



RESEARCH ARTICLE

WILEY

The nature of deprovincialism: Assessment, nomological network, and comparison of cultural and group deprovincialization

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Abstract

This study ($N = 770$) explores in depth the construct of deprovincialization by both uniting and comparing two scales that assess its two facets: the Group Deprovincialization Scale (GDS; Martinovic & Verkuyten, 2013) and the Cultural Deprovincialization Scale (CDS, Boin et al., 2020). First, we tested the factorial structure of the construct through confirmatory factor analyses. Second, we compared the mean scores of the GDS and the CDS and a list of variables related to individual dispositions and intergroup outcomes for participants who had (vs. had not) lived abroad. Then, we explored the nomological net of correlates of deprovincialization to examine whether the GDS and the CDS differed in their relationship with the correlates. Finally, we tested the simultaneous relationships of both scales with a subset of variables via network analysis. Results offer insights on the important construct of deprovincialization, its assessment, and the relevance of its facets, showing that the GDS and the CDS tap into related yet different nuances of the broad deprovincialization construct. Please refer to the Supplementary Material section to find this article's [Community and Social Impact Statement](#).

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KEYWORDS

cultural deprovincialization, factorial structure, group deprovincialization, network analysis, nomological net

1 | INTRODUCTION

Deprovincialization has been conceptualized by Pettigrew (1997, 2011) to describe a worldview characterized by openness toward and acceptance of other cultures and groups, as well as the abandonment of an ingroup-centric perspective without disparaging the ingroup. This term can be considered the opposite of “provincialism”, which refers to a closed-minded set of attitudes characterized by entailing an excessive centring in one's small world and the perception of new and unknown experiences (e.g., intergroup and intercultural encounters) as threatening (Pettigrew, 2011).

Deprovincialization is characterized by two interconnected facets (Verkuyten, Voci, & Pettigrew, 2022): the first facet involves a more nuanced, less ethnocentric view of one's ingroup; the other facet is grounded on increased openness, curiosity, and acceptance of outgroups. Two scales operationalize these two sides of the construct: the Group Deprovincialization Scale (GDS; Martinovic & Verkuyten, 2013) represents the first facet, whereas the Cultural Deprovincialization Scale (CDS, Boin, Fuochi, & Voci, 2020) represents the second facet.

The first ingroup-oriented facet of deprovincialization consists in a less ingroup-centric worldview, which implies a constructive reappraisal of one's own group, its ways of life, and its cultural traditions. This re-evaluation does not have to lead to a less positive portrayal of the ingroup, nor does it have to imply an emotional distancing from it. Rather, ingroup norms, traditions, and values are put into perspective: they are not taken for granted nor considered the only way to deal with the world, which is not incompatible with a sense of ingroup satisfaction, belonging, and commitment (Verkuyten et al., 2022).

The GDS is a 4-item measure tackling this facet of deprovincialization. The scale is short and reliable (example item: “One should always try to adopt a broader cultural perspective than only the perspective of one's own culture”, 5-point agreement response scale) and has been administered in several large-scale surveys involving national probability samples in countries such as the Netherlands, Germany, and the US (e.g., Martinovic & Verkuyten, 2013). Twelve empirical studies in different countries (see Verkuyten et al., 2022, for a review) supported the construct validity of the GDS as well as its relation with various measures. The scale was associated with openness to new experiences, the ability to see things from different perspectives, as well as cognitive flexibility. Importantly, the GDS was also positively related to having an inclusive understanding of the national community and negatively related to ethnic boundary drawing, dogmatism, ethnic nationhood, social dominance orientation (SDO), right-wing authoritarianism (RWA), and superiority beliefs regarding one's own society. Additionally, the GDS has been found to be positively correlated with left-wing political orientation, as well as with second language use and multilingualism, and with international living experiences.

The importance of deprovincialization as cultural ingroup nuance is further supported by its negative independent association with outgroup prejudice and by the evidence that people scoring higher on deprovincialization are more likely to acknowledge immigrants' discrimination and to protest against it (Verkuyten & Martinovic, 2015). Additionally, deprovincialization is positively associated with the endorsement of cultural diversity ideologies (i.e., multiculturalism and interculturalism) and predicts support for immigrant rights and tolerance of dissenting minority group practices, even after multiple controls (Verkuyten, Martinovic, & Smeekes, 2014; Verkuyten, Thijs, & Bekhuis, 2010).

The second outgroup-oriented facet of deprovincialization reflects a growing process of cultural change where encounters with norms, customs, and traditions of other groups promote openness to and acceptance of other people, their worldviews, and their culture. Boin et al. (2020) developed and validated the CDS to measure this facet of

deprovincialization. The CDS consists of six items capturing a broad-minded view of other cultures and outgroups following intergroup encounters. Examples of items are: "Getting to know individuals from different cultures makes me feel more open toward other people." and "Knowing customs and traditions of different cultures helps me feel closer to other people." (5-point scale, from 0 = *does not describe me at all* to 4 = *describes me very well*).

Besides testing the psychometric properties of the scale, the first study in Boin et al.'s (Boin et al., 2020) paper showed that people scoring higher on the CDS reported higher levels of agreeableness, extraversion, openness to experience, universalism and benevolence values, cognitive flexibility, and more positive experiences with the outgroup (immigrant people). Simultaneously, they reported lower levels of prejudice, nationalism, SDO, RWA, and less negative experiences with the outgroup. Overall, these results supported Pettigrew's deprovincialization hypothesis, suggesting that deprovincialized individuals embrace new experiences, perspectives, and ways to think while being respectful of outgroups and concerned for intergroup harmony and peace.

The second study of the paper by Boin et al. (2020) examined the temporal within-person fluctuations in CDS scores and their associations with variations in positive and negative contact with immigrants and in prejudice variables (i.e., attitudes, subtle prejudice, and blatant prejudice toward immigrants in Italy). Results showed that, in an 8-week time span, CDS scores displayed little intra-individual variation, which was only 23% of the total variance, that is, of the sum of within- and between-persons variance. This suggests that cultural deprovincialization was rather stable but changed to some extent. Moreover, results of multilevel regressions showed that within- and between-person variations in positive and negative contact were related to time-varying deprovincialization, whereas within- and between-person variations in deprovincialization were linked to time-varying outgroup evaluations and prejudice. These findings support the idea that being exposed to other cultures' customs and traditions through positive intergroup encounters can favour deprovincialization as well as more harmonious intergroup relations.

Importantly and consistent with this, international and intercultural experiences while living abroad have been found to have a positive impact on perception of other cultures and groups. Specifically, among Dutch and German participants, GDS was positively associated with having lived abroad for at least a month (Verkuyten et al., 2022). Living abroad was also linked to more creativity (Leung, Maddux, Galinsky, & Chiu, 2008; Maddux & Galinsky, 2009) and higher outgroup tolerance through higher deprovincialization, measured with GDS (Verkuyten, 2021). Living abroad for studying was also related to the development of less ethnocentric attitudes and greater open-mindedness (Ngai & Janusch, 2015; Walters, Garii, & Walters, 2009).

Overall, previous research has shown that group and cultural deprovincialization have a strong association not only with intergroup prejudice but also with dispositional variables related to both prejudice and openness toward other cultures and groups (Boin et al., 2020; Martinovic & Verkuyten, 2013; Verkuyten et al., 2010). In light of these results, deprovincialization could be a promising construct for understanding and improving intergroup relations in multicultural societies. Despite a growing number of studies supporting the importance of deprovincialization, it remains underestimated by existing literature, and the construct is still understudied (see Hodson, Crisp, Meleady, & Earle, 2018). This paper aimed at deepening our understanding of the nature of deprovincialization, considering its two facets, measured by the GDS and the CDS. Even though the two scales share a common ground, their theoretical framework suggests that the GDS and the CDS tap into two related but different aspects of the same construct (Verkuyten et al., 2022). However, the structure of the overall deprovincialization construct, the link between the two deprovincialization scales, and the simultaneous relations of the GDS and the CDS with individual differences, social experiences, and prejudice-related variables have not yet been tested. Testing how these two facets and measures of deprovincialization are related to and differ from each other—in factorial, correlational and network analyses—is important to (a) empirically confirm the theoretical framework conceptualizing group deprovincialization and cultural deprovincialization as two facets of the broader deprovincialization construct; (b) give social and behavioural scientists proper tools to measure deprovincialization, informing them about when and how to use the GDS and the CDS; and (c) deepen the understanding of the overall construct of deprovincialization, its nomological net, and its potential to improve intergroup relations.

1.1 | Aim and hypotheses

This paper aimed to investigate the factorial structure and the correlational network of the broad deprovincialization construct by both uniting and comparing group deprovincialization and cultural deprovincialization. As correlates, we selected various dispositions and intergroup outcomes relevant to the nomological network of the GDS and the CDS. Specifically, based on previous empirical findings involving the GDS and the CDS, we considered individual dispositions related both to prejudice and to openness (i.e., right-wing authoritarianism—RWA, social dominance orientation—SDO, and dispositional curiosity), positive and negative intergroup contact experiences with outgroup members, ingroup identification, attitudes and feelings toward the ingroup, and prejudice and feelings toward the outgroup (Boin et al., 2020; Martinovic & Verkuyten, 2013; Verkuyten, Martinovic, Smeekes, & Kros, 2016).

First, we hypothesized (H1) that cultural deprovincialization and group deprovincialization are two strongly connected but also distinct constructs. To test H1, we calculated the correlation between the two scales, and we performed two-factor (one factor for each scale, with a higher order deprovincialization factor) and one-factor confirmatory factor analyses (CFA). H1 is supported if three conditions are met: (1) The correlation between the total scores of the two scales is higher than .50 (Cohen, 1988); (2) The two-factor solution from CFA fits the data well; (3) The one-factor solution from CFA yields unsatisfactory fit indexes. As thresholds for an acceptable fit, we considered a root mean square error of approximation (RMSEA) smaller or equal to .08, a comparative fit index (CFI) and Tucker–Lewis index (TLI) higher than .95, and a standardized root mean square residual (SRMR) smaller than .10 (Hu & Bentler, 1999; Schermelleh-Engel et al., 2003).

Second, we hypothesized (H2) that cultural deprovincialization and group deprovincialization are part of a network of variables related to openness, non-hierarchical and outgroup-friendly attitudes, and positive intergroup and international experiences, but that they have different locations within this network. To test H2, we: (a) tested whether mean scores of the two deprovincialization scales and the other variables of the study are different in people who have or have not lived abroad; (b) computed the correlations between the two deprovincialization scales and the other variables of the study, which can be considered either antecedents or outcomes of deprovincialization, related to ingroup and outgroup appraisals, as well as more stable individual differences, and tested whether correlation coefficients differ for the two types of deprovincialization; (c) performed a network analysis of cultural and group deprovincialization with the variables of interest, that is, the strongest correlates.

2 | METHOD

The Psychological Research Ethics Committee of the University of Padova (*masked for submission*) approved the procedures of this study, protocol #4443. Raw data and R script are openly available at https://osf.io/8z9au/?view_only=ac28ddfca0b9432ca46816ab67b2427b.

2.1 | Participants and procedure

Six research collaborators managed the data collection, relying on their social networks to collect a convenience sample of 770 native Italian adults (representing the full sample of data collected for this study: 467 women, 295 men, 3 other, and 5 missing values), from the general population. Participants received a link to an online questionnaire. In the informed consent of the study, they were provided with information on the study's purposes, the anonymity of their responses, and the possibility to withdraw at any time. Participation was on a voluntary basis, without any compensation in exchange. Age ranged from 18 to 80 years ($M = 34.72$; $SD = 16.13$). Their occupations were as follows: 1% were manual workers; 23% were retailers, employees, or primary-school teachers; 17% were engineers, doctors, or lawyers; 43% were students; and 8% were retired, unemployed, or housekeepers. The rest of the sample did not report any

occupation. As for education, 4% attained primary and middle school; 44% had a high school diploma; 23% had a bachelor's degree; and 29% got a master's degree or a PhD. Finally, 22% of the sample declared they had lived abroad for at least one month in their lives, up to 51 years. On average, participants who had international living experiences spent about two years in another country ($M_{\text{months spent abroad}} = 23.96$ and $SD_{\text{months spent abroad}} = 61.52$).

2.2 | Measures

Importantly, if a validated Italian version of a scale did not exist, items were translated by adopting a back-translation procedure to preserve their original meaning.

2.2.1 | Deprovincialization

We used the GDS (Martinovic & Verkuyten, 2013; 7-point response scale, from 1 = *totally disagree* to 7 = *totally agree*; $\alpha = .92$) and the CDS (Boin et al., 2020; 5-point response scale, from 0 = *does not describe me at all* to 4 = *describes me very well*; $\alpha = .82$) to assess two distinct sides of deprovincialization. English and Italian items are fully reported in Table S1.

2.2.2 | Prejudice-related variables

To measure prejudice toward immigrants, we used a total of seven items: three were adapted from Christ et al. (2010), substituting the original target outgroup, "foreigners", with "immigrants" (e.g., Immigrants are a burden for our social security system). The rest were developed by the researchers. The scale had high reliability in our sample ($\alpha = .84$). To assess identification with the ingroup (i.e., Italian people), we employed Brown and colleagues' (1986) three-item scale in its Italian version (Voci, 2006; $\alpha = .58$). Both prejudice and ingroup identification's measures were on a 5-point response scale (from 0 = *total disagreement* to 4 = *total agreement*). To measure positive attitudes toward the outgroup and the ingroup, participants were asked to rate, on a 5-point scale (from 0 = *not at all* to 4 = *very much*), how "positive", "unfavourable" (reverse-coded), "friendly", and "negative" (reverse-coded) were their attitudes toward immigrants living in Italy ($\alpha = .81$) and Italian people ($\alpha = .70$), respectively (Pagotto & Voci, 2013).

2.2.3 | Individual dispositions

We assessed participants' dispositional curiosity by employing three subscales of the Five-Dimensional Curiosity Scale (Kashdan et al., 2018): Stress tolerance, which is the ability to manage the distress that may arise from being exposed to unfamiliar stimuli ($\alpha = .84$); Joyous Exploration, which is the tendency to desire and enjoy novel situations and new knowledge ($\alpha = .82$); and Social Curiosity, which is the interest in other people's lives ($\alpha = .84$). Participants responded on a scale from 0 (= *does not describe me at all*) to 7 (= *describes me perfectly*). To measure participants' ideologies, we administered the Social Dominance Orientation Scale (SDO, Pratto, Sidanius, Stallworth, & Malle, 1994; Italian version by Aiello, Chirumbolo, Leone, & Pratto, 2005; $\alpha = .90$) and a short 14-item version of the Right-Wing Authoritarianism Scale (RWA; Altemeyer, 1996; $\alpha = .79$), proposed by Manganelli Rattazzi, Bobbio, and Canova (2007) in the Italian cultural context. The first scale assesses the preference for maintaining inequality and hierarchy among social groups, whereas the second one measures the tendency to be submissive to authority figures and a preference for conformity to traditional norms. For both measures, responses were provided on a 7-point scale (from 1 = *strongly disagree* to 7 = *strongly agree*).

2.2.4 | Positive and negative contact with outgroup members

We employed two items each to assess positive and negative contact with immigrants in Italy (then averaged; Fuochi et al., 2020): “How many immigrant people do you know and see in a positive [negative] way?”, “How often do you meet immigrant people you know and perceive the experience as positive [negative]?”. Responses were on a five-point scale (quantity of contact: 0 = none, 1 = very few, 2 = few, 3 = quite a lot, and 4 = a lot; frequency of contact: 0 = never, 1 = rarely, 2 = sometimes, 3 = often, and 4 = very often). The Spearman–Brown coefficient was high for both positive ($\rho = .77$) and negative ($\rho = .82$) contact.

2.2.5 | Feelings toward ingroup and outgroup

To measure outgroup and ingroup trust, participants had to report how often they experienced a list of four trust-related emotions and feelings (Fuochi, Voci, Boin, & Hewstone, 2021; Voci, 2006)—sense of reliability, trust, feeling of security, suspicion (reverse-coded), and distrust (reverse-coded)—toward immigrants living in Italy ($\alpha = .81$) and Italians ($\alpha = .72$), respectively. Responses were on a 5-point Likert-type scale, going from 0 = never to 4 = very often. To measure outgroup and ingroup anxiety, participants were told to imagine themselves in a hypothetical situations in which they were “the only Italian among a group of unknown immigrants of the same gender as yours” and “in a group of Italian people of the same gender as yours”, respectively. For each of the two hypothetical situations, participants indicated how much they would feel relaxed (reverse-coded), quiet (reverse-coded), cautious, troubled, and embarrassed in that situation on a scale from 0 = *not at all* to 4 = *very much* (Fuochi et al., 2021; Voci & Hewstone, 2003). Alpha values were high for both outgroup ($\alpha = .87$) and ingroup anxiety ($\alpha = .82$).

3 | RESULTS

3.1 | Testing H1

H1 hypothesized that cultural and group deprovincialization are two distinct, yet related, constructs. Specifically, we expected that: (1) the correlation between the GDS and the CDS would be higher than .50; (2) fit indexes from a two-factor CFA would be satisfying; (3) fit indexes of a one-factor CFA would be poor. On average, participants scored relatively high on both deprovincialization scales (see Table 1). To test H1, we first computed the correlation between the total scores of the two scales: Pearson correlation yielded $r = .65$ ($p < .001$), suggesting a strong connection between the two deprovincialization scales. Second, we performed a CFA with two first-order latent factors, CDS and GDS, and a second-order deprovincialization factor. Items of each deprovincialization scale were loaded on the respective factor. We employed the Robust Maximum Likelihood (MLR) estimator, which is particularly suitable for our ordinal, non-normal data (multivariate skewness $_{CDS} = 1,516.70$, $p < .001$; multivariate kurtosis $_{CDS} = 44.59$, $p < .001$; multivariate skewness $_{GDS} = 1,231.16$, $p < .001$; multivariate kurtosis $_{GDS} = 57.73$, $p < .001$). For the CDS, following Boin et al. (2020), we tested a model in which items three, four, and six (i.e., the negatively worded items) loaded on a method factor orthogonal to the general one. The model yielded satisfactory indexes: CFI = 0.95, TLI = 0.93, RMSEA = 0.08, SRMR = 0.06. Standardized loadings ranged from .34 to .91 on the cultural deprovincialization factor and from .77 to .92 on the group deprovincialization factor (all with $p < .001$, Table S2). Loadings of cultural and group deprovincialization on the general deprovincialization factor were .89 and .79, respectively ($p < .001$). Third, we performed a one-factor CFA, with items of the two deprovincialization scales loading on one single factor. The fit indexes of one-dimensional model were only

TABLE 1 Comparison of means by having lived abroad or not, correlations of cultural and group deprovincialization with the other variables, and correlation differences comparing the two scales.

	<i>Lived abroad</i>				<i>Correlations</i>	
	YES, M(SD)	NO, M(SD)	<i>p</i>	<i>Cohen's d</i>	CDS	GDS
CDS	3.34 (0.66)	3.11 (0.76)	<.001	.31		
GDS	6.01 (1.27)	5.71 (1.47)	.009	.21	.65***	
Positive contact	2.51 (0.90)	2.33 (0.85)	.019	.21	.43***	.35***
Negative contact	1.39 (0.81)	1.36 (0.86)	.697	.03	-.31***	-.22***
Ingroup identification	2.02 (0.94)	2.16 (0.90)	.079	.16	-.23***	-.22***
Attitudes toward immigrants	3.12 (0.73)	2.97 (0.77)	.025	.19	.58***	.51***
Attitudes toward Italians	2.74 (0.73)	2.75 (0.66)	.856	.02	.12**	.03
Outgroup anxiety	1.43 (0.84)	1.72 (0.85)	<.001	.33	-.45***	-.31***
Ingroup anxiety	1.26 (0.69)	1.47 (0.71)	<.001	.30	-.25***	-.18***
Outgroup trust	2.33 (0.77)	2.17 (0.73)	.016	.22	.56***	.43***
Ingroup trust	2.34 (0.65)	2.30 (0.60)	.463	.07	.18***	.11**
Prejudice toward immigrants	0.83 (0.70)	1.01 (0.77)	.004	.24	-.63***	-.59***
SDO	2.08 (0.94)	2.15 (1.00)	.386	.07	-.56***	-.59***
RWA	2.53 (0.93)	2.81 (0.96)	<.001	.30	-.46***	-.53***
Joyful exploration	3.83 (0.05)	3.75 (0.03)	.176	.11	.40***	.34***
Stress tolerance	5.59 (0.80)	5.26 (0.90)	<.001	.38	.22***	.03
Social curiosity	3.72 (0.91)	3.64 (0.91)	.334	.09	.22***	.26***

Note: Effect sizes are in absolute value. Stronger correlations for significant differences between the CDS and GDS are displayed in bold. CDS, cultural deprovincialization scale, 0–4 response scale; GDS, group deprovincialization scale, 1–7 response scale.

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

suboptimal (CFI = 0.84, TLI = 0.77, RMSEA = 0.14, SRMR = 0.07). Moreover, a direct comparison of the fits of the two models supported our claims that the one-factor model (AIC = 19,847.449; BIC = 19,999.646) showed a worse fit compared to the two-factor model (AIC = 19,403.524; BIC = 19,564.946). As the three conditions to test H1 were verified, H1 was supported.

3.2 | Testing H2

H2 hypothesized that the GDS and the CDS have different locations in a nomological network of variables related to openness, non-hierarchical and outgroup-friendly attitudes, and positive intergroup and international experiences. To test H2, we first performed t-tests for all the variables of the study, comparing mean scores for people who lived abroad for at least one month in their lives and for people who never lived abroad (Table 1). Compared to those who never lived abroad, people who have lived in another country for at least one month in their lives reported statistically significant higher scores on both cultural and group deprovincialization, outgroup trust, positive intergroup contact, positive attitudes toward the outgroup, and the ability to manage the distress from being exposed to novel stimuli (i.e., stress tolerance). Participants who lived abroad also reported statistically significant lower levels of outgroup and ingroup anxiety, prejudice, and RWA. Additionally, having lived abroad does not seem to matter for the ingroup measures (e.g., ingroup identification, attitudes toward Italians, and ingroup trust).

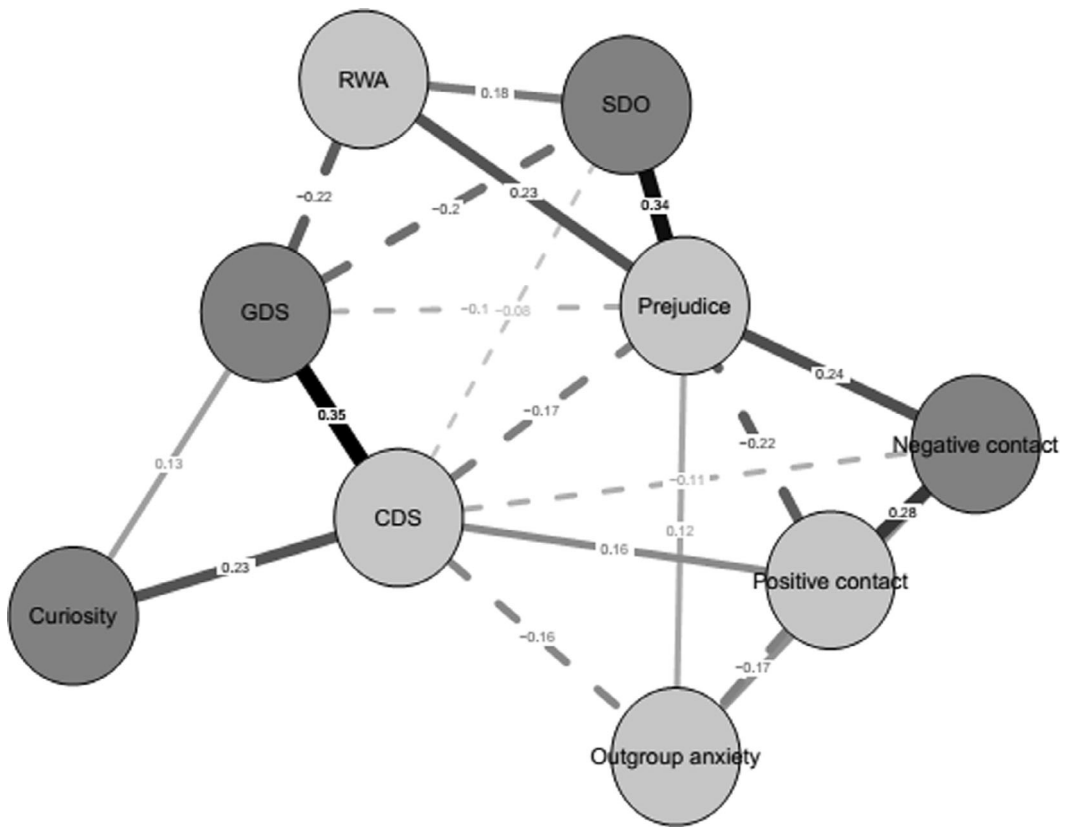


FIGURE 1 The network of cultural and group deprovincialization. CDS, cultural deprovincialization scale; Curiosity, joyous exploration dimension of dispositional curiosity; GDS, group deprovincialization scale; RWA, right-wing authoritarianism; SDO, social dominance orientation.

Second, we computed Pearson correlations between the scores of the two deprovincialization scales and the other variables, and we tested whether the correlation coefficients differed in a statistically significant way for the two types of deprovincialization, by employing a variant of Fisher's *r*-to-*z* transformation for correlations based on the same sample (Hittner, May, & Silver, 2003). R packages *sjPlot* (Lüdtke & Lüdtke, 2015) and *cocor* (Diedenhofen & Musch, 2015) were used to compute correlations and Fisher's *r*-to-*z* transformation, respectively.

Results (Table 1) showed that both group and cultural deprovincialization were positively related to positive contact, outgroup trust, and ingroup trust, and negatively related to negative contact, outgroup anxiety and ingroup anxiety; correlation coefficients were stronger for the CDS, consistent with the fact that CDS items are more focused on intergroup experiences. Endorsing high levels of cultural and group deprovincialization was also associated with lower prejudice toward immigrants, lower ingroup identification, and more positive attitudes toward immigrants; these attitudes were more strongly related to the CDS than to the GDS. Only cultural deprovincialization was positively associated with attitudes toward Italians and the Stress Tolerance dimension of curiosity. The other two curiosity dimensions were positively correlated with both deprovincialization scales, but a stronger relationship was found between the CDS and the Joyous Exploration dimension of curiosity. Finally, we also found that cultural and group deprovincialization were negatively related to SDO and RWA, with RWA being more strongly related to the GDS than to the CDS.

Third, we performed network analysis: Gaussian Markov random field estimation (graphical LASSO algorithm; extended Bayesian information criterion; hyperparameter gamma set to 0.5) was employed. Nodes were placed

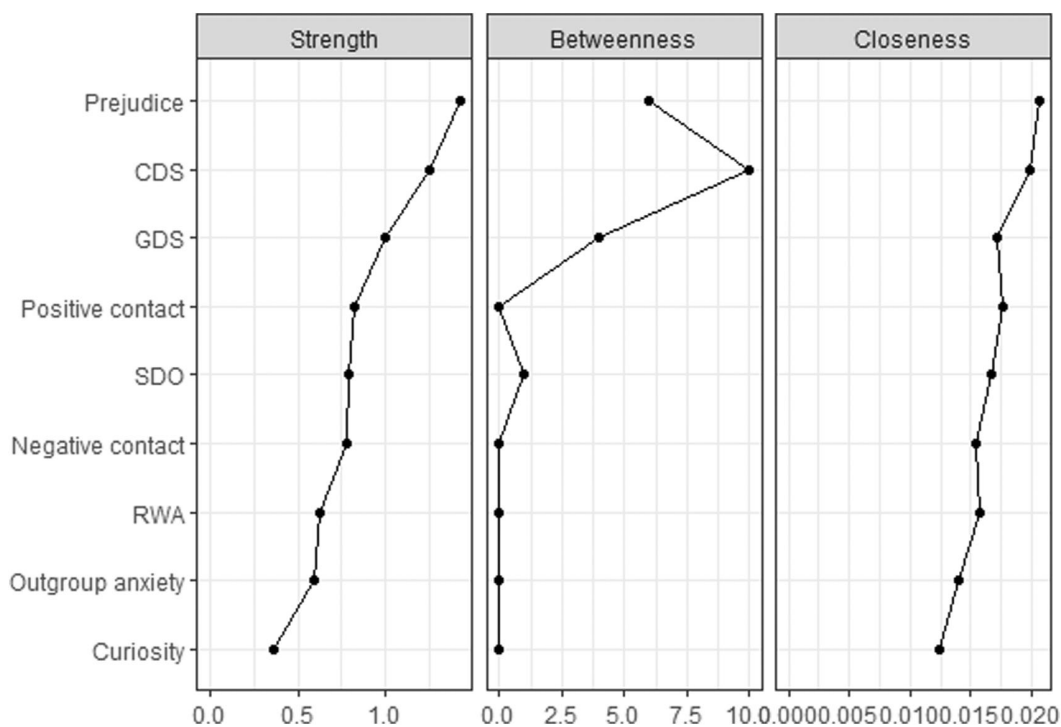


FIGURE 2 Centrality indexes from the network of cultural and group deprovincialization.

according to the Fruchterman–Reingold (“spring”) algorithm. We also set a threshold for removing potentially spurious edges, to ensure high specificity. Analyses were conducted with the R (R Core Team, 2021) package *bootnet* (Epskamp, Borsboom, & Fried, 2018).

In the network, nodes represent the variables, which are connected by edges. The latter portrays the regularized partial correlations between two nodes, given all other nodes in the network. The strength of each edge (partial correlation) is represented by its thickness and the number printed on it. Network analyses display not only links but also possible mediation paths: if two nodes (namely, two variables) are only indirectly linked, say X and Y via Z, we can expect that the association between X and Y is mediated by Z (Epskamp & Fried, 2018). In Figure 1, continuous edges represent positive relations, whereas dotted edges indicate negative relations. We also calculated three centrality indexes: closeness, which measures how strongly a node is directly and indirectly connected to all other nodes in the network; betweenness, namely how often a node is in paths between other nodes in the network; and strength, which measures the strength (in absolute value) of the direct connection of a node to the other nodes. In the network analysis, we included the deprovincialization correlates that display a correlation coefficient larger than .30 in absolute value ($r > |.30|$; medium correlation according to Cohen, 1988) with at least one deprovincialization scale. Importantly, including in the analysis variables that have weak relationships with the deprovincialization scale would provide low additional information while worsening the stability of the network. Among the correlates, we chose one between attitudes and prejudice toward the outgroup, as they measure overlapping constructs. Curiosity is represented by the Joyous Exploration dimension, which includes the dispositional desire for new experiences and the subsequent joy of learning—in some ways, the prototype of curiosity (Kashdan et al., 2018). To sum up, the performed network analysis included cultural and group deprovincialization, prejudice, dispositional curiosity, social dominance orientation, right-wing authoritarianism, outgroup anxiety, and intergroup contact.

The network of the two deprovincialization scales with their strongest correlates is shown in Figure 1, and the related centrality indexes are in Figure 2. In this network, one of the strongest edges is the one linking cultural and

group deprovincialization. This edge shows the powerful link between the two deprovincialization facets when controlling for all other variables of the network. Notably, strength indexes of the two deprovincialization nodes are also the highest after prejudice (Figure 2).

However, cultural and group deprovincialization have different direct links: the group deprovincialization node is strongly and negatively connected with RWA and SDO, weakly connected with prejudice and the Joyous Exploration dimension of dispositional curiosity, while having no direct edges with intergroup contact and anxiety toward the outgroup. By contrast, the cultural deprovincialization node is connected with all social and emotional experiences related to the outgroup, strongly connected with dispositional curiosity, weakly connected with SDO and unrelated to RWA. Therefore, group deprovincialization is more related to non-hierarchical ideology, whereas cultural deprovincialization is more grounded in openness to experience, especially intergroup experiences, which are the focus of the CDS. Moreover, cultural deprovincialization is the node with the highest betweenness and closeness after prejudice (Figure 2), thus with a high number of direct and indirect links in this network.

The replicability, the accuracy of estimates, and a sufficient sample size are criteria of utmost importance in network analysis (Epskamp et al., 2018). Our network was stable and reliable, as suggested by satisfactory edge-weight accuracy and stability of central indexes (Figures S1 and S2).

4 | DISCUSSION

Deprovincialization has been discussed as an underappreciated but potentially very powerful construct for understanding intergroup relations in plural societies (Hodson et al., 2018), and an increasing number of studies are providing empirical support for its importance (Verkuyten et al., 2022). The recognized high importance of deprovincialization makes a more detailed understanding of the various aspects of deprovincialization valuable and timely. We conducted a study to investigate the broad deprovincialization construct, taking into account its two key facets, namely, cultural and group deprovincialization, measured with the CDS (Boin et al., 2020) and the GDS (Martinovic & Verkuyten, 2013), respectively. We hypothesized that cultural deprovincialization and group deprovincialization: (H1) tackle different but related aspects of the deprovincialization construct; (H2) are part of a network of variables related to openness, non-hierarchical and outgroup-friendly attitudes, and positive intergroup experiences.

To test H1, we assessed the strength of the relationship among the two deprovincialization scales, as well as their factorial structure, running CFAs. All the conditions established to support H1 were met. As hypothesized, the correlation between the CDS and the GDS was higher than .50. As for the factorial structure of the scales, the two-factor solution with a higher order deprovincialization factor yielded satisfactory fit indexes, whereas the fit of the one-dimensional model was poorer compared to the two-factor solution. These results provide two crucial insights on the underlying structure of deprovincialization. On the one side, the unsatisfactory fit indexes of the one-dimensional model—especially compared to the two-factor solution—provide empirical evidence of a distinction between the two facets of deprovincialization. Thus, despite being highly intercorrelated, the CDS and the GDS tap different, non-overlapping aspects of the construct. On the other side, the strong relationship between the CDS and the GDS, together with the results of the hierarchical model, suggest that the two scales might be employed combinedly. This possibility would allow researchers to assess deprovincialization in a more comprehensive way while still considering the peculiarities of its facets. In this case, we suggest adopting the same response scale for both CDS and GDS.

To test H2, first, we employed t-tests to compare the mean scores of the two deprovincialization scales and the other variables assessed for participants who lived abroad for at least one month in their lives (vs. those who never lived abroad). Participants who had international living experiences scored significantly higher on both the CDS and the GDS, showed a greater ability to manage the distress that may arise from novel stimuli, and reported better orientations toward the outgroup in terms of better attitudes, higher trust, more positive contact with immigrants,

lower prejudice toward immigrants, lower RWA, and lower anxiety toward both Italians and immigrants. Moreover, having international living experiences was related to a less ethnocentric and more open-minded attitude toward other groups, without negatively affecting ingroup attitudes and orientations. Importantly, we are aware that intercultural and international experiences might not always be positive and pleasant, and it would be important to also consider negative experiences. Indeed, in our study, we assessed both positive and negative contact with outgroup members. Consistently with research on negative intergroup contact and with the previously found relationship between negative intergroup encounters and deprovincialization (Boin et al., 2020; Schäfer et al., 2021), we found that higher contact was associated with lower CDS scores. Thus, both positive and negative intergroup contact can have an (different) impact on the development of a deprovincialized mindset.

As a further step, we tested the relationship of the CDS and the GDS with the same list of variables employed for the t-tests, also exploring whether correlation coefficients with those variables differed for the two types of deprovincialization. Results of our study replicated and expanded the correlations found in the previous literature (Verkuyten et al., 2022). Despite the CDS and the GDS being quite similar in their correlational patterns, we also found some differences in the strength of these relations.

In line with Boin et al. (2020), the CDS was positively related to positive contact with immigrants and outgroup attitudes, as well as negatively related to negative contact with immigrants, ingroup identification, SDO, and RWA. The same correlation pattern was found for the GDS, although the CDS had stronger relationships with positive and negative contact and with attitudes toward immigrants. As for the GDS, it was more related to RWA than the CDS. Both scales were equally and negatively related to outgroup prejudice, replicating previous research (Boin et al., 2020; Martinovic & Verkuyten, 2013).

In line with Martinovic and Verkuyten (2013) and consistent with the ingroup-centric nature of the identification measure (example item: "Being Italian is important to me"), both deprovincialization scales were negatively and equally related to ingroup identification. However, consistent with the theoretical assumption that deprovincialization does not involve a disparagement of the ingroup (Pettigrew, 1997), we did not find any negative relationship between evaluations of the ingroup and deprovincialization scales. Positive attitudes toward the ingroup were positively related only to the CDS, whereas trust and anxiety toward the ingroup and the outgroup were related to both deprovincialization scales; correlations were positive for trust and negative for anxiety, and stronger for the CDS compared to the GDS.

Consistent with Boin et al. (2020), who found a positive relationship between the CDS and openness to experience, we found that both the CDS and the GDS were positively associated with people's tendency to be interested in other people (social curiosity), as well as with their enjoyment of and desire for novel stimuli and knowledge (joyful exploration). The CDS was more strongly related to the latter than the GDS. As for people's ability to manage the distress that may arise when facing unfamiliar stimuli (stress tolerance), it was positively correlated to the CDS but not to the GDS.

Finally, we employed network analysis to test the simultaneous relationships of both deprovincialization scales with a subset of variables that had the strongest correlations with the CDS and GDS. Network analysis results shed light on the topology of the two deprovincialization scales. First, we found that the CDS and the GDS were tightly linked, even when controlling for their relationship with other variables in the network. Second, the two deprovincialization scales showed different locations and partially different correlation patterns in the network. On the one side, the CDS was more related to positive social and emotional experiences related to the outgroup. This includes more positive and less negative contact experiences with immigrants; lower prejudice and anxiety toward immigrants; as well as such positive individual characteristics as dispositional curiosity. On the other side, the GDS was more strongly connected to non-hierarchical ideologies, being negatively related to RWA and SDO. Taken together, these results corroborate the idea that despite being highly correlated, the CDS and the GDS tap into related yet different nuances of the broad deprovincialization construct.

In conclusion, the CDS and the GDS are reliable tools to assess deprovincialization, which take into account the complexity of the construct. The fact that the two-factor solution with a superordinate deprovincialization factor

showed more satisfactory fit indexes compared to the unidimensional model and that the CDS and the GDS seem to detect different nuances of deprovincialization has theoretical and practical implications.

From a theoretical point of view, these results corroborate the conceptualization of cultural and group deprovincialization as two different but interconnected facets of the overall deprovincialization construct. From a practical perspective, our results provide methodological insights on the assessment of deprovincialization at different levels. First of all, scholars who are interested in a more comprehensive assessment of deprovincialization that takes into account the peculiarities of its facets could employ the CDS and the GDS combinedly. Another practical implication of our work is broadening the understanding of deprovincialization in terms of its relationship with other variables. Importantly, we did not only corroborate previous results concerning the relationship of the two scales with other variables, we also highlighted new correlation patterns.

Additionally, our findings also support practical insights on the potential of deprovincialization at the societal level (e.g., Verkuyten et al., 2022). For instance, future research could test the causal impact of fostering deprovincialization, as measured by GDS and CDS, by developing systematic protocols to increase it and test its effects in promoting social harmony among groups. Moreover, starting from the different patterns of associations found for the GDS and the CDS, researchers could test whether interventions focused on increasing either group or cultural deprovincialization have different implications. On the one side, given the strong association between group deprovincialization and non-hierarchical ideologies, promoting a more nuanced view of the ingroup (as tapped by GDS) might increase the importance that people give to values such as equality, equity, and fairness. On the other side, fostering openness, curiosity, and acceptance of outgroups (assessed by CDS) might stimulate high-quality listening and receptiveness to opposing views (Minson & Chen, 2022).

We acknowledge that this study is not without limitations. First, the fact that we relied on an Italian convenience sample could limit the external validity of our findings, which may not be generalizable to the Italian population or to other cultural contexts (Simons, Shoda, & Lindsay, 2017). Future studies that replicate these results in different samples are needed. Second, as we relied on self-report measures and correlational analyses within a cross-sectional design, we acknowledge the lack of causality and the possibility of social desirability in our data. Future researchers should possibly employ longitudinal designs to better disentangle the causal nature of the relationships tested in our work. Using such a design would also make it possible to assess how stable both deprovincialization facets are and whether a gradual change in one facet corresponds with a change in the other facet.

Despite these limitations, our results take a step forward in understanding the nature of deprovincialization and its assessment: we gained a detailed insight on the structure of this construct and the relevance of its two facets, and we explored its role in a variety of frameworks, spacing from individual dispositions to outgroup attitudes and positive intergroup and international experiences. We believe that our analysis is timely and valuable since it allows researchers to examine the nature of deprovincialization and its importance for intergroup relations in a more extensive and detailed way.

FUNDING INFORMATION

None.

CONFLICT OF INTEREST STATEMENT

The authors declare that there is no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in OSF at https://osf.io/8z9au/?view_only=ac28ddfca0b9432ca46816ab67b2427b.

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How to cite this article: Lucarini, A., Boin, J., Fuochi, G., Voci, A., Verkuyten, M., & Pettigrew, T. F. (2023). The nature of deprovincialism: Assessment, nomological network, and comparison of cultural and group deprovincialization. *Journal of Community & Applied Social Psychology*, 33(4), 868–881. <https://doi.org/10.1002/casp.2695>