sup>a</sup>	.42 <sup>b</sup>	.32 <sup>a</sup>	.32 <sup>a</sup>
Vote for territorial status	.18 <sup>a</sup>	.21 <sup>a</sup>	.57 <sup>b</sup>	.31 <sup>a</sup>
Vote for statehood	.57 <sup>a</sup>	.34 <sup>b</sup>	.08 <sup>c</sup>	.37 <sup>a</sup>

Note: Values represent the predicted likelihoods for an individual whose identity type is known with certainty (i.e. a probability of 1). The dependent variables were dummy coded to indicate voting response (No = 0; Yes = 1). Values in a row not sharing a superscript are significantly different at  $p < .05$ .

<sup>9</sup>For results concerning measured attitudes towards the other status options (i.e. independence and continued commonwealth status), see the Supporting Information (Table S29).

<sup>10</sup>A simple multipanel Boxplot with  $t$ -test  $p$ -values analysing mean differences of support of each political status option across those subjects assigned to the different ideological profiles is also available for sample 3 in the Supporting Information (see Figure S2).

TABLE 7 Political status forced choice by ideological profiles sample 3

	Pro-egalitarian (low-low)	Ambivalent (mid-mid)	Anti-egalitarian (high-high)	Neo-colonial (high-low)
Vote for independence	.37 <sup>a</sup>	.56 <sup>c</sup>	.49 <sup>a</sup>	.16 <sup>b</sup>
Vote for territorial status	.12 <sup>a</sup>	.18 <sup>a</sup>	.33 <sup>b</sup>	.32 <sup>b</sup>
Vote for statehood	.51 <sup>a</sup>	.26 <sup>b</sup>	.19 <sup>b</sup>	.51 <sup>a</sup>

Note. Values represent the predicted likelihoods for an individual whose identity type is known with certainty (i.e. a probability of 1). The dependent variables were dummy coded to indicate voting response (No = 0; Yes = 1). Values in a row not sharing a superscript are significantly different at  $p < .05$ .

TABLE 8 Evaluation of political status attitudes and congress bill by ideological profiles

	Pro-egalitarian (low-low)	Ambivalent (mid-mid)	Anti-egalitarian (high-high)	Neo-colonial (high-low)	History-ambivalent (mid-low)
Puerto Rico Statehood <i>US-Frame</i> (Sample 1)	.80 (.05) <sup>a</sup>	.56 (.04) <sup>b</sup>	.20 (.06) <sup>c</sup>	.69 (.06) <sup>b</sup>	.80 (.06) <sup>a</sup>
Puerto Rico Statehood <i>PR-Frame</i> (Sample 1)	.84 (.05) <sup>a</sup>	.67 (.04) <sup>b</sup>	.57 (.06) <sup>c</sup>	.76 (.06) <sup>a</sup>	.84 (.06) <sup>a</sup>
Puerto Rico Statehood (Sample 2)	.79 (.12) <sup>a</sup>	.67 (.12) <sup>b</sup>	.56 (.12) <sup>c</sup>	.77 (.14) <sup>a</sup>	
Puerto Rico Statehood (Sample 3)	.57 (.12) <sup>a</sup>	.44 (.12) <sup>a</sup>	.39 (.12) <sup>b</sup>	.54 (.12) <sup>a</sup>	
U.S. Congressional Bill (Sample 3)	.85 (.09) <sup>a</sup>	.74 (.10) <sup>b</sup>	.60 (.10) <sup>c</sup>	.76 (.10) <sup>b</sup>	

Note. Values represent the predicted means for an individual whose identity type is known with certainty (i.e. a probability of 1). All dependent variables were rescaled to a range of 0–1 values. Values in a row not sharing a superscript are significantly different at  $p < .05$ . Analyses control for age, gender (female = 1), race (European American = 1) and mean-centred political ideology.

### Support for Resources to Puerto Rico

Our analyses revealed that moral-credentialers and pro-egalitarians support Puerto Rican statehood to similar degrees. We thus sought to distinguish the motives behind the groups' relatively pro-statehood stances. To this end, we examine the degree to which pro-egalitarians and moral-credentialers support a hypothetical congressional bill dedicating significant federal resources to Puerto Rico. We expected that, because they acknowledge the colonial history of and harms experienced by the Puerto Rican people, pro-egalitarians' support for statehood would be accompanied by relatively strong support for material aid to the island. In contrast, we theorized that moral-credentialers regard statehood as the completion of the colonial project in Puerto Rico rather than as a means of improving Puerto Ricans' quality of life—and therefore predicted that moral-credentialers would display relatively weak support for the congressional bill.

Despite favouring Puerto Rican statehood to equal degrees, moral-credentialers and pro-egalitarians differed in terms of support for economic aid to the island. Specifically, and as predicted, moral-credentialers supported the hypothetical federal aid bill to a lesser extent than did pro-egalitarians. For their part, anti-egalitarians supported material aid to Puerto Rico less than did moral-credentialers or pro-egalitarians (Table 8).

This pattern of findings supports the idea that moral-credentialers and pro-egalitarians, despite supporting Puerto Rican statehood to equal degrees, differ in their motivations for doing so. Consistent with the idea that moral-credentialers tend to support Puerto Rican statehood more as the culmination of the U.S. colonial project than as a means of uplifting the Puerto Rican people, they are less supportive of material aid to the island than are pro-egalitarians. Conversely, the combination of strong support for statehood *and* material aid displayed by pro-egalitarians suggests a broader commitment to material and symbolic concerns regarding the Puerto Rican people.

## GENERAL DISCUSSION

In this research, we sought to understand the ideological underpinnings of U.S. Americans' support for Puerto Rican political status resolutions. Given that Puerto Rico is an actively contested colonial site, we explored relationships between colonial ideologies—historical negation and symbolic exclusion—and attitudes regarding the island's fate (Sibley, 2010; Sibley & Osborne, 2016). Specifically, we sought to understand how historical negation and symbolic exclusion combine to shape U.S. Americans' preferences for superficial and symbolic gestures towards the Puerto Rican people versus material initiatives aimed at rectifying deep inequalities rooted in colonial history.

By incorporating decolonial concerns into the original theoretical arguments developed by Sibley and Osborne (2016), we analysed distinct profiles of Dark Duo beliefs among U.S. Americans. We then traced these ideological profiles to attitudes and preferences regarding different Puerto Rican status options. Of special interest was the link between a *moral-credentialed profile* (Sibley & Osborne, 2016)—which fuses high levels of historical negation with low levels of symbolic exclusion—to support for the annexation of Puerto Rico as a U.S. state. As such, the present research is the first application of the DDM to a present-day neo-colonial milieu. Thus, we believe our work answers calls for the extension of the DDM to a range of colonial contexts (Sibley, 2010) and for further investigation of neo-colonial ideologies (Sibley & Osborne, 2016).

At the applied level, the present work supports the extension of existing methodological tools to the Puerto Rican context. Our adaptation of the original Dark Duo measures displayed the expected two-dimensional structure, with factors representing historical negation and symbolic exclusion. The PRDDS also replicated an array of nomological links (e.g. to SDO, system justification and political conservatism) seen in previous research, thus evidencing the measure's construct validity.

### The moral credentialing hypothesis

Across all samples, our LPAs uncovered distinct profiles of colonial ideology among U.S. Americans. The four most common profiles found among U.S. Americans were: *pro-egalitarians*, characterized by low levels of historical negation and symbolic exclusion; *anti-egalitarians*, who display high levels of both colonial ideologies; *moral-credentialeds*, marked by high levels of historical negation but low levels of symbolic exclusion, and an 'ambivalent' profile characterized by moderate levels of each colonial ideology. From a decolonial perspective, the moral-credentialed profile is perhaps the most theoretically interesting—as these individuals endorse symbolically egalitarian efforts to incorporate Puerto Rican culture into American identity while at the same time dismissing past colonial harms and the possibility of reparations. That credentialers are consistently found in the general population suggests that this ideological group is not limited to political elites (Sibley & Osborne, 2016).

Past theorizing (Sibley & Osborne, 2016) has suggested that moral-credentialeds embrace symbolically inclusive gestures in order to justify disregard for colonial harms and history—and thus to maintain a commitment to colonial outcomes. In the light of this reasoning, we theorized that Puerto Rican statehood, which promises to extend certain rights to the island's people *and* represents the culmination of the colonial project in Puerto Rico, might resonate with moral-credentialeds as much as it does with pro-egalitarians. This is precisely what we found. Moreover, suggesting that moral-credentialeds' support for statehood reflects a colonial mindset, credentialers showed relatively lower levels of support for a congressional bill that would divert significant federal funds to the island than pro-egalitarians.

### Theoretical and practical implications

By stressing colonized peoples' inalienable right to sovereignty and self-determination, our decolonial extension of the model enabled us to uncover both 'benevolent' and 'strategic' colonial discourses



concerning the annexation of Puerto Rico. Within strategic colonial discourse, symbolic projection of colonial subjects' culture in the hegemonic national identity represents an insidious means of maintaining the colonial hierarchies. As such, support for statehood among moral-credentialers may represent an offer to the Puerto Rican people that comes at little cost to the majority group—but that nonetheless secures a territorial possession (Sibley et al., 2010; Sibley & Osborne, 2016).

Our results also speak to current ideological divides in contemporary political debates over Puerto Rico's status—specifically, those among liberal politicians (Fineout, 2021). Since 2020, two bills have been formally presented to resolve the Puerto Rican status dilemma. First, 'The Puerto Rico Statehood Admission Bill' (H.R.1522 – 117th Congress, 2021), introduced by Florida Representative Daren Soto (a Democrat) and Puerto Rico Commissioner Resident in Congress Jennifer Gonzalez (a Republican), calls on U.S. Congress to offer statehood as a binding option to voters of Puerto Rico. Second, 'The Puerto Rico Self-Determination Act' (H.R.2070 – 117th Congress, 2021), introduced by New York Democratic Representatives Nydia Velázquez and Alexandria Ocasio-Cortez, offers 'a legitimate, accountable and inclusive process for decolonization and self-determination'. In contrast to HR 1522, HR 2070 proposes creating a 'status convention' consisting of delegates elected by Puerto Rican voters who would choose a political resolution for the island's territorial status—whether independence, statehood or any option other than the current territorial arrangement. In this context, we would expect moral-credentialers to support a push for Puerto Rico statehood but not to express unconditional support for a Puerto Rican self-determination process.

Our results highlight the colonial-ideological undercurrents that might motivate support for the two congressional bills—one advocating Puerto Rican statehood, the other Puerto Rican self-determination. Specifically, the former may reflect the neo-colonial agenda of moral-credentialers, and the latter a more pro-egalitarian outlook. The neo-colonial push for Puerto Rican statehood may reflect a lack of critical knowledge concerning the territory's history and its longstanding self-determination movement, as well as partisan self-interest (Varela, 2020; Zambrana, 2021).<sup>11</sup>

## Limitations and future considerations

Although our study sheds valuable light on the psychological and ideological underpinnings of colonial ideologies, the work has theoretical and methodological limitations that should be addressed in future research. First, we only addressed support for a resource-specific bill in Sample 3. Future work should attempt to replicate the results involving this item, in which moral-credentialers and pro-egalitarians agreed on Puerto Rico statehood but differed significantly with respect to aid to the island. Moreover, levels of support for the congressional bill were quite high across all ideological profiles, hinting at a ceiling effect among the young and liberal students in the sample; a replication among a more diverse set of participants is therefore necessary.

Second, the present research did not directly address support for Puerto Rican self-determination. Our results revealed significant patterns, suggesting that the moral-credentialed group supported political status options that maintain or reinforce U.S. hegemonic rule in Puerto Rico, while the pro-egalitarian group displayed relatively strong support for both national independence and statehood.<sup>12</sup> We interpret these results as suggesting (albeit indirectly) that pro-egalitarians (but not moral-credentialers) would support a political process supporting Puerto Ricans' right to determine their own political status. Future work should explicitly address the question of support for self-determination.

Finally, although we consistently observed the existence of a subgroup of respondents corresponding to the theorized moral-credentialed profile, we cannot substantiate that this group are actually engaging in

<sup>11</sup>There is an expectation among U.S. American politicians that Puerto Rico would constitute an overwhelming Democratic state given its Afro- and Latin-American demographics (see Varela, 2020).

<sup>12</sup>For results concerning mean differences of support of each political status option across those subjects assigned to the different ideological profiles, see the Supporting Information (Figure S2).

a causal process of moral credentialing or licensing. Consistent with the theory, research on moral credentialing indicates that people who demonstrate a lack of bias in terms of symbolic contexts are ironically more likely to subsequently engage in materially discriminatory behaviours (Sibley & Osborne, 2016). Thus, future work should examine the implications of the ideologically based moral-credentialing hypothesis from an experimental perspective. As suggested, it is likely that people who are first asked to indicate their support for symbolic projection should subsequently be more supportive of historical negation than people who are asked to demonstrate their support for these two ideologies in the opposite order (Sibley & Osborne, 2016).

## CONCLUSION

Throughout this article, we have drawn critical attention to a subgroup of U.S. Americans who, consciously or unconsciously, promote neo-colonial interests concerning the island nation of Puerto Rico. For these *moral-credentialers*, Puerto Rican statehood may represent a simple symbolic gesture towards the Puerto Rican people that comes at little cost to the majority group but which nonetheless completes, through full annexation, the longstanding colonial project on the island. Though it appears superficially egalitarian, for these individuals, the offer of statehood secures a colonial possession and all its material and symbolic resources through a new 'post-colonial' societal arrangement.

From this perspective, the annexation of Puerto Rico does not represent a system-challenging escape from U.S. hegemonic rule over the island. In fact, it represents the opposite: the entrenchment of the U.S. colonial project and colonial forms of thinking among Puerto Ricans and U.S. Americans (Grosfoguel, 2003; Rivera Pichardo et al., 2022). Like the annexed territory of Hawaii, which in 1959 saw the prospect of annexation materialize, Puerto Rico's statehood may represent a transitional step into a settler post-colonial project that reinforces colonial intergroup inequalities (Canan & Hennessy, 1989; Davis, 2011). We conclude by urging that any discussion of the political status of Puerto Rico needs to first and foremost privilege colonial subjects' agency and the decolonial considerations of self-determination, sovereignty and liberation (Fanon, 1963; Martín-Baró, 1994) over any self-interested concerns among members of the dominant group.

## AUTHOR CONTRIBUTIONS

**Eduardo Javier Rivera Pichardo:** Conceptualization; data curation; formal analysis; investigation; methodology; project administration; validation; visualization; writing – original draft; writing – review and editing. **Salvador Vargas Salfate:** Conceptualization; data curation; formal analysis; investigation; methodology; project administration; validation; visualization; writing – original draft; writing – review and editing. **Eric D. Knowles:** Conceptualization; formal analysis; supervision; writing – original draft; writing – review and editing.

## ACKNOWLEDGEMENTS

We thank the research participants who gave their time to complete our study materials. We acknowledge the members of the Social Justice Lab, the Politics & Intergroup Relations Lab and others at New York University for their helpful commenting on previous drafts of this article.

## CONFLICT OF INTEREST

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article. This research was conducted without any commercial or financial relationships construed as a potential conflict of interest.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in the Open Science Framework at: [https://osf.io/3m7z4/?view\\_only=8a08d8acce9f4d5c96fb40c594f45124](https://osf.io/3m7z4/?view_only=8a08d8acce9f4d5c96fb40c594f45124)

## ORCID

Eduardo J. Rivera Pichardo  <https://orcid.org/0000-0002-6822-3652>

Salvador Vargas Salfate  <https://orcid.org/0000-0003-3306-4134>

Eric D. Knowles  <https://orcid.org/0000-0001-8525-1930>

## REFERENCES

- Adams, G., Estrada-Villalta, S., & Gómez Ordóñez, L. H. (2018). The modernity/coloniality of being: Hegemonic psychology as intercultural relations. *International Journal of Intercultural Relations*, 62, 13–22. <https://doi.org/10.1016/j.ijintrel.2017.06.006>
- Bishop, G. F., Tuchfarber, A. J., & Oldendick, R. W. (1978). Change in the structure of American political attitudes: The nagging question of question wording. *American Journal of Political Science*, 22(2), 250–269. <https://doi.org/10.2307/2110616>
- Bulhan, H. A. (2015). Stages of colonialism in Africa: From occupation of land to occupation of being. *Journal of Social and Political Psychology*, 3(1), 239–256. <https://doi.org/10.5964/jssp.v3i1.143>
- Cabecinhas, R., & Feijó, J. (2010). Collective memories of Portuguese colonial action in Africa: Representations of the colonial past among Mozambicans and Portuguese youths. *International Journal of Conflict and Violence*, 4(1), 28–44. <https://doi.org/10.4119/ijcv-2813>
- Canan, P., & Hennessy, M. (1989). The growth machine, tourism, and the selling of culture. *Sociological Perspectives*, 32(2), 227–243. <https://doi.org/10.2307/1389099>
- Cardenas Castro, M., Arancibia, H., Bahamondes, J., & Figueiredo, A. (2022). Symbolic exclusion and historical negation regarding the indigenous Mapuche people: A study of their moral and ideological causes in Chile. *Race and Social Problems*, 14, 342–356. <https://doi.org/10.1007/s12552-022-09358-3>
- Chow, R. M., Lowery, B. S., & Hogan, C. M. (2013). Appeasement: Whites' strategic support for affirmative action. *Personality and Social Psychology Bulletin*, 39(3), 332–345. <https://doi.org/10.1177/0146167212475224>
- David, E. J. R., & Okazaki, S. (2006). Colonial mentality: A review and recommendation for Filipino American psychology. *Cultural Diversity & Ethnic Minority Psychology*, 12(1), 1–16. <https://doi.org/10.1037/1099-9809.12.1.1>
- Davis, S. (2011). The US military base network and contemporary colonialism: Power projection, resistance, and the quest for operational unilateralism. *Political Geography*, 30(4), 215–224. <https://doi.org/10.1016/j.polgeo.2011.04.003>
- Decolonial Psychology Editorial Collective. (2021). General psychology otherwise: A decolonial articulation. *Review of General Psychology*, 25(4), 339–353. <https://doi.org/10.1177/10892680211048177>
- Dovidio, J. F., Gaertner, S. L., & Saguy, T. (2009). Commonality and the complexity of “we”: Social attitudes and social change. *Personality and Social Psychology Review*, 13(1), 3–20. <https://doi.org/10.1177/1088868308326751>
- Fanon, F. (1963). *The wretched of the earth*. (C. Farrington, Trans.). Grove Press. (Original work published 1961).
- Fineout, G. (2021, March 5). Democrats fracture over Puerto Rico statehood. *Politico*. Retrieved from: <https://www.politico.com/states/new-york/albany/story/2021/03/05/democrats-fracture-over-puerto-rico-statehood-1367099>
- Glasford, D. E. (2022). The privileged liberal principle-implementation gap: How the personal behavior of privileged liberals contributes to social inequality. *Journal of Applied Social Psychology*, 52, 865–885. <https://doi.org/10.1111/jasp.12896>
- Greaves, L. M., Osborne, D., Sengupta, N. K., Milojev, P., & Sibley, C. G. (2014). Politics and post-colonial ideology: Historical negation and symbolic exclusion predict political party preference. *New Zealand Journal of Psychology*, 43(3), 39.
- Grosfoguel, R. (2003). *Colonial subjects: Puerto Ricans in a global perspective*. University of California Press.
- H.R.1522 – 117th Congress. (2021). Puerto Rico statehood admission act. <https://www.congress.gov/bill/117th-congress/house-bill/1522>
- H.R.2070 – 117th Congress. (2021). Puerto Rico Self-Determination Act of 2021. <https://www.congress.gov/bill/117th-congress/house-bill/2070>
- H.R.4900 – 114th Congress. (2016). PROMESA. <https://www.congress.gov/bill/114th-congress/house-bill/4900>
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO, scale. *Journal of Personality and Social Psychology*, 109(6), 1003–1028. <https://doi.org/10.1037/pspi0000033>
- Hornsey, M. J., & Hogg, M. A. (2000). Assimilation and diversity: An integrative model of subgroup relations. *Personality and Social Psychology Review*, 4(2), 143–156. [https://doi.org/10.1207/S15327957PSPR0402\\_03](https://doi.org/10.1207/S15327957PSPR0402_03)
- Jones-Shafroth Act of 1917, Pub L. No. 64–368, 39 Stat. 951. (1917). Available from: <https://www.loc.gov/law/help/statutes-at-large/64th-congress/session-2/c64s2ch145.pdf>
- Jost, J. T. (2020). *A theory of system justification*. Harvard University Press.
- Jost, J. T., & van der Toorn, J. (2012). System justification theory. In P. A. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 313–343). SAGE Publications. <https://doi.org/10.4135/9781446249222.n42>
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375. <https://doi.org/10.1037/0033-2909.129.3.339>
- Kay, A. C., & Jost, J. T. (2003). Complementary justice: Effects of “poor but happy” and “poor but honest” stereotype exemplars on system justification and implicit activation of the justice motive. *Journal of Personality and Social Psychology*, 85(5), 823–837.
- Knowles, E. D., Lowery, B. S., Hogan, C. M., & Chow, R. M. (2009). On the malleability of ideology: Motivated construals of color blindness. *Journal of Personality and Social Psychology*, 96(4), 857–869. <https://doi.org/10.1037/a0013595>

- Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., Ouwerkerk, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology, 95*(1), 144–165. <https://doi.org/10.1037/0022-3514.95.1.144>
- Licata, L., & Klein, O. (2010). Holocaust or benevolent paternalism? Intergenerational comparisons on collective memories and emotions about Belgium's colonial past. *International Journal of Conflict and Violence, 4*(1), 45–57. <https://doi.org/10.4119/ijcv-2814>
- Licata, L., Khan, S. S., Lastrego, S., Cabecinhas, R., Valentim, J. P., & Liu, J. H. (2018). Social representations of colonialism in Africa and in Europe: Structure and relevance for contemporary intergroup relations. *International Journal of Intercultural Relations, 62*, 68–79. <https://doi.org/10.1016/j.ijintrel.2017.05.004>
- Lipscombe, T. A., Dzidic, P. L., & Garvey, D. C. (2020). Coloniser control and the art of disremembering a "dark history": Duality in Australia day and Australian history. *Journal of Community & Applied Social Psychology, 30*(3), 322–335.
- Liu, J. H., & Hilton, D. J. (2005). How the past weighs on the present: Social representations of history and their role in identity politics. *The British Journal of Social Psychology, 44*(4), 537–556. <https://doi.org/10.1348/014466605X27162>
- Magidson, J., & Vermunt, J. K. (2004). Latent class models. In D. Kaplan (Eds.), *The Sage handbook of quantitative methodology for the social sciences* (pp. 175–198). Sage.
- Maldonado-Torres, N. (2017). Frantz Fanon and the decolonial turn in psychology: From modern/colonial methods to the decolonial attitude. *South Africa Journal of Psychology, 47*(4), 432–441. <https://doi.org/10.1177/0081246317737918>
- Martín-Baró, I. (1994). In A. Aron & S. Corne (Eds.), *Writings for a liberation psychology*. Harvard University Press.
- McCarthy, J. (2019, July 18). Americans Continue to Support Puerto Rico Statehood. *Gallup*. Retrieved from: <https://news.gallup.com/poll/260744/americans-continue-support-puerto-rico-statehood.aspx>
- Meléndez, E. (1993). *Colonial dilemma: Critical perspectives on contemporary Puerto Rico*. South End Press.
- Merritt, A. C., Efron, D. A., & Monin, B. (2010). Moral self-licensing: When being good frees us to be bad. *Social and Personality Psychology Compass, 4*, 344–357. <https://doi.org/10.1111/j.1751-9004.2010.00263.x>
- Mignolo, W. (2007). Introduction: Coloniality of power and de-colonial thinking. *Cultural Studies of Science Education, 21*(2–3), 155–167. <https://doi.org/10.1080/09502380601162498>
- Mummendey, A., & Wenzel, M. (1999). Social discrimination and tolerance in intergroup relations: Reactions to intergroup difference. *Personality and Social Psychology Review, 3*(2), 158–174. [https://doi.org/10.1207/s15327957pspr0302\\_4](https://doi.org/10.1207/s15327957pspr0302_4)
- Newton, H. J., Sibley, C. G., & Osborne, D. (2018). The predictive power of post-colonial ideologies: Historical negation and symbolic exclusion undermine support for resource-based bicultural policies. *International Journal of Intercultural Relations, 62*, 23–33. <https://doi.org/10.1016/j.ijintrel.2017.03.005>
- Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal, 14*(4), 535–569. <https://doi.org/10.1080/10705510701575396>
- Oberski, D. L. (2016). A review of latent variable modeling with R. *Journal of Educational and Behavioral Statistics, 41*(2), 226–233. <https://doi.org/10.3102/1076998615621305>
- Pastor, D. A., Barron, K. E., Miller, B. J., & Davis, S. L. (2007). A latent profile analysis of college students' achievement goal orientation. *Contemporary Educational Psychology, 32*(1), 8–47. <https://doi.org/10.1016/j.cedpsych.2006.10.003>
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology, 49*, 65–85. <https://doi.org/10.1146/annurev.psych.49.1.65>
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*(5), 751–783. <https://doi.org/10.1037/0022-3514.90.5.751>
- Posada, D., & Buckley, T. R. (2004). Model selection and model averaging in phylogenetics: Advantages of Akaike information criterion and Bayesian approaches over likelihood ratio tests. *Systematic Biology, 53*(5), 793–808. <https://doi.org/10.1080/10635150490522304>
- Puerto Rican Federal Relations Act of 1950, Pub L. No. 81–600, 64 Stat. 319. (1950). Available from: <https://www.loc.gov/law/help/statutes-at-large/81st-congress/session-2/c81s2ch446.pdf>
- R Core Team. (2021). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna.
- Rivera Pichardo, E. J., Jost, J. T., & Benet-Martínez, V. (2022). Internalization of inferiority and colonial system justification: The case of Puerto Rico. *Journal of Social Issues, 78*, 79–106. <https://doi.org/10.1111/josi.12437>
- Rosenberg, J., Beymer, P., Anderson, D., van Lissa, C. J., & Schmidt, J. (2018). TidyLPA: An R package to easily carry out latent profile analysis (LPA) using open-source or commercial software. *Journal of Open Source Software, 3*(30), 978. <https://doi.org/10.21105/joss.00978>
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling. *Journal of Statistical Software, 48*(2), 1–36. <https://doi.org/10.18637/jss.v048.i02>
- Saad. (1998, March 13). Americans divided over status of Puerto Rico. *Gallup*. Retrieved from: <https://news.gallup.com/poll/4243/americans-divided-over-status-puerto-rico.aspx>
- Saguy, T., Dovidio, J. F., & Pratto, F. (2008). Beyond contact: Intergroup contact in the context of power relations. *Personality and Social Psychology Bulletin, 34*(3), 432–445. <https://doi.org/10.1177/0146167207311200>
- Satherley, N., & Sibley, C. G. (2018). A dual process model of post-colonial ideology. *International Journal of Intercultural Relations, 64*, 1–11. <https://doi.org/10.1016/j.ijintrel.2018.03.003>

- Selvanathan, H. P., Jetten, J., & Crimston, C. R. (2022). Australia day or invasion day? Perspectives on the continuing impact of colonialism underlies public contestations round Australia's national day. *Political Psychology*. Advance online publication. <https://doi.org/10.1111/pops.12818>
- Sibley, C. G. (2010). The dark duo of post-colonial ideology: A model of symbolic exclusion and historical negation. *International Journal of Conflict and Violence*, 4(1), 106–123. <https://doi.org/10.4119/ijcv-2818>
- Sibley, C. G., & Liu, J. H. (2013). Relocating attitudes as components of representational profiles: Mapping the epidemiology of bicultural policy attitudes using latent class analysis. *European Journal of Social Psychology*, 43(2), 160–174. <https://doi.org/10.1002/ejsp.1931>
- Sibley, C. G., & Osborne, D. (2016). Ideology and post-colonial society. *Political Psychology*, 37(S1), 115–161. <https://doi.org/10.1111/pops.12323>
- Sibley, C. G., Liu, J. H., & Khan, S. S. (2010). Implicit representations of ethnicity and nationhood in New Zealand: A function of symbolic or resource-specific policy attitudes? *Analyses of Social Issues and Public Policy*, 10(1), 23–46. <https://doi.org/10.1111/j.1530-2415.2009.01197.x>
- Sibley, C. G., Liu, J. H., Duckitt, J., & Khan, S. S. (2008). Social representations of history and the legitimization of social inequality: The form and function of historical negation. *European Journal of Social Psychology*, 38(3), 542–565. <https://doi.org/10.1002/ejsp.449>
- Tomicic, A., & Berardi, F. (2018). Between past and present: The sociopsychological constructs of colonialism, coloniality and post-colonialism. *Integrative Psychological & Behavioral Science*, 52(1), 152–175. <https://doi.org/10.1007/s12124-017-9407-5>
- United Nations. (2022). Special committee on decolonization approves resolution calling upon United States to promote process for Puerto Rico's self-determination, eventual independence. *United Nations Meetings Press Releases*. Retrieved from: <https://press.un.org/en/2022/gacol3360.doc.htm>
- Varela, J. R. (2020, November 11). White liberals must stop pushing Puerto Rican statehood for their own benefit. Let us decide. *THINK newsletter NBC News*. Retrieved from: <https://www.nbcnews.com/think/opinion/white-liberals-must-stop-pushing-puerto-rican-statehood-their-own-ncna1247419>
- Zambrana, R. (2021). *Colonial debts: The case of Puerto Rico*. Duke University Press.

## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

**How to cite this article:** Rivera Pichardo, E. J., Vargas Salfate, S., & Knowles, E. D. (2022). The psychology of colonial ideologies: Decoupling pro-egalitarian and neo-colonial sources of support for Puerto Rico statehood. *British Journal of Social Psychology*, 00, 1–26. <https://doi.org/10.1111/bjso.12591>