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Does nationalism compensate for perceived ethnic disadvantage? The moderating effect of SDO



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Abstract

Contemporary right-wing populist rhetoric paradoxically criticizes society as disadvantaging the ethnic majority relative to minorities, while simultaneously emphasizing the superiority of one's own nation over others. Recent studies suggest that national superiority beliefs compensate for the perceived loss of ingroup advantage among ethnic-majority groups. A critical test of this idea would be whether ethnic-majority individuals with a higher need for group-based dominance show a stronger link between perceived ethnic deprivation and nationalism. Here, we assessed people's need for dominance using the social dominance orientation (SDO) scale and tested our moderation hypothesis in two community samples in the UK and NZ (total $N=37,510$). We found that white people perceiving their ethnic group as deprived predicts higher nationalism and does so more strongly for those higher on SDO. This suggests that part of the appeal of white nationalism may be about maintaining ethnic advantage, rather than economic grievances.

Keywords

relative deprivation, social dominance, nationalism, patriotism, identity

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A key political development in the past decade has been the increased popularity and political success of right-wing populist movements across Western countries. The rhetoric of these movements features two co-occurring themes. One is the emphasis on supposed disadvantages faced by ethnic majority groups relative to minorities, in particular (but not exclusively), white people in white-majority countries. Recently, Steven Cheung, spokesperson for Donald Trump, emphasized Trump's commitment to "weeding out discriminatory programs and racist ideology across the federal government" if he was

re-elected, conveying a perception of policies such as affirmative-action as potentially discriminatory against Whites (Bump, 2024, p. 1). Similar notions

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of alleged racism against White people were also a prevalent theme in the “All Lives Matter” counter-protests against the Black Lives Matter movement (West et al., 2021). Notably, this rhetoric has coincided with a rise in jingoistic nationalism. From Donald Trump’s “America First” slogan to the Brexiteers’ “Take Back Control” campaign, these populist messages emphasize the exceptionalism of the nation and deride international cooperation (Cichocka et al., 2023).

At first glance, it may seem paradoxical that the same people who are responsive to critiques of the nation as systematically disadvantaging the ethnic majority ingroup are also the ones drawn to rhetoric conveying national superiority. Considering one’s group to be ill-treated in society can be seen as contradictory to the idea that the very same society is superior to others. So it is not surprising that although there are large literatures on both perceived disadvantage (see Smith et al., 2012 for a review) and nationalism (see Bonikowski, 2016 for a review), very little research has linked the two, especially among ethnic majority groups. Only recently have two studies attempted to directly connect the two phenomena in the light of the rise of the far right, finding a positive link between perceived ethnic deprivation and nationalism in majority groups (Sengupta et al., 2019; Wamsler, 2022).

Based on this initial finding, Sengupta et al. (2019) suggested that perceptions of losing out as a group threaten a key group-based need to perceive one’s group as having a competitive advantage over other groups. The existence of this type of motivation is referred to as the motive for positive group distinctiveness (in the Social Identity tradition; Tajfel & Turner, 1979) or for group-based dominance (in the Social Dominance tradition; Sidanius & Pratto, 1999). Given that the ethnic group is perceived as conferring lower status in the face of group-based relative deprivation (GRD), it cannot satisfy the motive for distinctiveness or dominance. Majority group members must therefore turn to the national category as a source of positive social identity. Specifically, they are drawn to the type of national identity that conveys superiority over

other groups, which compensates for the perceived loss of ingroup advantage. Sengupta et al. (2019) accordingly showed that, while nationalism provided a buffer against the negative impact of ethnic deprivation on well-being among White New Zealanders, patriotism did not have the same effect. However, they did not directly test whether nationalism was the result of a thwarted motivation for ingroup superiority. The present research aims to fill this gap.

Social dominance theory (Sidanius & Pratto, 1999) proposes that people differ in their motivation to maintain ingroup superiority, and these differences can be indexed by the construct of social dominance orientation (SDO). Consistent with the theory, decades of research have shown that people high on SDO show relatively more outgroup prejudice and a preference for hierarchical social relations (Berry, 2023; Duckitt & Sibley, 2009; Pratto et al., 1994). We leverage this concept to examine the psychological function of nationalism among ethnic majority groups in two contexts, the UK and NZ (total $N=37,510$). Specifically, we test whether the positive relationship between ethnic deprivation and nationalism is stronger for those higher in SDO. This pattern would suggest that nationalism is particularly appealing to majority-group members who have a high need for relative ingroup advantage and who cannot derive that sense of advantage from their ethnic ingroup. This would also provide additional data to inform the ongoing debate on whether the rise in nationalism across the West reflects symbolic, group-based motivations or realistic, economic motivations (see Green & McElwee, 2019, for a review).

Relative Deprivation Theory

Beginning with the seminal work by Stouffer et al. (1949), social scientists define relative deprivation as people’s perceived level of their own or their ingroup’s disadvantage, compared to those with whom they compare themselves with. The key contribution of relative deprivation theory is that perceived disadvantage is more psychologically relevant than objective levels of deprivation (Merton,

1957; Walker & Pettigrew, 1984; Walker & Smith, 2001). Accordingly, decades of research have confirmed this general principle, with meta-analysis showing that perceived deprivation predicts twice as much variance as objective deprivation (Smith et al., 2012). An important extension to the theory was provided by Runciman (1966, p. 338), who proposed that different reference points influence how people experience relative deprivation. Individual-based relative deprivation (IRD) results when a person feels personally ill-treated relative to other individuals, whereas group-based relative deprivation (GRD) arises from comparisons between one's ingroup with relevant outgroups.

Over the past decades, a large literature on the outcomes of both types of relative deprivation has emerged (see Smith et al., 2012 for a review). While IRD is typically associated with individual-based outcomes such as decreased mental and physical health (Beshai et al., 2017; Osborne et al., 2012; Smith et al., 2020; Walker, 1999), GRD is related to group-based outcomes such as prejudice (Pettigrew et al., 2008), collective action (Grant et al., 2015; Kawakami & Dion, 1995) and collective violence (Obaidi et al., 2019). These group-based outcomes are all predicated on a more proximal outcome of perceiving GRD, which is an increase in the degree to which people identify with their disadvantaged ingroup (see van Zomeren et al., 2008 for a meta-analysis).

The rejection-identification model (Branscombe et al., 1999) provides a theoretical framework for the mechanism by which perceived disadvantage bolsters ingroup attachments. Their model suggests that identification with the disadvantaged ingroup benefits psychological well-being, as it meets needs for acceptance and belonging, and helps people make sense of their place in the social world (Branscombe et al., 1999). Therefore, the rejection-identification model posits that group identification can act as a psychological buffer against the negative consequences of perceiving the ingroup as being unfairly disadvantaged. However, particularly in the domain of ethnicity, most relative deprivation studies focus on ethnic minorities' perceptions of deprivation (e.g., Bracegirdle et al., 2023; Obaidi et al., 2019), presumably because

they have an objective reason to perceive at least some degree of deprivation relative to ethnic majorities. Yet the subjectivity inherent in these perceptions means that, theoretically, deprivation can be experienced even if none exists.

Relative Deprivation among Advantaged Groups

The idea that members of advantaged groups can see their group as being deprived relative to disadvantaged groups has recently received increased attention in the context of the rise of reactionary populist politics (e.g., Lilly et al., 2023; Sengupta et al., 2019; Thomas et al., 2020; Wamsler, 2022). Norton and Sommers (2011) documented a historical reversal in White American's perceptions of discrimination, noting that they have recently begun perceiving anti-White discrimination as more prevalent than anti-Black discrimination. Journalists covering the Trump 2016 presidential campaign noted the pervasive discourse of out-group advantage and ingroup disadvantage among Trump supporters (Ball, 2016).

Accordingly, scholars of social change have been updating prior theoretical models – which focused on minority-disadvantage as a catalyst of collective action – to additionally account for reactionary collective action among advantaged groups (Thomas et al., 2020; see also Choma et al., 2020). This line of research has since shown that GRD may in fact have distinct outcomes among the structurally advantaged vs. disadvantaged. While relative deprivation literature has posited that experiencing GRD motivates people to challenge the societal status quo and the system that their group is part of (see Jost et al., 2017), Lilly et al. (2023) found that among dominant ethnic majority members, GRD was positively related with ideologies that perpetuate inequality, namely right-wing authoritarianism (RWA; Altemeyer, 1981) and SDO.

Despite these recent advances, research on the consequences of GRD among advantaged groups has not typically focused on the link between perceived ethnic deprivation and nationalism that has become salient in current political discourse. Instead, they have looked at related phenomena

that have accompanied the rise of nationalism, showing that GRD among majority groups predicts support for Brexit, Trump and far-right politics more generally (Marchlewska et al., 2018; Urbanska & Guimond, 2018; see also Pettigrew, 2017). Even when national categories have appeared in previous research, they have been investigated in contexts where the target groups are both subjectively *and* objectively disadvantaged compared to the hegemonic outgroup. For instance, Guimond and Dubé-Simard (1983) demonstrated that GRD among Canadian Francophones was strongly related to support for the Quebec nationalist movement, while egoistic relative deprivation (i.e., IRD) was not. Similarly, Abrams and Grant (2012) showed that GRD among Scottish citizens was linked to stronger support for the Scottish national party and Scottish independence from the United Kingdom. Consequently, the literature lacks substantial empirical information on the rise of nationalism among members of the dominant ethnic majority.

Apart from their focus on objectively disadvantaged groups, the studies on Quebecois and Scottish nationalism above also highlighted another potential oversight in the extant relative deprivation literature: They conceptualize nationalism as a subordinate category within a broader intergroup context. In both cases, the type of nationalism measured relates to a subnational polity (Quebec and Scotland) within an existing nation state (Canada and the UK). However, the social identity literature typically treats the nation as a superordinate group in which other group identities are nested (Gaertner et al., 1999; also see Tajfel & Turner, 1979). According to the ingroup projection model (IPM; Wenzel et al., 2007), groups can attain positive value or status when they are perceived as prototypical of the positively valued superordinate group. As such, the nation may provide an additional source of positive ingroup identification for individuals perceiving their ethnic ingroup as deprived, but prototypical of the national group (Sengupta et al., 2019). Nonetheless, because the nation is typically not the target of perceived ingroup

disadvantage, research has largely overlooked this superordinate level of identification when examining the consequences of GRD.

The Psychological Function of Nationalism

Building on these ideas, Sengupta et al. (2019) were the first to hypothesize a link between ethnic deprivation and nationalism among advantaged groups. The authors argued that, in addition to identifying with their ethnic identity, advantaged groups have another option to buffer their wellbeing against GRD: They can cling to their national identity. This superordinate national ingroup is accessible to ethnic majorities because national identity predominantly embodies the dominant cultural group within a nation (Devos & Banaji, 2005). White people are thus able to project their ethnic-majority identity on the superordinate national group to regain a sense of ingroup status and competitive advantage (Wenzel et al., 2007). The national identity, and in particular nationalism, may therefore serve a compensatory function for motives for positive group distinctiveness (Tajfel & Turner, 1979) and group-based dominance (Sidanius & Pratto, 1999). Accordingly, Sengupta et al. (2019) showed that ethnic GRD among white ethnic-majority members was associated with higher nationalism, but not patriotism. Moreover, GRD was negatively associated with wellbeing, but there was an indirect *positive* association mediated by nationalism. The authors thus proposed that members of high-status groups may address feelings of relative deprivation by satisfying their motives for ingroup dominance through nationalism, which conveys beliefs in national superiority.

In a similar vein, Wamsler (2022) posited that nationalism may represent an affect-driven response to perceived “violated entitlement”. Individuals who view their in-group as deprived may become more hostile toward out-groups and thus more nationalistic to channel their anger. Accordingly, the authors demonstrated distinct associations of GRD with nationalism and

patriotism, respectively. In a large-scale survey from six European countries, GRD was positively associated with nationalism, whereas the link between GRD and patriotism, a type of positive attachment to the nation that is free of ingroup superiority beliefs, was negative.

The Moderating Role of Social Dominance Orientation

Taken together, previous research suggests that associations between GRD and nationalism among ethnic majorities may be explained by motives to restore perceptions of ingroup competitive advantage. White nationalism is proposed to be a response to perceptions of ethnic ingroup deprivation, serving as a means for the advantaged to fulfil needs for ingroup dominance. However, these recent attempts to make sense of the link between relative deprivation and nationalism all have a key untested assumption: That a failure of one's ethnic group to fulfil needs for status and superiority results in people turning to the nation as a source of positive identification.

A critical test of this proposed compensatory function of nationalism would be whether ethnic-majority group members who have a stronger preference for ingroup dominance exhibit a stronger link between perceived ethnic GRD and nationalism. The literature conceptualizes such a general preference for ingroup dominance as social dominance orientation (SDO, Pratto et al., 1994). SDO depicts a perception of the world as a competitive arena in which stronger groups dominate over the weaker ones (a "dog-eat-dog" worldview; Duckitt & Sibley, 2009). SDO is thus related to prejudice toward groups threatening the ingroup's status (Duckitt, 2006). Accordingly, SDO has been shown to predict subscription to hierarchy-enhancing ideologies (Kteily et al., 2012), policies (Ho et al., 2012; Pratto et al., 1994), social roles (Sidanius et al., 1994), and even occupations (Zubilevitch et al., 2022). Moreover, Osborne et al. (2017) demonstrated that SDO was negatively related to patriotism, but positively related to nationalism over time. SDO was also shown to be a predictor of prejudice toward

groups who are viewed as exploiting the in-group or being of low status, but not those seen as competitive (Cohrs & Asbrock, 2009). Hence, the goal of SDO is not to elicit competition, but rather reflects a psychological need to maintain ingroup dominance (Sibley et al., 2013).

We propose that if motives to fulfil needs for ingroup superiority and competitive advantage drive the link between GRD and nationalism within dominant ethnic majority groups, as suggested by previous research (Sengupta et al., 2019; Wamsler, 2022), individuals with stronger motives for ingroup dominance should have a heightened need to reaffirm their sense of ingroup superiority if their perception of hierarchical advantage over other groups is threatened. Consequently, these individuals should be more sensitive to experiencing ethnic GRD and should consequently develop stronger nationalist attitudes to compensate for the perceived threat to their ingroup advantage. The present research provides, to our knowledge, the first attempt to test this assumption directly.

The Present Research

Based on the analysis above, we examine whether the preference for ingroup superiority – indexed by social dominance orientation (SDO) – moderates the effects of GRD on nationalism among white people in white-majority countries. We expect a positive link between GRD and nationalism (H1), as well as between SDO and nationalism (H2). This merely replicates findings from previous research discussed above (i.e., Osborne et al., 2017; Sengupta et al., 2019). Crucially, we expect that the positive relationship between GRD and nationalism will be stronger for those higher in SDO (H3). We test this idea in a community sample of white British citizens, and with a national probability sample in New Zealand (NZAVS, total $N=33,784$). In doing so, we examine a key proposed psychological mechanism underlying the current popularity of nationalistic politics. We also contribute to the ongoing debate about whether the appeal of white nationalism lies in the maintenance of perceived ethnic

ingroup hierarchical advantage, or is merely a reflection of legitimate grievances (Green & McElwee, 2019).

Study 1

Method

Participants. Participants were recruited via Prolific Academic and completed a questionnaire that included all relevant measures.¹ The original sample included 509 participants, 263 of which identified as ethnically white and passed an attention check. After removing 54 participants who did not provide an answer to every measure considered in our study, 209 participants remained for the final analysis. The sample was broadly representative of the white UK population in terms of key demographics such as age (M_{age} 47.36 years [$SD=15.37$]), gender (43% male), and education (52.15% with an undergraduate degree [BA/BSc/Other] or higher).

Measures. Items were rated on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Table 1 displays the descriptive statistics and bivariate correlations between our focal variables.

Nationalism. Nationalism was assessed through eight items adapted from Kosterman and Feshbach (1989). Participants rated their agreement with statements such as “Generally, the more influence the UK has on other nations, the better off they are” ($\alpha=.80$).

National identification. We measured national identification with three items created for this study (“To what extent does your national identity matter to you?”, “To what extent is your national identity a part of your life?”, and “To what extent is your national identity central to who you are?”, $\alpha=.91$).

Group-based relative deprivation. We measured GRD with two items adapted from Abrams and Grant (2012), “People from my ethnic group generally earn less than other groups in the UK”, and

“I’m frustrated by what my ethnic group earns relative to other groups in the UK” ($r=.37$). The original two items were developed to assess the cognitive and affective facet of relative deprivation, respectively. These measures directly assess how individuals perceive their ethnic group’s status relative to other groups in the UK (i.e., the country of Study 1). Participants are thus primed to think about their ethnic group identity which elicits responses comparing their ethnic group to other ethnic groups (see Brewer, 1991). While GRD has been conceptualized as the product of upward social comparisons among low-status group members (see Abrams & Grant, 2012), any feelings of GRD relative to other groups likely reflect feelings of “losing out” to other ethnic groups. Thus, previous studies have employed these measures to assess how deprived members of high-status groups feel relative to other ethnic groups (Lilly et al., 2023; also see Sengupta et al., 2019).

Social dominance orientation. We assessed SDO using Sidanius and Pratto’s (1999) 16-item SDO scale. Example items are “To get ahead in life, it is sometimes necessary to step on other groups”, and “All groups should be given an equal chance in life” (reverse-scored; $\alpha=.93$).

Demographic covariates. We adjusted for age and gender (0 – female, 1 – women).

Results

Data were analyzed using the R lavaan package (Rosseel, 2012). We conducted a path analysis in which GRD, SDO and their interaction term simultaneously predicted both nationalism and national identification, while adjusting for the residual covariance between them (see Figure 1). In a second model, we additionally adjusted for the demographic covariates of age and gender. Following current recommendations (Hünermund & Louw, 2023), we only present the results of the model without covariates here. The model with covariates is presented in the supplementary online materials. Means, standard deviations, and

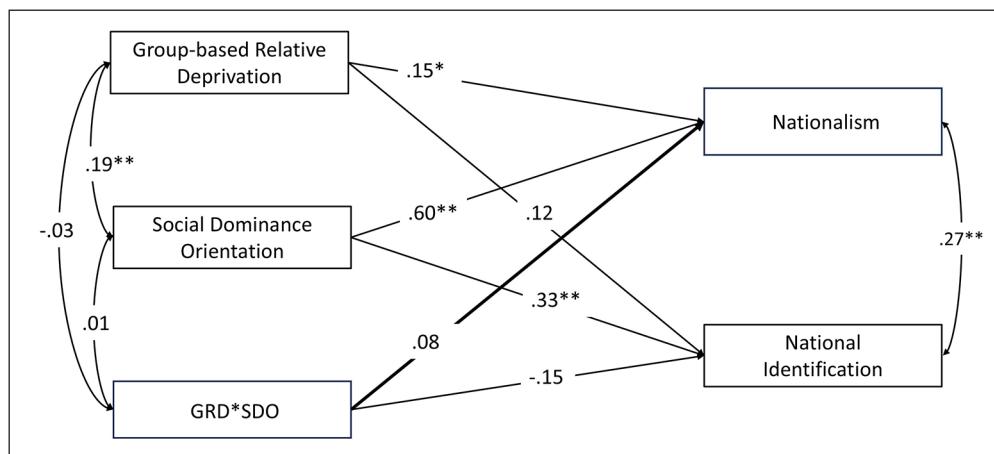
Table 1. Descriptive statistics and correlations between all variables.

	1.	2.	3.	4.	5.	6.	7.
1. Nationalism	-						
2. National ID	.51**	-					
3. Affective GRD	.23**	.18*	-				
4. Cognitive GRD	.20**	.14*	.37**	-			
5. SDO	.63**	.35**	.18**	.13	-		
6. Age	.03	.25**	.04	.12	.15*	-	
7. Gender ⁱ	-.01	-.08	-.15*	-.11	.13	.04	-
<i>M</i>	2.48	2.61	2.15	1.89	1.83	47.40	.56
<i>SD</i>	.82	.94	1.04	.95	.71	15.39	.53

Note. ⁱ=Gender coded 0 – female, 1 – male.

* $p < .05$. ** $p < .01$.

Figure 1. Standardized parameter estimates for the path model in which GRD, SDO and the interaction between them simultaneously predict nationalism and national identification.



Note. * $p < .05$. ** $p < .01$.

correlations among all observed variables are reported in Table 1.

As shown in Figure 1 (see also Table 2), the regressions reveal that GRD ($b=0.15$, $SE=0.05$, $\beta=.15$, $p=.005$, 95% CI [0.05, 0.26]) and SDO ($b=0.70$, $SE=0.06$, $\beta=.60$, $p<.001$, 95% CI [0.58, 0.82]) were both positively associated with nationalism. Surprisingly, the interaction between GRD and SDO did not significantly predict nationalism ($b=0.06$, $SE=0.08$, $\beta=.08$, $p=.404$, 95% CI [-0.09, 0.21]). Moreover, only SDO was significantly associated with national identification ($b=0.44$, $SE=0.09$, $\beta=.33$, $p<.001$, 95%

CI [0.27, 0.61]). This pattern of results remained consistent when adjusting for the demographic covariates of age and gender (see supplementary online materials).

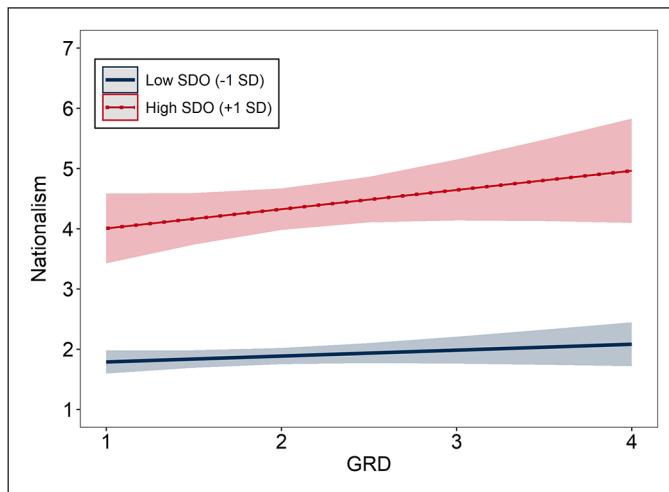
Analysis of simple slopes. While the hypothesized interaction was non-significant, the sign of the interaction effect indicated a pattern somewhat consistent with our expectations. Thus, we further probed the interaction by assessing the effect of GRD at high and low levels of SDO (one standard deviation above and below the mean). As shown in Figure 2, GRD was not significantly related to

Table 2. Standardized and unstandardized parameter estimates for the path model simultaneously predicting nationalism and national identification.

Outcome	Predictor	<i>b</i>	<i>SE</i>	β	<i>p</i>	95% CI
Nationalism	GRD	0.15	0.05	.15	.005**	[0.05, 0.26]
	SDO	0.70	0.06	.60	<.001**	[0.58, 0.82]
	GRD*SDO	0.06	0.08	.08	.404	[-0.09, 0.21]
National identification	GRD	0.14	0.07	.12	.058	[-0.01, 0.29]
	SDO	0.44	0.09	.33	<.001**	[0.27, 0.61]
	GRD*SDO	-0.14	0.11	-.15	.175	[-0.35, 0.06]

Note. * $p < .05$. ** $p < .01$.

Figure 2. Simple slopes for the effect of GRD on nationalism at high and low levels of SDO.



nationalism for those low in SDO ($b=0.11$, $SE=0.07$, $\beta=.08$, $p=.145$, 95% CI [-0.04, 0.25]), but significant for those high in SDO ($b=0.20$, $SE=0.08$, $\beta=.17$, $p=.011$, 95% CI [0.04, 0.35]). This pattern provides tentative support for our hypothesis that those higher in SDO would show a stronger link between GRD and nationalism.

Exploratory analyses. In line with theoretical descriptions of GRD (see Abrams & Grant, 2012; Smith et al., 2012), the measure used in this study comprises a cognitive component (perceiving relative disadvantage) and an affective component (feeling frustrated by this disadvantage). This two-component measure is well-established and has demonstrated excellent criterion-related

validity over nearly two decades of consistent use in the literature (e.g., Abrams & Grant, 2012; Grant et al., 2015; Lilly et al., 2023; Osborne & Sibley, 2015; Sengupta et al., 2019; Zubilevitch et al., 2022). Despite this theoretical and empirical backing, however, it is possible to consider the theoretical implications of separating these dimensions. This may be a fruitful direction to explore, specifically because the relative lack of relative deprivation research among advantaged groups leaves open the possibility that the theory misses important dynamics operating among these groups. Thus, we separated the components to examine the new and tentative possibility that the affective response in advantaged groups may partially reflect frustration about minority groups gaining on them – without perceiving

their own group to be disadvantaged. To examine these possibilities, we conducted an exploratory analysis in which SDO moderated the effect of cognitive GRD and affective GRD on nationalism separately.

Specifically, we tested the same path model described above, but replaced the full GRD scale with either the affective or the cognitive component of GRD. We ran all models with only the key variables, and then ran them again accounting for covariates. Mean-centered and standardized parameter estimates for both models, as well as parameter estimates for the exploratory models adjusting for covariates, are shown in the supplementary online materials.

Results showed that the cognitive component of GRD significantly predicted nationalism ($b=0.10$, $SE=0.05$, $\beta=.12$, $p=.028$, 95% CI [0.01, 0.19]), as did SDO ($b=0.50$, $SE=0.04$, $\beta=.62$, $p<.001$, 95% CI [0.42, 0.59]). However, the interaction between cognitive GRD and SDO did not significantly predict nationalism, as in the main model ($b=-0.03$, $SE=0.04$, $\beta=-.04$, $p=.482$, 95% CI [-0.11, 0.05]).

For the affective component of GRD, we again found a positive association with nationalism ($b=0.11$, $SE=0.04$, $\beta=.11$, $p=.013$, 95% CI [0.02, 0.20]), and SDO ($b=0.71$, $SE=0.06$, $\beta=.50$, $p<.001$, 95% CI [0.41, 0.58]). Crucially, the interaction between affective GRD and SDO was significant, as hypothesized ($b=0.13$, $SE=0.06$, $\beta=.16$, $p=.035$, 95% CI [0.01, 0.25]). A subsequent analysis of the simple slopes showed that affective GRD was not significantly related to nationalism for people low on SDO ($b=0.01$, $SE=0.06$, $\beta=.02$, $p=.805$, 95% CI [-0.10, 0.14]), but was positively related to nationalism for people high in SDO ($b=0.20$, $SE=0.06$, $\beta=.20$, $p=.002$, 95% CI [0.08, 0.32]), which was consistent with our hypothesis. These findings provide a tentative indication that it is the affective reaction to perceived disadvantage that seems to be the most central in evoking a need to cling onto the nation as a compensatory identity.

Discussion

Study 1 replicated previous findings that have demonstrated a positive relationship between

GRD and nationalism within dominant ethnic-majority group members. However, the hypothesized moderating effect of SDO on this link was non-significant, which was contrary to our expectations. Nonetheless, the simple slopes trended in the expected direction, suggesting that further investigation was warranted. Notably, the results of the exploratory analyses revealed a significant interaction of affective GRD and SDO predicting nationalism, but no significant interaction between cognitive GRD and SDO. These findings suggest that people's frustration with their ingroup status may not exclusively be due to perceptions of genuine economic disadvantage, but, for some, may also reflect a perceived threat to the ingroup status by minority groups gaining on them. That said, while this provides additional informative value in the light of the current social and political phenomena that we explore in this paper, it is important to acknowledge that the affective component alone does not constitute relative deprivation according to the theory. This is because it lacks the key cognitive element of perceiving ingroup disadvantage. As such, these findings should thus be interpreted with caution, as they fall outside the scope of traditional relative deprivation theory. We return to this point in the General Discussion, below.

Moreover, we sought to address some limitations in Study 1 that may have reduced our ability to detect the hypothesized effects. First, the small sample size limited its statistical power. Second, Study 1 was missing important covariates that would have enabled us to rule out the most theoretically relevant alternative explanations for the expected effects, like patriotism, ethnic identification, individual relative deprivation (IRD), objective deprivation, and political attitudes. We addressed these limitations in Study 2, which featured a significantly larger, representative sample from a different national context, and adjusted for key covariates.

Study 2

Methods

Participants. Study 2 analyzed data from Time 10 (2018) of the New Zealand Attitudes and Values

Study (NZAVS),² an ongoing longitudinal, national probability panel study drawn from the New Zealand electoral roll (which provides contact details for all registered voters aged 18 or over). We chose to analyse data from this wave of the study because it represented the most recent version that provided all the required measures. The Time 10 NZAVS contained responses from 37,301 participants who identified as New Zealand European, and who had provided answers to all the relevant measures. The mean age of the sample was 49.40 ($SD=13.87$) and 63% were women.

Measures. Items were rated on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. Due to space constraints associated with a large omnibus survey, our focal measures are short-form scales of their respective constructs. However, measures containing three or more items (i.e., SDO) were validated against their full-form parent counterparts and displayed acceptable reliability (see Sibley et al., 2024). Table 3 displays descriptive statistics and bivariate correlations between our focal variables.

Nationalism. Nationalism was measured using two items adapted from Kosterman and Feshbach (1989), “Generally, the more influence NZ has on other nations, the better off they are”, and “Foreign nations have done some very fine things, but it takes NZ to do things in a big way” ($r=.36$).

Patriotism. Patriotism represents the positive facet of national identification without the dominance-driven, exclusionary elements of nationalism (Blank & Schmidt, 2003). Controlling for the residual covariance of patriotism is important to confirm our hypothesis that it is in fact the superiority-driven part of national identification that is compensating for the effect of GRD among those high in SDO. We measured patriotism with two items adapted from Kosterman and Feshbach (1989): “I feel a great pride in the land that is our New Zealand”, and “Although at times I may not agree with the government, my commitment to New Zealand always remains strong” ($r=.51$). Patriotism is conceptualized as positive

national attachment without the superiority and dominance-driven elements of nationalism.

Group-based relative deprivation. Perceived ethnic deprivation was assessed through the same two items as in Study 1 assessing affective and cognitive GRD (Abrams & Grant, 2012): “I’m frustrated by what my ethnic group earns relative to other groups in NZ”, and “People from my ethnic group generally earn less than other groups in NZ” ($r=.30$).

Social dominance orientation. SDO was measured with six items (e.g. “Inferior groups should stay in their place”) from the 16-item SDO scale (Sida-nius & Pratto, 1999; $\alpha=.76$). Again, the con-trait items were reverse-scored, and a composite scale mean was computed with higher values representing higher SDO.

Covariates. The variables included in our model were carefully chosen to speak to our hypotheses and rule out the most theoretically relevant confounds. For instance, choosing GRD as the focal predictor necessitated including individual relative deprivation (IRD) simultaneously in the model because these two perceptions of deprivation are positively correlated (see Osborne et al., 2012). We measured IRD with two items adapted from Abrams and Grant (2012), “I’m frustrated by what I earn relative to other people”, and “I generally earn less than other people in NZ” ($r=.40$). These items form the equivalent to the GRD items used in this study.

Including subjective perceptions of deprivation meant that we also needed to include objective indices of deprivation to show that perceptions matter beyond people’s objective circumstances – a core tenet of relative deprivation theory (Smith et al., 2012). For this purpose, we included a broad range of indicators of objective social status – age, gender, income, area-level deprivation and education. Neighborhood-level deprivation was assessed by matching each participant’s neighborhood (obtained via their address) with a measure of deprivation calculated by the Ministry of Health (NZDep2018; Atkinson

Table 3. Means, standard deviations, and correlations.

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. Nationalism													
2. Patriotism	.26**												
3. Affective GRD	.10**	-.07**											
4. Cognitive GRD	.10**	-.03**	.30**										
5. SDO	.13**	-.06**	-.03**	.15**									
6. IRD	.09**	-.11**	.23**	.19**	.05**								
7. Education ⁱ	.04**	-.01	.06**	.09**	.07**	.13**							
8. Income ⁱⁱ	.04**	-.05**	.09**	.10**	.02**	.16**	.62**						
9. Ethnic ID	.11**	.10**	.28**	.24**	-.01	.09**	.02**	.04**					
10. Pol. orient.	.11**	.12**	-.07**	.09**	.39**	.01*	.08**	.01	.04**				
11. Deprivation	.04**	-.06**	.09**	.10**	.01	.16**	.53**	.73**	.04**	-.01*			
12. Age	.03**	.17**	-.06**	.02**	.11**	-.07**	.02**	-.03**	.09**	.14**	-.04**		
13. Gender ⁱⁱⁱ	.04**	-.06**	-.05**	-.01	.22**	-.10**	-.02**	-.02**	-.08**	.05**	-.02**	.08**	
<i>M</i>	3.60	5.85	2.43	2.07	2.29	3.41	0.41	4.81	3.12	3.57	4.64	49.40	0.37
<i>SD</i>	1.24	1.04	1.62	1.54	0.95	1.53	0.49	2.67	1.50	1.38	2.69	13.87	0.48

Note: ⁱ=Education coded 0 – lower five percentiles, 1 – upper five percentiles, ⁱⁱ=Income coded 0 – lower five percentiles, 1 – upper five percentiles, ⁱⁱⁱ=Gender coded 0 – female, 1 – male.

* $p < .05$. ** $p < .01$.

et al., 2019). The NZDep2018 index assigns a ranked decile score (1 = *most affluent*; 10 = *most deprived*) to each local neighborhood in New Zealand ($M=4.60$; $SD=2.62$).

Moreover, our theoretical model proposes that the buffering function of nationalism operates independently of political stance. This view reflects a defining feature of contemporary right-wing populism, which is its appeal across traditional political lines. Individuals with high GRD (and higher SDO) are thus expected to utilize nationalism as a compensatory strategy regardless of whether they identify as left- or right-leaning. To reflect this, we controlled for the influence of political orientation. We assessed political orientation with participants' self-ratings on a scale ranging from "*Extremely Liberal*" to "*Extremely Conservative*".

Finally, our model was theoretically grounded in the rejection-identification model, which proposes that ethnic identification buffers people against the negative effects of perceived disadvantage (Branscombe et al., 1999). We sought to establish that nationalism buffers minority groups in a manner distinct from ethnic identification (i.e., fulfilling the need for ingroup dominance rather than the need for affiliation, as discussed in the preceding section). Therefore, we included ethnic identification as an additional dependent variable in our model, and controlled for its covariance with patriotism and nationalism, respectively. Ethnic identification was measured with three items adapted from Leach et al. (2008), "I often think about the fact that I am a member of my ethnic group", "The fact that I am a member of my ethnic group is an important part of my life", and "Being a member of my ethnic group is an important part of how I see myself" ($\alpha=.71$).

Results

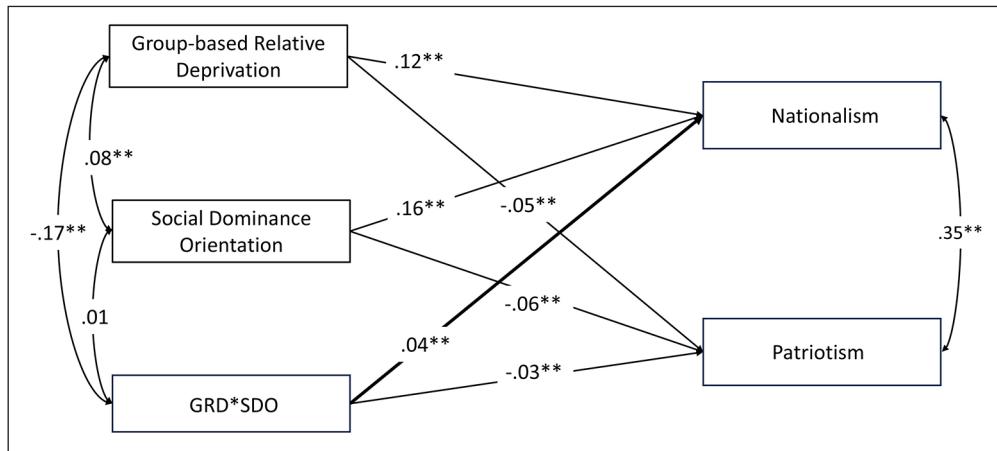
Again, data were analyzed using the R lavaan package (Rosseel, 2012). We conducted a path analysis in which GRD, SDO and their interaction term simultaneously predicted both nationalism and patriotism, while adjusting for the

residual covariance between them (see Figure 3). In a second model, we additionally adjusted for key covariates (individual-based relative deprivation, ethnic identification, political orientation, objective deprivation, education, income, age, and gender). Again, following current recommendations (Hünermund & Louw, 2023), we only present the results of the model without covariates here. The model with covariates is presented in the supplementary online materials. Means, standard deviations, and correlations among all observed variables are reported in Table 3.

As shown in Figure 3 (see also Table 4), GRD ($b=0.12$, $SE=0.01$, $\beta=.12$, $p<.001$, 95% CI [0.11, 0.13]), and SDO ($b=0.16$, $SE=0.01$, $\beta=.12$, $p<.001$, 95% CI [0.14, 0.17]) were positively associated with nationalism. Crucially, the interaction between GRD and SDO was significant ($b=0.04$, $SE=0.01$, $\beta=.03$, $p<.001$, 95% CI [0.03, 0.05]). In contrast, GRD ($b=-0.05$, $SE=0.01$, $\beta=-.06$, $p<.001$, 95% CI [-0.06, -0.04]) and SDO ($b=-0.06$, $SE=0.01$, $\beta=-.05$, $p<.001$, 95% CI [-0.07, -0.04]) were associated with lower patriotism. Again, results revealed a significant interaction between GRD and SDO ($b=-0.03$, $SE=0.01$, $\beta=-.03$, $p<.001$, 95% CI [-0.04, -0.02]), indicating that the negative link between GRD and patriotism was stronger for those higher in SDO. This pattern of results remained consistent when adjusting for covariates (see supplementary online materials).

Analysis of simple slopes. Based on the significant interaction effect in the main path model, we further probed the interaction by assessing the effect of GRD at high and low levels of SDO (one standard deviation above and below the mean). Figure 4 reveals that GRD was significantly and positively related to nationalism for those high in SDO ($\beta=.15$, $SE=0.01$, $p<.001$, 95% CI [0.14, 0.17]), and significantly –but weaker – for those low in SDO ($\beta=.08$, $SE=0.01$, $p<.001$, 95% CI [0.07, 0.09]). Consistent with Hypothesis 3, these results show that those higher in SDO showed a stronger link between GRD and nationalism.

Figure 3. Standardized parameter estimates for the path model in which GRD, SDO and the interaction between them simultaneously predict nationalism and patriotism.



Note. * $p < .05$. ** $p < .01$.

Table 4. Standardized and unstandardized parameter estimates for the full path model.

Outcome	Predictor	<i>b</i>	SE	β	<i>p</i>	95% CI
Nationalism						
	GRD	0.12	0.01	.12	<.001**	[0.11, 0.13]
	SDO	0.16	0.01	.12	<.001**	[0.14, 0.17]
	GRD*SDO	0.04	0.01	.03	<.001**	[0.03, 0.05]
Patriotism						
	GRD	-0.05	0.01	-.06	<.001**	[-0.06, -0.04]
	SDO	-0.06	0.01	-.05	<.001**	[-0.07, -0.04]
	GRD*SDO	-0.03	0.01	-.03	<.001**	[-0.04, -0.02]

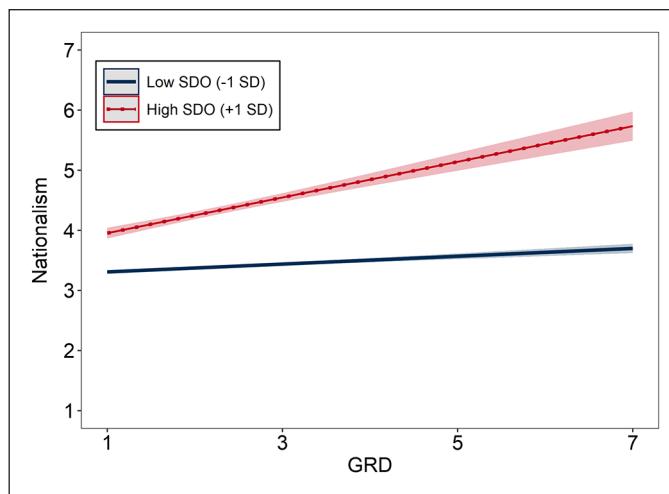
Note. * $p < .05$. ** $p < .01$.

Exploratory analyses. Consistent with prior research (Abrams & Grant, 2012, Lilly et al., 2023), our main analysis used a measure of GRD that captured both its affective and cognitive components. However, considering the findings of the exploratory analyses from Study 1, which indicated differences in the effects of these two components, we once again ran separate tests of our focal moderation hypotheses using first the cognitive and then the affective component of the construct. Results showed that the cognitive component of GRD significantly predicted nationalism ($b=0.06$, $SE=0.00$, $\beta=.08$, $p < .001$,

$95\% \text{ CI } [0.05, 0.07]$), as did SDO ($b=0.15$, $SE=0.01$, $\beta=.12$, $p < .001$, $95\% \text{ CI } [0.13, 0.16]$). However, as in Study 1, the interaction between cognitive GRD and SDO did not significantly predict nationalism ($b=0.01$, $SE=0.00$, $\beta=.01$, $p=.074$, $95\% \text{ CI } [-0.01, 0.02]$).

For the affective component of GRD, results revealed a positive association with nationalism ($b=0.09$, $SE=0.01$, $\beta=.11$, $p < .001$, $95\% \text{ CI } [0.08, 0.10]$), as with SDO ($b=0.17$, $SE=0.01$, $\beta=.13$, $p < .001$, $95\% \text{ CI } [0.15, 0.18]$). Moreover, and consistent with the findings in Study 1, the interaction between cognitive GRD and SDO

Figure 4. Simple slopes for the effect of GRD on nationalism at high and low levels of SDO.



significantly predicted nationalism ($b=0.05$, $SE<0.005$, $\beta=.04$, $p<.001$, 95% CI [0.04, 0.05]). Analysis of the simple slopes revealed that affective GRD was significantly related to nationalism for people with high levels of SDO ($b=0.14$, $SE=0.01$, $\beta=.16$, $p<.001$, 95% CI [0.13, 0.15]), and significantly – but weaker – for people at low levels of SDO ($b=0.05$, $SE=0.01$, $\beta=.08$, $p<.001$, 95% CI [0.03, 0.05]).

Discussion

We conducted Study 2 to follow-up on the findings of Study 1 using large-scale, representative data from a different national context. Moreover, with Study 2 we aimed to tackle some of the key limitations from Study 1. Results supported our hypotheses that GRD is associated with higher nationalism, and that this link is moderated by SDO within dominant ethnic groups. Notably, the interaction also remained significant after we accounted for relevant covariates. This signals that the hypothesized function of nationalism in bolstering majority-group members against the loss of ingroup advantage is an explanatory factor in the contemporary appeal of nationalistic politics. Notably, we found converse effects when predicting patriotism. GRD was associated with lower patriotism, and this negative relationship

was stronger for people higher in SDO. These results further strengthen the argument that group-based dominance motives make ethnic-majority group members turn towards exclusionary nationalism instead of a general positive attachment to the nation to satisfy these group-based needs.

General Discussion

In this study, we tested the idea that nationalism helps to compensate for perceptions that the ethnic-majority ingroup is losing out relative to ethnic-minority outgroups (Sengupta et al., 2019). In two representative samples of white British citizens and European New Zealanders, we find that the positive relationship between group-based relative deprivation (GRD) and nationalism was stronger for those higher in social-dominance orientation (SDO). Our findings provide a critical, and more direct support for a key psychological mechanism underlying present-day white nationalism, by suggesting that a strong appeal of present-day nationalism may lie in its psychological function to satisfy group-based needs for competitive advantage.

Moreover, we replicate findings from previous research (Sengupta et al., 2019; Wamsler, 2022) that found a negative link between GRD and

patriotism. Our results showed that GRD was associated with lower levels of patriotism, and that this negative relationship was stronger for people higher in SDO. GRD and nationalist attitudes thus seem to echo each other's sentiments, as both rely on coping strategies in response to ingroup status threat, and share similar emotional reactions, preferences for hierarchy-based social order, and outgroup derogation (Kosterman & Feshbach, 1989; Tajfel & Turner, 1979; see Wamsler, 2022). In contrast, patriotism has fundamentally different psychological dimensions that oppose notions of national superiority and ingroup idealization, leading to different coping strategies such as decreasing one's secure national attachment when faced with perceptions of unfair disadvantage (Blank & Schmidt, 2003). Our findings thus showcase the unique psychological function of nationalism in the face of perceived ethnic GRD, and contribute to our understanding of how a group can perceive unfair treatment within a larger political entity, such as a nation, while still maintaining a strong identification with that entity.

More broadly, our findings inform the debate on whether current nationalism is primarily driven by individuals' concerns about their economic prospects, or by fears of losing their ingroup's privileged societal status (Green & McElwee, 2019). On one hand, the macro-level literature suggests that economic troubles may drive support for far-right parties (Funke et al., 2015). Accordingly, Pettigrew et al. (2008) found both individual and group-based relative deprivation to be particularly prominent among working-class whites and serving as a proximal correlate of prejudice against immigrants. Yet conversely, there is growing evidence that racial attitudes significantly shape public attitudes toward nationalist rhetoric and its advocates. For instance, Donald Trump exemplified an acceleration of preexisting trends in racial attitude polarization, with partisans increasingly divided along these lines (Sides et al., 2017; Tesler, 2016). The idea that support of racial hierarchy drives nationalistic attitudes is also supported by our findings, which suggest that the rise of nationalism in many Western

democracies may not solely be attributed to people's economic hardships. Instead, group-based needs for dominance appear to be a key factor, especially among whites who feel that their ethnic group is losing status.

Nonetheless, it remains unclear as to what extent GRD within advantaged groups expresses a genuine, if false, perception of real ingroup disadvantage, or rather a sense of violated entitlement tied to a perceived loss of ingroup *privilege*. In line with theoretical descriptions of the construct (see Abrams & Grant, 2012; Smith et al., 2012), the measure comprises both a cognitive component (perceiving ingroup disadvantage) and an affective component (feeling frustrated by the perceived ingroup status). The two-component measure derived from this theory is well-established and has shown strong criterion-related validity across nearly two decades of consistent use in the literature (e.g., Abrams & Grant, 2012; Lilly et al., 2023; Osborne & Sibley, 2015; Sengupta et al., 2019; Zubilevitch et al., 2022). However, findings from our exploratory analyses highlight the merit of considering the theoretical implications of examining the components independently. While the cognitive component assesses perceived real ingroup disadvantage, the affective component is more nuanced, and may capture either frustration regarding the perceived ingroup disadvantage, or frustration about losing one's ingroup *advantage*. The extant literature provides some support for the idea that GRD among advantaged groups may reflect both of these sentiments. On one hand, Pettigrew (2017) argues that "Trump adherents feel deprived relative to what they expected to possess at this point in their lives and relative to what they erroneously perceive other 'less deserving' groups have acquired" (p. 111).

Conversely, Mols and Jetten (2016) picture populist right-wing politicians as successful "identity entrepreneurs" who are able to turn objective relative gratification, the belief that one's group is better off than other groups (Grofman & Muller, 1973), into fears that these advantages could be lost. In line with this idea, studies have found that acquiring wealth can

trigger “status anxiety” (de Botton, 2004) and increase the “fear of falling” (Ehrenreich, 1990; Lubbers et al., 2002, p. 371; Lucassen & Lubbers, 2012). The larger effects observed in the model utilizing only the affective GRD component, compared to those using either the full scale or solely the cognitive component, further suggest that both false consciousness and fear of losing ingroup privileges may be important factors in explaining the contemporary rise of white nationalism.

Moreover, a closer examination of the source of the larger interaction effect in the affective GRD model suggests the presence of an additional, previously unconsidered dynamic. The stronger interaction effect in the affective GRD model appears to stem from a reduced slope among those low in SDO (the slopes for those high in SDO were nearly identical across all models). Particularly in Study 1, the link between affective GRD and nationalism for those low in SDO was very small, while it was notably larger in the full GRD model. This pattern hints at the possibility that individuals low in SDO may be expressing frustration about the ingroup’s *unfair privileges*, when responding to the affective item, resulting in the non-significant link between affective GRD and nationalism among them.

However, it is important to note that we separated the components mainly to examine psychological processes operating among dominant groups that do not strictly conform to the formulations of relative deprivation theory; for instance, the possibility that the affective response in advantaged groups may partially reflect frustration about minority groups gaining on them – without perceiving their own group to be disadvantaged. While this provides additional informative value in the light of the current social and political phenomena we explore in this paper, the affective component alone does not constitute relative deprivation according to the theory (see Smith et al., 2012), as it lacks the key cognitive element of perceiving ingroup disadvantage. As such, we caution against overinterpreting findings based solely on this component or contrasting them with results from the full scale. Future research would do well to do a more focused

analysis on whether the GRD components differ in their psychological underpinnings within advantaged groups.

In this study, we explored the idea that nationalism may reflect a compensatory mechanism that helps ethnic majorities to cope with the perceived loss of ingroup dominance. Another type of group attachment that may provide a similar function is collective narcissism, a belief that the ingroup is glorious but underappreciated by others (Golec de Zavala & Lantos, 2020). National collective narcissism has been shown to be closely associated with nationalism (Golec de Zavala & Lantos, 2020), leading scholars to suggest that contemporary nationalism may be a form of collective narcissism (Cichocka, 2016; Cichocka & Cislak, 2020). Crucially, national collective narcissism has been identified as a primary driver of GRD, mediating the relationship between GRD and support for right-wing politics (Marchlewski et al., 2018). Nonetheless, although national collective narcissism strongly predicts nationalism (Cichocka & Cislak, 2020; Golec de Zavala & Lantos, 2020), the concepts are distinct (Federico et al., 2023). National narcissism stems from a desire for the nation’s greatness to be acknowledged, not from a need to dominate other countries, which traditional nationalism emphasizes (Blank & Schmidt, 2003). Yet, research has suggested that “the craving for recognition of the ingroup can slide into a demand for dominance” (Gronfeldt et al., 2021, p. 1). It thus remains possible, yet still unclear, whether the link between GRD and national collective narcissism is underpinned by the same dominance-driven motives investigated in the present study. Future research would do well to investigate whether the psychological function of nationalism can be extended to other types of defensive identities.

Limitations and Future Research

A major strength of our study is its ability to model the hypothesized interaction effect of GRD and SDO in a non-student sample and a national probability sample in two different contexts. Nonetheless, the present research has some important caveats that limit the interpretation of

the findings. First, the study is cross-sectional and thus precludes causal inferences. Even so, there are indications that support the causal direction underpinning our hypotheses. For instance, the perception of ethnic-group disadvantage among white individuals in the US has been increasing for a considerable time, predating the rise of present-day nationalistic political discourses (e.g. Norton & Sommers, 2011). Moreover, longitudinal data support the idea that perceptions of group disadvantage have a stronger influence on populist attitudes than vice versa (Filsinger et al., 2023). Marchlewski et al. (2018) also demonstrated that experimentally enhancing national-level GRD led to higher national narcissism. Thus, although we cannot rule out that nationalism increases GRD, we have reason to believe that GRD also increases nationalism and does so more for people high in SDO. Nonetheless, more longitudinal and experimental research that manipulates ethnic GRD would provide a key addition to the literature.

Second, while both studies showed patterns consistent with our hypotheses, the interaction in Study 1 was not statistically significant, despite generally larger effect sizes than in Study 2. We had anticipated that the heightened public discourse around white disadvantage in the UK (e.g., BBC News, 2024; Farage, 2024) would produce effects similar to those found in New Zealand, even with a smaller sample. However, this expectation was only partially supported. Although the difference between simple slopes was greater in Study 1, the non-significant interaction remains a limitation and underscores the need for further research on the buffering role of nationalism in Western contexts like the UK and US. Notably, the inclusion of the affective GRD component in Study 1 strengthened the interaction effect, rendering it significant, whereas in Study 2 it amplified an already significant effect. This likely reflects differences in statistical power, with stronger effects requiring less power to detect.

In this context, it is important to emphasize that increased statistical power enhances the precision of parameter estimates and reduces both Type I and Type II errors (Akobeng, 2016). Significant results in larger samples should thus be seen as reflecting a greater capacity to detect

small yet meaningful effects that might be overlooked in underpowered studies (Abraham & Russell, 2008). We therefore view the significance of our findings in Study 2 as a more accurate representation of population-level effects, rather than merely a by-product of large sample size. Given the very small standard errors in Study 2, we can reasonably infer that the significant interaction effects are primarily driven by differences in effect size between the simple slopes. While these differences were only small-to-moderate, they are within the range commonly observed in psychological research (see Lovakov & Agadullina, 2021, for a meta-analytic review). Therefore, we can assume that these effects are likely to have a meaningful impact at the societal level.

Third, our study is limited to making predictions for white majorities in Western societies. We identify considerable gaps in the literature regarding the origins and consequences of nationalism and its relationship with GRD in non-Western contexts. Scholars have primarily focused on describing the outcomes of group-based relative deprivation through the lens of ethnic majority-minority dynamics, where majority groups possess greater societal power, while minorities hold significantly less power. However, such a distinction may not accurately reflect the dynamics shaping society in many places across the world. For instance, there are countries in which ethnic minority groups possess substantial economic power, such as in South Africa (Cheslow, 2019). There are also societies in which multiple groups engage in a competition over which group primarily shapes the content of national identity, such as Lebanon (Abou-Ismail et al., 2023). Hence, a consequential next step would be to emphasize the psychological function of nationalism and its link with GRD in non-WEIRD (Western, Educated, Industrialized, Rich, and Democratic) contexts.

Conclusion

We tested whether social-dominance orientation (SDO) moderates the relationship between group-based relative deprivation (GRD) and nationalism within ethnic-majority groups in the

United Kingdom and New Zealand. We found that white people who perceive their ethnic ingroup to be deprived had stronger nationalistic attitudes, and that this link was reinforced by SDO. These findings provide the first direct empirical support for the idea that the link between perceived ethnic ingroup disadvantage and nationalism may result from a failure of one's ethnic group to fulfil group-based needs for dominance. The present study adds weight to the argument that a key part of the appeal of white nationalism may lie in its function to restore a sense of ingroup competitive advantage, rather than merely being a response to genuine economic grievances.

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Author Contributions

Tamino Konur: Conceptualization; Formal analysis; Writing – Original draft; Writing – review and editing.

Ramzi Abou-Ismail: Conceptualization; Writing – review and editing. **Aleksandra Cichocka:** Supervision; Writing – review and editing. **Chris G. Sibley:** Data curation; Writing – review and editing. **Nikhil K. Sengupta:** Data curation; Supervision; Conceptualization; Writing – review and editing.

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Ethical Approval

This research was approved by the School of Psychology Ethics Committee, University of Kent on 17 October 2022 (ID: 202216660157817903).

The New Zealand Attitudes and Values Study was approved by The University of Auckland Human Participants Ethics Committee on 3 June 2015 until 3

June 2018, and renewed on 5 September 2017 until 3 June 2021. Reference number: 014889.

Consent to Participate

In both studies, participants provided informed consent at the start of the questionnaires.

Consent for Publication

Not applicable.

Data Availability Statement

The data analysed in Study 1 are part of a pilot for the Voter Opinion and Insight on Current Events (VOICE) Study. The questionnaire materials and data used in the analyses are available on the OSF website (https://osf.io/t6h85/?view_only=b2b77735fd534c5faa11287c55fc3963). The data analysed in Study 2 are part of the New Zealand Attitudes and Values Study (NZAVS). The full questionnaire materials and data dictionary used in this study are available on the NZAVS website: www.nzavs.auckland.ac.nz. An anonymized version of the R script is available on the OSF website. A de-identified data set containing the variables analysed in this manuscript is available from Chris Sibley upon request for the purpose of replicating the analyses reported here.

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Supplemental Material

Supplemental material for this article is available online.

Notes

1. The data analyzed in Study 1 are part of a pilot for the Voter Opinion and Insight on Current Events (VOICE), an annual, national probability panel of UK voters. The scales and data used in this study,

as well as an anonymized version of the R script, are available on the OSF website (https://osf.io/t6h85/?view_only=b2b77735fd534c5faa11287c55fc3963).

2. The scales and data dictionary used in the present study are available on the NZAVS website: www.nzavs.auckland.ac.nz. An anonymized version of the R script is available on the OSF website (see note 1). A de-identified data set containing the variables analysed in this manuscript is available from Chris Sibley upon request for the purpose of replicating the analyses reported here.

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