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Personal control decreases narcissistic but increases non-narcissistic in-group positivity

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Abstract

Objective: We examined the effects of control motivation on in-group positivity. Past research suggests that people compensate for low personal control by increasing support for social in-groups. We predicted that the effect of personal control on in-group positivity would depend on the type of in-group positivity. Low personal control should increase compensatory, narcissistic in-group positivity, whereas high personal control should increase secure, non-narcissistic in-group positivity.

Method: These hypotheses were tested in a cross-sectional survey (Study 1 $N = 1{,}083$, 54% female, $M_{age} = 47.68$), two experiments (Study 2 $N = 105$, 50% female, $M_{age} = 32.05$; Study 3 $N = 154$, 40% female, $M_{age} = 29.93$), and a longitudinal survey (Study 4 $N = 398$, 51% female, $M_{age} = 32.05$).

Results: In all studies, personal control was negatively associated with narcissistic in-group positivity but positively associated with non-narcissistic in-group positivity. The longitudinal survey additionally showed that the positive relationship between personal control and non-narcissistic in-group positivity was reciprocal. Moreover, both types of in-group positivity differentially mediated between personal control and out-group attitudes: Narcissistic in-group positivity predicted negative attitudes, and non-narcissistic positivity predicted positive attitudes.

Conclusions: These findings highlight the role of individual motivation in fostering different types of in-group positivity and intergroup outcomes.

KEYWORDS
collective narcissism, defensiveness, in-group identification, personal control, prejudice

> Group narcissism . . . is extremely important as an element giving satisfaction to the members of the group and particularly to those who have few other reasons to feel proud and worthwhile. (Fromm, 1973, p. 275)

1 | INTRODUCTION

The opening quote from Erich Fromm (1973) reflects a tradition in psychology to link deficits in the personal realm of the self with compensations in the social realm of the self. Indeed, previous research confirms that social groups satisfy various individual needs and motives (e.g., Baumeister & Leary, 1995; Mullin & Hogg, 1998; Vignoles, Regalia, Manzi, Golledge, & Scabini, 2006). In the current research, we focus on the need for personal control, or the ability to influence the course of one's life, which is one of the basic human motivations (e.g., Deci & Ryan, 2000; Kay, Whitson, Gaucher, & Galinsky, 2009).[1] Although in-group positivity

can increase because groups help manage individual needs, including the need for personal control, it may also increase because groups offer opportunities for self-fulfillment to those who feel in control. We argue that the deprivation of personal control should foster defensive and destructive in-group positivity, whereas increased personal control has the potential to facilitate more secure and constructive commitment to the in-group. In the current research, we seek to demonstrate these relationships by relying on the distinction between narcissistic and non-narcissistic in-group positivity.

Collective narcissism, a belief in the in-group's unparalleled greatness that is contingent on external recognition, is a predictor of destructive intergroup attitudes (Golec de Zavala, Cichocka, Eidelson, & Jayawickreme, 2009). It has been previously theorized, yet demonstrated only indirectly, that the negative consequences of collective narcissism result from its defensive character (Golec de Zavala, Cichocka, & Iskra-Golec, 2013). We aim to demonstrate that such defensiveness stems from the fact that collective narcissism compensates for frustration of basic needs, such as the need for personal control. In fact, it has been suggested that decreased personal control was an important factor behind the rise of nationalistic sentiments that brought the Nazi regime to power (Frey & Rez, 2002). This is in line with Fromm's (1973) notion of a compensatory function of collective narcissism (see also Adorno, 1963/1998).

Non-narcissistic in-group positivity—positive in-group identification that is independent of the recognition of the group by others—is related to positive out-group attitudes (Golec de Zavala, Cichocka, & Bilewicz, 2013). We aim to demonstrate that this type of in-group positivity is a result of increased personal control, indicating that one can realize individual potential by supporting the group rather than by using the group to satisfy personal needs. For example, it has been argued that the Solidarity movement in Communist Poland was inspired by increased feelings of subjectivity fostered by the teachings of Pope John Paul II (Balcerczyk, 2014). This would suggest that reliance on the social group that led peaceful system change did not result from the authoritarian regime's limiting personal control but rather from a restoration of individual control and autonomy. Overall, by examining different motivational underpinnings of different types of in-group positivity, we seek to shed light on the relationship between the self and the group. Our approach allows us to go beyond a mere description of different types of in-group positivity by showing *why* some forms of in-group support promote hostility while others have the potential to facilitate tolerance (see, e.g., Brewer, 1999).

1.1 | Social groups and control restoration

Feelings of personal control are linked to psychological well-being (Skinner, 1996; Taylor, 1983). Deprivation of personal control triggers immediate attempts to restore it. This can be accomplished by upholding convictions (e.g., superstitions; Whitson & Galinsky, 2008) or supporting entities (e.g., interventionist governments; Kay, Gaucher, Napier, Callan, & Laurin, 2008) that restore a sense of control. Deprivation of personal control should also lead people to "define their self via the in-group and act as an in-group member[s] because this might maintain perceptions of power and control exerted through the (social) self" (Fritsche et al., 2013, p. 20). Research indicates that low personal control fosters in-group favoritism (Fritsche et al., 2013), in-group defense manifest by derogating critics of the in-group (Agroskin & Jonas, 2013, Studies 1 and 3), and ethnocentrism (Agroskin & Jonas, 2013, Study 3). Moreover, low personal control accounts for the effects of mortality salience on in-group defense. Death reminders increase in-group worldview defense more strongly when death is portrayed as uncontrollable (vs. self-inflicted; Fritsche, Jonas, & Fankhänel, 2008). Personal control also moderates the relationship between threat and out-group attitudes. Threat predicts out-group hostility only when individuals perceive they have no personal control over the threat (Greenaway, Louis, Hornsey, & Jones, 2014; cf. Aydin, Krueger, Frey, Kastenmüeller, & Fischer, 2014). Overall, research to date suggests that low personal control leads to in-group bias and out-group derogation.

Theoretical accounts that explain the above findings postulate that the deprivation of personal control plays a role in shaping intergroup attitudes because it is restored by endorsement of group membership (Fritsche et al., 2013). However, the empirical evidence shows that low personal control increases in-group preference relative to other groups, rather than in-group identification. In previous studies, deprivation of personal control produced intergroup bias, which manifested in higher in-group versus out-group ratings (Fritsche et al., 2008, Study 2; Fritsche et al., 2013, Studies 2 and 3) or in lower ratings of the out-group alone (Fritsche et al., 2013, Study 4). The same studies also assessed in-group identification in terms of feeling connected to the in-group and the importance of social identity to the self, but changes in personal control did not affect responses to these items. To our knowledge, a direct link between personal control and the strength of in-group identification has only been shown in two studies: In one, perceived low control over one's mortality increased in-group identification (Fritsche et al., 2008, Study 3); in another, low personal control increased identification with task groups but not with other groups, such as nations (Stollberg, Fritsche, & Bäcker, 2015, Study 1).

In light of the ample evidence indicating that low personal control is associated with intergroup bias, the relatively weaker empirical support for a direct link between low personal control and in-group identification is striking. It is unlikely that deprivation of personal control affects in-

group protection, intergroup bias, or out-group derogation without increasing in-group positivity. We propose that the relationship between personal control and positive in-group identification might be difficult to observe because personal control may have opposite relationships with different forms of in-group positivity. The existence of two interrelated but qualitatively distinct forms of in-group positivity is arguably best demonstrated by the example of national identity.

1.2 | Different forms of in-group positivity

Psychological literature differentiates between two types of national sentiments: patriotism, or love for one's nation and pride in one's nationality; and nationalism, or an orientation toward national supremacy (Druckman, 1994; Kosterman & Feshbach, 1989). Nationalism predicts prejudice and intergroup aggressiveness, whereas patriotism shows less robust links to negative intergroup attitudes and is sometimes linked to intergroup tolerance (e.g., Blank & Schmidt, 2003; De Figueiredo & Elkins, 2003; Mummendey, Klink, & Brown, 2001). Nationalism is predicted by a non-self-determined motivation for in-group identification, whereas patriotism is predicted by a self-determined motivation for in-group identification (Amiot & Aubin, 2013). This means that patriotism reflects an intrinsic motivation to positively identify with a national group, which is associated with greater subjective well-being. Nationalism, in contrast, is compensatory, results from external motivations and social pressures, and is related to lower levels of well-being and negative intergroup attitudes (Yampolsky & Amiot, 2013). In a similar vein, researchers differentiate secure and insecure in-group attachment (Jackson & Smith, 1999), constructive and blind patriotism (Schatz, Staub, & Lavine, 1999), and national attachment and glorification (Roccas, Klar, & Liviatan, 2006). All of these accounts propose that one aspect of in-group positivity is somehow problematic, is compensatory, and predicts out-group hostility. Yet, they do not provide a sound and testable explanation for why such in-group positivity exists and what functions it serves.

We propose to address this gap by investigating the motivations underlying different types of in-group positivity. To this end, we incorporate a conceptualization that goes beyond national sentiments and differentiates between narcissistic and non-narcissistic in-group positivity (Golec de Zavala, Cichocka, & Bilewicz, 2013). This distinction is inspired by research on self-evaluation where personal self-esteem (i.e., a realistic pride people take in their strengths; e.g., Kernis, 2005) is differentiated from narcissism (i.e., an inflated view of oneself that requires continual external validation; e.g., Emmons, 1987; Morf & Rhodewalt, 2001). Self-esteem predicts emotional stability and well-being, whereas narcissism is related to less optimal psychological functioning (e.g., Kernis, 2005; Stronge, Cichocka, & Sibley, 2016). Adjusting for the variance shared between self-esteem and narcissism reveals that narcissism alone predicts antisocial behavior, presumably because narcissists' need to proclaim their superiority is linked to sensitivity to threats or criticism. High non-narcissistic self-esteem (i.e., unassuming pride in the self without the narcissistic need for validation) is more resilient to threats and, thus, predicts less antisocial behavior (Locke, 2009; Paulhus, Robins, Trzesniewski, & Tracy, 2004).

Recent research proposes that a similar process can be observed in the relationship between out-group attitudes and narcissistic versus non-narcissistic in-group positivity. Collective narcissism, an inflated view of the in-group that needs external validation, predicts increased sensitivity to criticism and lack of recognition from others, presumably due to an underlying need to proclaim the in-group's worth (Golec de Zavala et al., 2009). Consequently, it is a robust predictor of out-group hostility, particularly when the in-group's image is threatened (Cai & Gries, 2013; Golec de Zavala & Cichocka, 2012; Golec de Zavala, Cichocka, & Iskra-Golec, 2013; Lyons, Coursey, & Kenworthy, 2013). Similar to approaches distinguishing non-narcissistic self-esteem, one way to distinguish non-narcissistic in-group positivity is to partial out collective narcissism from measures of in-group identification. Although in-group identification consists of multiple components (e.g., Ashmore, Deaux, & McLaughlin-Volpe, 2004; Leach et al., 2008), a popular approach sees it as a combination of feeling like a member of an in-group, satisfaction with this in-group membership, and solidarity with and connection to other in-group members (Cameron, 2004; Postmes, Haslam, & Jans, 2012; Tajfel, 1978). In-group identification tends to be positively correlated with collective narcissism, as both constructs assume a positive evaluation of the in-group. However, accounting for their shared variance helps distinguish their unique effects.

Covarying out collective narcissism from in-group identification removes the compensatory need to externally validate the in-group's image. What remains is secure, non-narcissistic in-group positivity that can be interpreted as an unassuming, positive emotional investment in one's in-group that is independent of the recognition of the group by others (Golec de Zavala, Cichocka, & Bilewicz, 2013). We refer to in-group identification without the variance shared with collective narcissism as *non-narcissistic in-group positivity*. When the positive in-group identification is partialed out of collective narcissism, what remains is the concern about external recognition of the in-group's worth. We refer to collective narcissism without the variance shared with in-group identification as *narcissistic in-group positivity*. Narcissistic and non-narcissistic in-group positivity have opposed relationships with out-group attitudes. When the variance shared

by collective narcissism and in-group identification is covaried out, narcissistic in-group positivity predicts out-group hostility, whereas non-narcissistic in-group positivity predicts favorable attitudes toward out-groups, presumably because it lacks the need for external validation and is, thus, resilient to intergroup threats (Cichocka, Golec de Zavala, Marchlewska, & Olechowski, 2015; Cichocka, Marchlewska, Golec de Zavala, & Olechowski, 2016; Golec de Zavala, Cichocka, & Bilewicz, 2013). Uncovering the individual motivations that underlie narcissistic and non-narcissistic in-group positivity would help explain these opposing relationships.

1.3 | Personal control and narcissistic versus non-narcissistic in-group positivity

We propose that narcissistic and non-narcissistic in-group positivity should change as a function of changes to personal control. Indirectly supporting this prediction are findings linking the more destructive forms of in-group positivity to decreased self-determination and worse psychological functioning, and the less destructive forms of in-group positivity to emotional stability and greater psychological well-being (Amiot & Aubin, 2013). These suggest that low personal control may be compensated by higher narcissistic in-group positivity, whereas high personal control may predict higher non-narcissistic in-group positivity. Empirical evidence supporting the group-based control restoration model (Fritsche et al., 2008, 2013) further points to the link between personal control deprivation and narcissistic in-group positivity. Low personal control has been linked to in-group favoritism and out-group hostility (Agroskin & Jonas, 2013; Greenaway et al., 2014), which are robustly associated with narcissistic in-group positivity. Thus, we expect narcissistic in-group positivity to mediate between low personal control and negative out-group attitudes.

The link between increased personal control and in-group positivity might have been less studied because in light of existing social-psychological theories, it just seems less obvious. However, indirect evidence suggests that high personal control could reinforce commitment to the in-group. In classic personality theorizing, Erikson (1968) argued that engaging with one's community is an important motivation at higher levels of psychosocial development: Those with a mature and stable self are able to take responsibility for others and act on their behalf. Recent empirical evidence demonstrates that the individual self can be functional for reinforcing in-group positivity specifically. For example, individuals with a stable self-concept show higher in-group identification due to their tendency to attribute their own characteristics to the in-group (Van Veelen, Otten, & Hansen, 2011). Moreover, Jans, Postmes, and Van der Zee (2012) demonstrated that, at least in heterogeneous groups, in-group identification can be built on expressions of individuality and compatibility, rather than similarity with other group members. These routes for social identity formation presume that the sense of in-group identity is strengthened and enriched by contributions from individual members. We propose that such processes should be facilitated when individual needs are satisfied (rather than frustrated).

People may be especially likely and willing to show in-group positivity when they experience high personal control. Support for this prediction can be derived from self-determination theory (Deci & Ryan, 1987, 2000), which proposes that satisfaction of the basic human need for autonomy (i.e., experiencing one's behavior as self-determined, rather than externally controlled) is crucial in facilitating the expression of individual intrinsic motivation. This includes enhanced performance (Deci & Ryan, 2000; Ryan & Deci, 2001) and pro-social behaviors (Gagné, 2003), as well as greater in-group attachment (Gagné & Deci, 2005).

Further, research shows that people who feel self-sufficient are more likely to feel that they can enhance their in-group's welfare (Kerr & Kaufman-Gilliland, 1997). Taken together, this evidence suggests that satisfaction of individual needs may promote constructive commitment to the in-group. We then propose a novel hypothesis that increased personal control will foster non-narcissistic in-group positivity, devoid of the need to validate the in-group image by derogating out-groups. Integrating this approach with our reasoning about narcissistic in-group positivity's compensating low personal control leads to the prediction that a decrease as well as an increase in personal control may enhance in-group positivity—just in-group positivity of a different kind.

1.4 | Overview of the current research

In four studies, we test the hypothesis that personal control will have opposite effects on narcissistic and non-narcissistic in-group positivity. Increases in in-group support after loss of control reflect a compensatory process, which serves a self-protective function. Hence, low personal control should be associated with narcissistic in-group positivity, and defensiveness in intergroup relations. Increased personal control, on the other hand, is likely to allow for investing the self in the in-group. Having personal control should then foster non-narcissistic in-group positivity, which is linked to more positive intergroup attitudes.

We seek to shed light on why previous research has failed to find a reliable link between personal control and in-group identification (e.g., Fritsche et al., 2008, 2013). We propose that in order to better observe this link, collective narcissism and in-group identification need to be assessed in

the same study. We expect the opposed effects of personal control to be especially pronounced when we adjust for their overlap, revealing the effects for narcissistic versus non-narcissistic in-group positivity. Therefore, we first report effects of personal control on collective narcissism and in-group identification separately. Next, we report the effects of personal control on each form of in-group positivity while controlling for the other form by including it in the analyses as a covariate. We investigate these effects in a cross-sectional survey (Study 1), two experiments (Studies 2 and 3), and a longitudinal survey (Study 4), in which we examine the reciprocal paths between personal control, both forms of in-group positivity, and out-group attitudes. In all studies, we conceptualize in-group identification as a combination of in-group centrality, solidarity, and satisfaction (Cameron, 2004). These aspects of in-group identification are highly correlated and form a homogenous conceptualization of "the Tajfelian definition of identification" (Postmes et al., 2012, p. 9).

2 | STUDY 1

Study 1 tested the prediction that personal control would have opposite relationships with narcissistic and non-narcissistic in-group positivity: Low personal control should be associated with collective narcissism, whereas high personal control should be associated with in-group identification. We expected these effects to be especially pronounced once the overlap between collective narcissism and in-group identification is accounted for, that is, when we observe the effects for narcissistic and non-narcissistic in-group positivity.

2.1 | Method

2.1.1 | Participants and procedure

We analyzed data from a large Polish nationally representative survey that measured personal control, national collective narcissism, and national in-group identification (among other variables). The initial sample consisted of 1,115 respondents, but we excluded data from 32 participants who reported their identity as other than Polish. The final sample consisted of 1,083 participants (584 women), ages 18–88 ($M = 47.68$, $SD = 18.04$). Data were collected by the Public Opinion Research Centre (CBOS) as computer-assisted face-to-face interviews (CAPI), with the use of address-based sampling.

2.1.2 | Measures

In-group identification

Identification with the national in-group was measured with the Social Identification Scale (Cameron, 2004), which includes 12 items capturing in-group ties ("I have a lot in common with other Poles"), centrality ("In general, being Polish is an important part of my self-image"), and in-group affect ("In general, I'm glad to be Polish"). Participants responded using a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*; $\alpha = .77$; $M = 3.81$, $SD = 0.63$).

Collective narcissism

Collective narcissism was measured with a five-item version of the Collective Narcissism Scale (Golec de Zavala, Cichocka, & Bilewicz, 2013) used with respect to the national in-group (e.g., "The Polish nation deserves special treatment"). Participants responded using a scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*; $\alpha = .80$; $M = 3.68$, $SD = 1.22$).

Personal control

Personal control was measured with four items: (a) "I feel I have little control over my life" versus "I feel I have great control over my life," (b) "I have little influence on my fate" versus "I have great influence on my fate," (c) "There are many things in my life I cannot influence" versus "There are few things in my life I cannot influence," and (d) "Things that are happening in my life are simply a matter of coincidence" versus "Things that are happening in my life are not a coincidence." Participants responded using a scale ranging from –3 (greater agreement with a low-control item) to + 3 (greater agreement with a high-control item). Responses were recoded into a 1–7 scale, with higher scores indicating higher control ($\alpha = .68$; $M = 4.96$, $SD = 1.32$).

2.2 | Results

2.2.1 | Unadjusted analyses

Collective narcissism and in-group identification were significantly positively correlated, $r(1070) = .30$, $p < .001$. In line with our predictions, personal control was significantly negatively correlated with collective narcissism, $r(1068) = –.10$, $p = .002$, and significantly positively correlated with in-group identification, $r(1070) = .18$, $p < .001$.

2.2.2 | Analyses adjusting for the other type of in-group positivity

Next, we examined the effects of personal control on collective narcissism and in-group identification, each time adjusting for the other type of in-group positivity. In the first regression analysis, we included personal control as the predictor, in-group identification as the covariate, and collective narcissism as the outcome variable (i.e., testing the effect on narcissistic in-group positivity). The negative effect of

personal control on narcissistic in-group positivity was significant, $B = –0.14$, $SE = 0.03$, $\beta = –.16$, $p < .001$; whole model $F(2, 1067) = 68.94$, $p < .001$, $R^2 = .11$. We conducted a similar regression analysis for in-group identification as the outcome variable, with personal control as the predictor and collective narcissism as the covariate (i.e., testing the effect on non-narcissistic in-group positivity). The positive effect of personal control on non-narcissistic in-group positivity was significant, $B = 0.10$, $SE = 0.01$, $\beta = .21$, $p < .001$; whole model $F(2, 1067) = 82.80$, $p < .001$, $R^2 = .13$. These effects remained significant when we adjusted for age, gender, and education.

2.3 | Discussion

In line with our hypotheses, collective narcissism was associated with lower personal control, and this association was even more pronounced when we adjusted for in-group identification. In-group identification was associated with higher personal control, and this effect was even more pronounced when we adjusted for collective narcissism. Although Study 1 provides a first encouraging test of our model of the opposing effects of personal control on different forms of in-group positivity, it did not allow for determining causal relationships between variables. Therefore, in Studies 2 and 3, we used an experimental design.

3 | STUDY 2

In Study 2, we examined the effects of experimentally manipulated personal control on collective narcissism and in-group identification. We expected the effects to be especially pronounced when the relationship between these two variables is accounted for, and we predicted that a decrease in personal control would result in an increase in narcissistic in-group positivity, whereas an increase in personal control would result in an increase in non-narcissistic in-group positivity.

3.1 | Method

3.1.1 | Participants and procedure

Study 2 was conducted among 111 participants recruited via Amazon's Mechanical Turk. At the beginning of the study, participants indicated their national identity: 107 participants reported being American, and four participants indicated other nationalities. Participants were randomly assigned to one of the only two experimental conditions. We manipulated control with the procedure used by Whitson and Galinsky (2008, Study 4). Participants were asked to recall a particular incident in which something threatening happened to them and they did versus did not have control over the situation. This procedure holds the valence of the described events constant and negative while manipulating personal control. One person commented that he or she could not recall such an incident and was excluded from the analyses. Because there is evidence that the effects of self-threats tend to be more pronounced after delays (Fritsche et al., 2013; Jonas et al., 2014), before measuring collective narcissism and in-group identification, we added a neutral filler task consisting of reading a neutral excerpt from a novel and answering two questions about it (based on Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994; Golec de Zavala, Cichocka, Orehek, & Abdollahi, 2012). Finally, participants completed measures of collective narcissism and in-group identification. Based on their response to the question about nationality, participants were asked to indicate how much they agree with each statement in relation to the group of Americans or their (other) national group. The order of scale presentation was randomized and did not moderate the effects.

The study also included an attention check. Participants were asked about the content of the filler task. Four participants who failed the attention check were excluded from the analyses. We also excluded one person with extremely long completion time (over 4 hours; other completion times > 2 min and <17 min). The final sample included 105 participants (52 men, 52 women, 1 missing), ages 18–81 ($M = 32.05$, $SD = 11.79$; 1 missing); most ($n = 76$) were White (not Hispanic). There were 56 participants in the low-control condition and 49 in the high-control condition.

3.1.2 | Measures

In-group identification

In-group identification was measured as in Study 1 ($\alpha = .89$; $M = 3.45$, $SD = 0.74$), with respect to the national in-group (Americans or other).

Collective narcissism

Collective narcissism was measured as in Study 1 ($\alpha = .86$; $M = 2.43$, $SD = 1.14$), with respect to the national in-group (Americans or other).

3.2 | Results

3.2.1 | Unadjusted analyses

Collective narcissism was significantly correlated with in-group identification, $r(103) = .50$, $p < .001$. Without covariates, the effects of personal control on collective narcissism, $F(1, 103) = 2.53$, $p = .11$, $\eta_p^2 = .02$ (low control: $M = 2.60$, $SD = 1.14$; high control: $M = 2.24$, $SD = 1.12$) and on in-group identification, $F(1, 103) = 1.24$, $p = .27$, $\eta_p^2 = .01$

(low control: $M = 3.38$, $SD = 0.74$; high control: $M = 3.54$, $SD = 0.72$), were not significant.

3.2.2 | Analyses adjusting for the other type of in-group positivity

We conducted analyses of covariance with the experimental manipulation as the independent variable, collective narcissism and in-group identification as dependent variables, and the other type of in-group positivity as the covariate. When we adjusted for in-group identification, we found a significant effect of personal control on narcissistic in-group positivity, $F(1, 102) = 6.42$, $p = .01$, $\eta_p^2 = .06$. Narcissistic in-group positivity was higher in the low-control condition ($M_{adj} = 2.66$, $SE = 0.13$) than in the high-control condition ($M_{adj} = 2.18$, $SE = 0.14$). When we adjusted for collective narcissism, we found a significant effect of personal control on non-narcissistic in-group positivity, $F(1, 102) = 5.09$, $p = .03$, $\eta_p^2 = .05$. Non-narcissistic in-group positivity was higher in the high-control condition ($M_{adj} = 3.60$, $SE = 0.09$) than in the low-control condition ($M_{adj} = 3.32$, $SE = 0.08$). These results remained significant when we did not exclude any participants, as well as when we adjusted for age, gender, ethnicity, and education.

3.3 | Discussion

In Study 2, low personal control increased narcissistic in-group positivity, whereas high personal control increased non-narcissistic in-group positivity. However, these effects were found only when the common variance of the two types of in-group positivity was accounted for. This suggests that not distinguishing narcissistic and non-narcissistic in-group positivity might conceal the complex nature of the relationship between control motivation and in-group positivity. The results of Study 2 allow us to further understand the nature of narcissistic and non-narcissistic in-group positivity. Narcissistic in-group positivity seems to reflect a defensive compensation for personal control deprivation. The fact that non-narcissistic in-group positivity was strengthened by an increase in personal control indicates that it can be considered a non-compensatory form of in-group positivity.

4 | STUDY 3

Study 2 examined the effects of personal control in the context of threatening situations. Research on compensatory control suggests that these effects should be generalizable beyond the context of threat (Kay et al., 2008). Therefore, in Study 3, we manipulated personal control over positive life events and examined its effects on the two types of in-group positivity. We also included a baseline condition.

4.1 | Method

4.1.1 | Participants and procedure

Study 3 was conducted among 245 participants recruited via Mechanical Turk. Participants were asked to state the nationality they most identify with in an open-ended question. They were randomly assigned to one of the three experimental conditions. Personal control was manipulated with the procedure used by Kay and colleagues (2008, Studies 1, 2, and 4). Participants were asked to think about and describe something positive that happened to them over which they did or did not have control. In the baseline condition, they were simply asked to describe something positive that happened to them (with no mention of control). We excluded two participants who stated they cannot recall such events. Immediately following the manipulation, we included a measure of general personal control and filler questions (based on Kay et al., 2008, Study 1), and one item measuring self-esteem. However, there were no significant effects of the research conditions on any of these measures.[2]

Afterward, participants responded to the measures of collective narcissism and in-group identification. The order of scale presentation was counterbalanced and did not moderate the effects. In Study 3, the two in-group positivity scales measured American identity only, so we excluded data from 55 participants who reported their national identity as other than American or mixed American.[3] To ensure participants were diligent in data completion, we further excluded 34 participants with extremely short completion times, which was determined based on average reading time at 120 seconds or less. This was implemented because Study 3 did not include an attention check task (no extreme times identified; all < 16 min). The final sample consisted of 154 participants (62 women, 90 men, 2 unknown), ages 17–59 ($M = 29.93$, $SD = 9.11$), with most ($n = 119$) reporting White (not Hispanic) as their ethnicity. There were 57 participants in the high-control, 45 in the low-control, and 52 in the baseline conditions.

4.1.2 | Measures

In-group identification

In-group identification was measured as in Studies 1 and 2 ($\alpha = .89$; $M = 3.28$, $SD = 0.73$), with respect to the national in-group (Americans).

Collective narcissism

Collective narcissism was measured as in Studies 1 and 2 ($\alpha = .86$; $M = 2.36$, $SD = 0.99$), with respect to the national in-group (Americans).

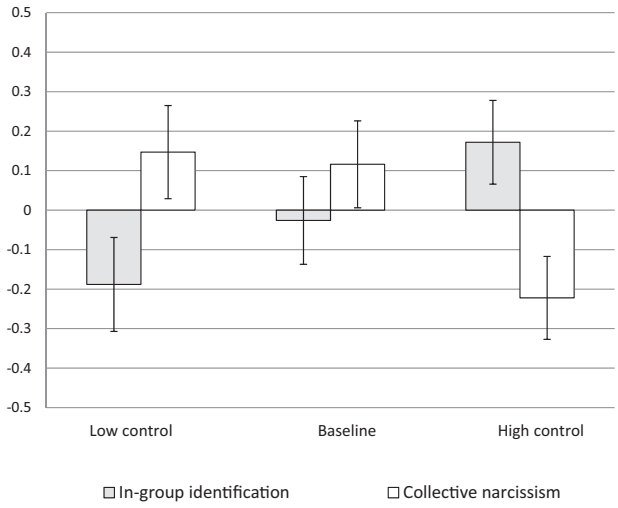

FIGURE 1 Mean estimates of the two types of in-group positivity depending on the effects of control manipulation (Study 3). Because the two measures used different scales, scores were standardized prior to plotting. Means are adjusted for the other type of in-group positivity. Error bars represent standard errors

4.2 | Results

4.2.1 | Unadjusted analyses

Collective narcissism was positively and significantly correlated with in-group identification, $r(152) = .60$, $p < .001$. When the effects of personal control were analyzed without covariates, there were no statistically significant effects on collective narcissism, $F(2, 151) = 1.73$, $p = .18$, $\eta_p^2 = .02$ (low control: $M = 2.41$, $SD = 1.01$; baseline: $M = 2.52$, $SD = 1.06$; high control: $M = 2.18$, $SD = 0.91$), nor on in-group identification, $F(2, 151) = 0.78$, $p = .46$, $\eta_p^2 = .01$ (low control: $M = 3.16$, $SD = 0.67$; baseline: $M = 3.33$, $SD = 0.74$; high control: $M = 3.32$, $SD = 0.77$).

4.2.2 | Analyses adjusting for the other type of in-group positivity

When we adjusted for in-group identification, we found a significant effect of the personal control manipulation on narcissistic in-group positivity, $F(2, 150) = 3.56$, $p = .03$, $\eta_p^2 = .05$ (Figure 1). We computed a planned polynomial contrast testing for a linear trend, which represents a proportionate decrease in narcissistic in-group positivity as personal control increases; estimate = –0.26, $p = .02$. Moreover, pairwise comparisons indicated that narcissistic in-group positivity was significantly lower in the high-control condition ($M_{adj} = 2.14$, $SE = 0.10$) than in the low-control condition ($M_{adj} = 2.51$, $SE = 0.12$), estimate = 0.37, $p = .02$, or in the baseline condition ($M_{adj} = 2.48$, $SE = 0.11$), estimate = 0.34, $p = .03$. The low-control condition did not differ significantly from the baseline condition, estimate = 0.03, $p = .85$. When we adjusted for collective narcissism, we found a marginally significant effect of the personal control manipulation on non-narcissistic in-group positivity, $F(2, 150) = 2.59$, $p = .08$, $\eta_p^2 = .03$. The linear trend was significant, estimate = 0.19, $p = .03$, indicating that there was a proportionate increase in non-narcissistic in-group positivity as personal control increases. Pairwise comparisons indicated that non-narcissistic in-group positivity was higher in the high personal control condition ($M_{adj} = 3.40$, $SE = 0.08$) than in the low personal control condition ($M_{adj} = 3.14$, $SE = 0.09$), estimate = 0.26, $p = .03$. The baseline condition ($M_{adj} = 3.26$, $SE = 0.08$), which fell in the middle, did not differ significantly from the high-control condition, estimate = 0.15, $p = .20$, or the low-control condition, estimate = 0.12, $p = .32$. The pattern of results remained the same adjusting for age, gender, ethnicity, and education. However, when participants with short completion times were included in the ANCOVAs, the effects were not significant: for narcissistic in-group positivity, $F(2, 179) = 2.31$, $p = .10$, $\eta_p^2 = .03$; for non-narcissistic in-group positivity, $F(2, 179) = 1.99$, $p = .14$, $\eta_p^2 = .02$.

4.3 | Discussion

In Study 3, narcissistic in-group positivity was highest when participants were asked to recall life events that they could not control, whereas non-narcissistic in-group positivity was highest when participants recalled events they had control over. Although these effects corroborated the results of Studies 1 and 2, the effect for narcissistic in-group positivity was only marginally significant. It is at least plausible that the personal control manipulation is weaker when participants are asked to recall positive (rather than negative) events. Therefore, a manipulation involving only positive events might have resulted in a more conservative test for our predictions. Nevertheless, analyses of linear contrasts confirmed that participants in the baseline condition showed moderate scores for both measures, indicating that both an increase and a decrease in personal control affect the two types of in-group positivity. Importantly, pairwise comparisons showed a drop in narcissistic in-group positivity in the high personal control condition (relative to the low personal control or baseline conditions), suggesting that increased personal control might be especially successful in decreasing the defensive narcissistic dimension of in-group positivity. This result is in line with research pointing to the beneficial effects of increased personal control for psychological adjustment (e.g., Lachman & Weaver, 1998).

5 | STUDY 4

Studies 2 and 3 demonstrated that changes in personal control can affect in-group positivity. It is also important to

understand whether the two types of in-group positivity affect personal control. Study 4 examined this possibility with a longitudinal design. Recent research shows that identification with social groups increases feelings of personal control, which further foster greater well-being (Greenaway et al., 2015). This perspective can be integrated with our findings by proposing that the relationship between personal control and non-narcissistic in-group positivity might be reciprocal. In other words, we expected personal control to increase non-narcissistic in-group positivity and non-narcissistic in-group positivity to increase personal control.

As in Studies 1–3, we expected low personal control to increase narcissistic in-group positivity. However, we did not expect narcissistic in-group positivity to increase personal control. Even if narcissistic in-group positivity temporarily helps manage control needs, due to its defensive and compensatory nature, the control restoration associated with narcissistic in-group positivity is unlikely to be satisfactory or long-lasting. As suggested by self-determination theory, defensive compensation of frustrated needs serves only to further thwart these needs and tends to predict negative psychological consequences in the future (Deci & Ryan, 2000). Thus, we expected a weaker or even a negative relationship between narcissistic in-group positivity and personal control measured a few weeks later. We tested these predictions in a longitudinal study that measured personal control, collective narcissism, and in-group identification twice.

We also examined whether narcissistic and non-narcissistic in-group positivity differentially mediate the effects of personal control on attitudes toward out-groups. Based on previous research showing that the two types of in-group positivity have opposite relationships with out-group attitudes (e.g., Cichocka et al., 2015; Golec de Zavala, Cichocka, & Bilewicz, 2013), we predicted that narcissistic in-group positivity should mediate between low personal control and less favorable out-group attitudes, whereas non-narcissistic in-group positivity should mediate between high personal control and more favorable out-group attitudes. The two waves of Study 4 included measures of hostile out-group intentions, allowing us to test for longitudinal mediation effects (Cole & Maxwell, 2003). We also considered alternative models, in which we swapped predictors, mediators, and outcomes. Although these alternative models do not transpire from our theoretical approach, a longitudinal design offers an opportunity to compare them with the hypothesized mediation models.

5.1 | Method

5.1.1 | Participants and procedure

Study 4 was part of a larger longitudinal survey with two waves. Participants were recruited via an Internet research panel. The initial measurement was conducted in early May 2012 among 592 Polish adults. The second measurement took place 6 weeks later while the UEFA European Championship in football was taking place in Poland (after the group stage took place and Poland had been eliminated from the tournament). Because the championship involves competition between European national teams, it highlights national identities and the rivalry between them (see e.g., Fritsche et al., 2013). The second measurement recruited 398 participants, constituting our final sample, which included 201 women and 197 men, ages 15–73 ($M = 32.05$, $SD = 12.33$). All participants reported being Polish.

5.1.2 | Measures

In-group identification

In-group identification was measured as in Studies 1–3, with respect to Poles as the national group (T_1: $\alpha = .87$, $M = 3.40$, $SD = 0.71$; T_2: $\alpha = .87$, $M = 3.33$, $SD = 0.65$).

Collective narcissism

Collective narcissism was measured with the nine-item version of the Collective Narcissism Scale (Golec de Zavala et al., 2009). Participants indicated how much they agree with the items in relation to Poles as their national group using a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*; T_1: $\alpha = .84$, $M = 4.33$, $SD = 1.05$; T_2: $\alpha = .85$, $M = 4.21$, $SD = 0.94$).

Personal control

Personal control was measured with items 1–3 used in Study 1 (T_1: $\alpha = .80$, $M = 4.20$, $SD = 1.38$; T_2: $\alpha = .80$, $M = 4.08$, $SD = 1.32$).

Out-group hostility

Participants were asked to what extent they would like to engage in hostile behaviors (e.g., fighting, confronting, or avoiding; Mackie, Devos, & Smith, 2000) toward six European nationalities—Czechs, French, Germans, Greeks, Russians, and Slovaks—on a scale ranging from 1 (*definitely no*) to 7 (*definitely yes*). We averaged scores for all groups to create an index of out-group hostility (T_1: $\alpha = .96$, $M = 3.19$, $SD = 1.06$; T_2: $\alpha = .97$, $M = 3.24$, $SD = 1.08$).[4]

5.2 | Results

5.2.1 | Unadjusted analyses

Zero-order correlations are presented in Table 1. Personal control was positively correlated with in-group identification at Time 1 and Time 2. However, contrary to our expectations, personal control was also positively (although not

TABLE 1 Correlations among Study 4 variables

Variables	1	2	3	4	5	6	7
1. T_1 Personal control	–						
2. T_2 Personal control	.51***	–					
3. T_1 In-group identification	.17***	.23***	–				
4. T_2 In-group identification	.25***	.28***	.64***	–			
5. T_1 Collective narcissism	.05	.05	.44***	.35***	–		
6. T_2 Collective narcissism	–.03	.11*	.36***	.43***	.59***	–	
7. T_1 Out-group hostility	$-.09^{+}$	−.13*	−.06	−.04	.16***	.17***	–
8. T_2 Out-group hostility	$-.09^{+}$	−.10*	$-.09^{+}$	−.17***	.15**	.15**	.49***

Note. $^{+}p < .10$. *$p < .05$. **$p < .01$.***$p < .001$.

significantly) correlated with collective narcissism at Time 1 and significantly positively correlated with collective narcissism at Time 2. Furthermore, in-group identification was negatively correlated with out-group hostility, although this effect was only significant at Time 2. Collective narcissism was positively correlated with out-group hostility at both Times 1 and 2.

5.2.2 | Analyses adjusting for the other type of in-group positivity

In order to examine the effects of personal control on narcissistic and non-narcissistic in-group positivity, and intergroup intentions over time, we estimated a cross-lagged latent variables model. The model was run in Mplus7 (Muthén & Muthén, 1998–2012), with the use of the maximum likelihood estimates of model parameters. To maintain an adequate ratio of cases to parameters and to smooth measurement error, we used parceling (Little, Cunningham, Shahar, & Widaman, 2002). For collective narcissism, we created three parcels at random (the same parcels were used at Times 1 and 2). For in-group identification, we used three parcels based on the three subscales of the scale. For out-group hostility, we created six parcels corresponding to each of the national groups. For personal control, we used the three items as indicators. The first factor loading of each latent variable was set to unity, and residual errors of corresponding indicators were allowed to correlate over time in all subsequent analyses.

We first tested a longitudinal measurement model with freely estimated parameters, in which all Time 1 latent variables predicted all Time 2 latent variables. The model showed satisfactory fit, $\chi^2(362) = 914.70$, $p < .001$, CFI = .97, RMSEA = .06, SRMR = .06. To ensure that the same attributes were being measured at the two time points, we compared this model with a metric invariance model, in which factor loadings of corresponding indicators across time were constrained to be invariant (e.g., Little, Preacher, Selig, & Card, 2007). This model did not fit worse than the less restrictive measurement model, $\chi^2(373) = 925.56$, $p < .001$, CFI = .92, RMSEA = .06, SRMR = .06, $\Delta\chi^2(11) = 10.86$, $p = .45$, indicating sufficient metric invariance for testing a latent longitudinal model.

Path coefficients of the metric invariant model are presented in Figure 2. In line with the hypotheses, the path from Time 1 personal control to Time 2 narcissistic in-group positivity was negative and significant ($B = –0.05$, $SE = 0.02$, $\beta = –.10$, $p = .045$), whereas the path from Time 1 narcissistic in-group positivity to Time 2 personal control was negative and nonsignificant ($B = –0.13$, $SE = 0.13$, $\beta = –.07$, $p = .30$). Both paths between control and non-narcissistic in-group positivity were positive and significant: Time 1 personal control predicted Time 2 non-narcissistic in-group positivity ($B = 0.06$, $SE = 0.02$, $\beta = .16$, $p = .001$), and Time 1 non-narcissistic in-group positivity predicted Time 2 personal control ($B = 0.42$, $SE = 0.15$, $\beta = .19$, $p = .01$). Furthermore, the path from Time 1 out-group hostility to Time 2 narcissistic in-group positivity was not significant ($B = 0.05$, $SE = 0.03$, $\beta = .08$, $p = .10$), but the path from Time 1 narcissistic in-group positivity to Time 2 out-group hostility was positive and significant ($B = 0.29$, $SE = 0.10$, $\beta = .18$, $p = .004$). The path from Time 1 out-group hostility to Time 2 non-narcissistic in-group positivity was not significant ($B = 0.01$, $SE = 0.03$, $\beta = .02$, $p = .74$), but the path from Time 1 non-narcissistic in-group positivity to Time 2 out-group hostility was negative and significant ($B = –0.31$, $SE = 0.12$, $\beta = –.17$, $p = .01$). Thus, in line with the predictions, both Time 1 narcissistic and non-narcissistic in-group positivity differentially predicted Time 2 out-group hostility, yet Time 1 out-group hostility did not predict Time 2 narcissistic or non-narcissistic in-group positivity. Finally, neither the path from Time 1 personal control to Time 2 out-group

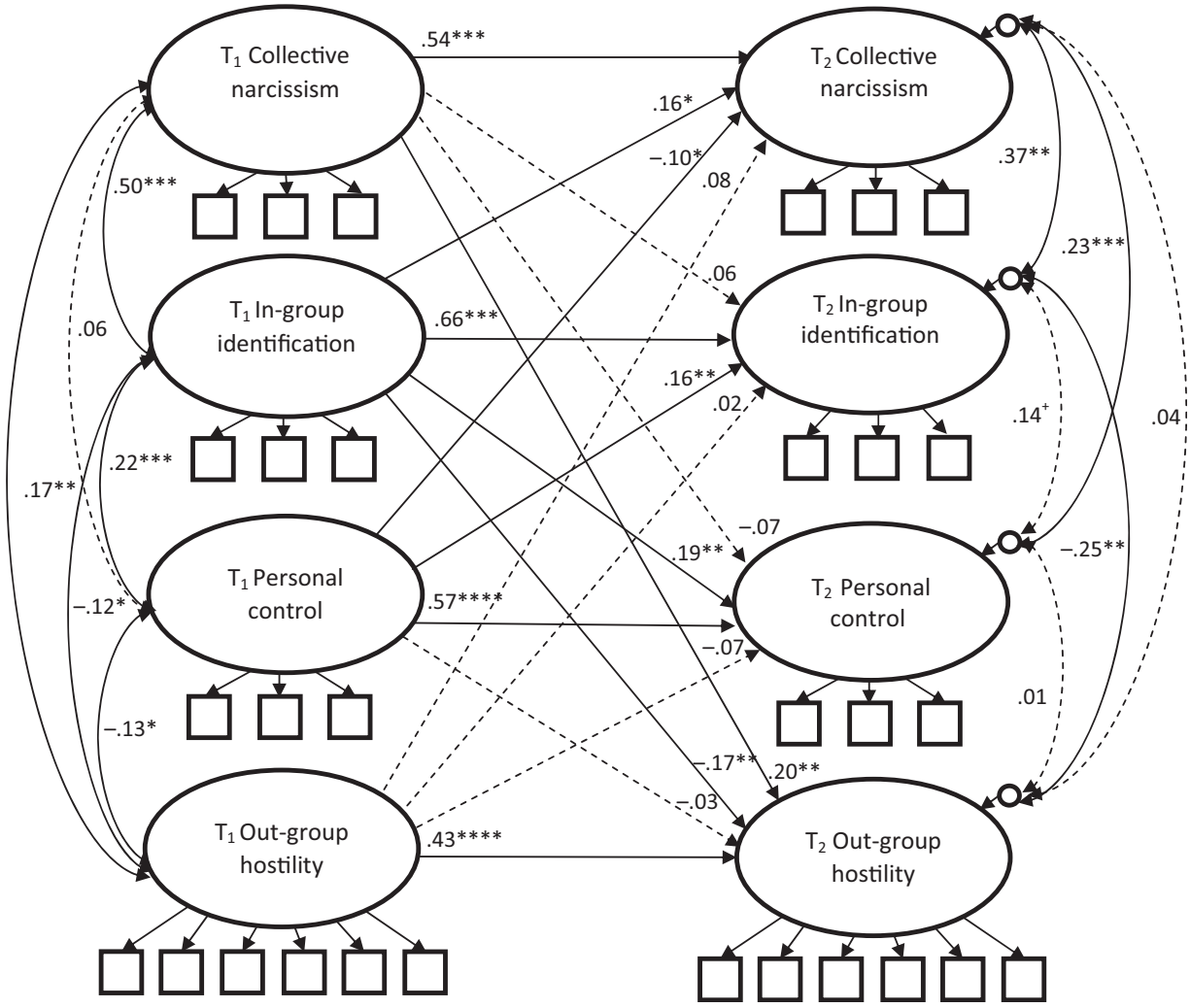

FIGURE 2 Cross-lagged model testing the longitudinal relationships between personal control, the two types of in-group positivity, and out-group hostility (Study 4). Entries are standardized coefficients. Broken lines represent nonsignificant paths. The error term for each indicator at Time 1 was allowed to correlate with the error term for the same indicator at Time 2. $^{+}p < .10$. $*p < .05$. $**p < .01$. $***p < .001$

hostility ($B = –0.02$, $SE = 0.04$, $\beta = –.03$, $p = .60$) nor the path from Time 1 out-group hostility to Time 2 personal control ($B = –0.09$, $SE = 0.07$, $\beta = –.07$, $p = .20$) were significant. The significance of the paths did not change when we added gender, age, and education as covariates in Time 1.

We then proceeded to examine whether the two types of in-group positivity mediated the effect of personal control on out-group hostility. This can be achieved by testing indirect effects in which the paths from the predictors measured in Time 1 to the mediators measured in Time 2 are multiplied by the paths from the mediators measured in Time 1 to the outcomes measured in Time 2 (see Cole & Maxwell, 2003; Dhont, Van Hiel, & Hewstone, 2014; Little et al., 2007). To generate bias-corrected confidence intervals for the indirect effects, we used bootstrapping with 10,000 resamples. We first tested the indirect effect of Time 1 personal control on Time 2 narcissistic in-group positivity multiplied by Time 1 narcissistic in-group positivity on Time 2 out-group hostility. This indirect effect was marginally significant, estimate = –0.01, 95% CI [–0.04, 0.00], 90% CI [–0.04, –0.002]. Second, we tested the indirect effect of Time 1 personal control on Time 2 non-narcissistic in-group positivity multiplied by Time 1 non-narcissistic in-group positivity on Time 2 out-group hostility. The indirect effect was significant, estimate = –0.02, 95% CI [–0.05, –0.004].

We also examined alternative mediation models of (a) personal control on the two types of in-group positivity via out-group hostility, (b) the two types of in-group positivity on out-group hostility via personal control, (c) out-group hostility on the two types of in-group positivity via personal control, and (d) out-group hostility on personal control via the two types of in-group positivity. None of these indirect effects were significant (all 90% and 95% CIs included zeros). Overall, the data were most consistent with the hypothesized pattern of results in which personal control predicts out-group hostility via the two types of in-group positivity. When the

demographics were included as covariates in the indirect effects model, results were very similar, although in this case the indirect effect of personal control on out-group hostility via narcissistic in-group positivity became significant, estimate = –0.01, 95% CI [–0.05, –0.001].

5.3 | Discussion

Study 4 supported our hypothesis that low personal control measured at Time 1 would predict narcissistic in-group positivity at Time 2. It also showed that Time 1 narcissistic in-group positivity did not significantly predict personal control measured at Time 2. This pattern of results suggests that any immediate control compensation provided by narcissistic in-group positivity is not long-lasting. Conversely, for non-narcissistic in-group positivity, both paths were significant: High personal control at Time 1 predicted greater non-narcissistic in-group positivity at Time 2, and non-narcissistic in-group positivity at Time 1 predicted greater personal control at Time 2. These results suggest that personal control reinforces non-narcissistic in-group positivity a few weeks later, and, at the same time, non-narcissistic in-group positivity reinforces feelings of personal control. This supports the assumption that in-group identification devoid of the narcissistic component is a more secure form of in-group positivity.

In line with previous findings from cross-sectional studies (e.g., Golec de Zavala, Cichocka, & Bilewicz, 2013), Time 1 narcissistic in-group positivity was a positive predictor of Time 2 out-group hostility, whereas Time 1 non-narcissistic in-group positivity was a negative predictor of Time 2 out-group hostility. We did not, however, find evidence for the opposite relationship: Time 1 out-group hostility had weaker (and nonsignificant) effects on Time 2 in-group positivity. Furthermore, the effects of Time 1 personal control on Time 2 out-group hostility were differentially driven by the two forms of in-group positivity, although the indirect effect via narcissistic in-group positivity was generally weak and only marginally significant.

6 | GENERAL DISCUSSION

The aim of this research program was to examine the links between the basic human need for personal control and in-group positivity. Across four studies, we hypothesized and found that both threats and boosts to personal control can increase in-group positivity, but in-group positivity of a different kind. Low personal control was linked to narcissistic in-group positivity, which captures a concern about the external recognition of the in-group's worth, whereas high personal control was linked to non-narcissistic in-group positivity —a positive investment in the in-group that is independent of the recognition of the group by others. These effects were especially pronounced when we accounted for the variance shared between collective narcissism and in-group identification.

Both self-reported and experimentally manipulated feelings of low personal control predicted stronger narcissistic in-group positivity. We argue that if narcissistic in-group positivity stems from a frustration of the need for control, then it serves a compensatory function of managing the individual self. This confirms previous claims about the defensive nature of narcissistic in-group positivity (Golec de Zavala et al., 2009; Golec de Zavala, Cichocka, & Iskra-Golec, 2013). Study 4 demonstrated that even if increased narcissistic in-group positivity may be functional in temporarily restoring personal control, this effect is not long-lasting. Narcissistic in-group positivity was not significantly associated with feelings of control measured 6 weeks later. Taken together, these findings point to the conclusion that narcissistic in-group positivity serves as a momentary, and potentially maladaptive, compensation for decreased personal control. By elucidating the underpinnings and functions of narcissistic in-group positivity, the current studies extend previous research on collective narcissism, which largely focused on its consequences.

At the same time, we found that increased feelings of personal control foster in-group identification without the narcissistic component. Both self-reported and experimentally induced feelings of personal control predicted increased non-narcissistic in-group positivity. It seems that because non-narcissistic in-group positivity stems from feelings of high control, it can serve as a genuine expression of communal concerns. In fact, personal control and non-narcissistic in-group positivity appear to be mutually reinforcing. In Study 4, non-narcissistic in-group positivity predicted increased feelings of personal control several weeks later. Thus, the current studies also add to our understanding of non-narcissistic in-group positivity by demonstrating that it is non-compensatory and potentially secure and adaptive. We expect that such in-group positivity would have positive consequences for personal well-being (Greenaway et al., 2015).

Our findings corroborate and extend previous research on the role of control motivation in shaping in-group favoritism. In previous research, lack of control predicted in-group support and defense (Agroskin & Jonas, 2010, 2013; Fritsche et al., 2008, 2013) but rarely directly affected the strength of in-group positivity (cf. Fritsche et al., 2008; Stollberg et al., 2015). Although several previous studies evaluated effects of personal control on connectedness to the in-group and importance of the in-group to the self (which are akin to our operationalization of in-group identification), personal control manipulations did not have significant effects on those

measures (Fritsche et al., 2008, 2013). One possible reason for these null effects was that these studies did not distinguish between narcissistic and non-narcissistic in-group positivity. By considering the two types of in-group positivity, we were able to demonstrate that they have opposite relationships with personal control.

In the current research, we covaried out defensiveness associated with collective narcissism to reveal the effects of non-narcissistic in-group positivity. In doing so, we followed an established tradition of capturing security by covarying out defensiveness (e.g., in the case of self-esteem; see Cichocka, Marchlewska, & Golec de Zavala, 2016; Locke, 2009; Marchlewska & Cichocka, 2017; Paulhus et al., 2004). Similarly, we used partialing to demonstrate the effects of narcissistic in-group positivity, without the variance shared with in-group identification. Such a strategy should be implemented only under certain conditions (Lynam, Hoyle, & Newman, 2006). Following recommendations of Lynam and colleagues (2006), we ensured these conditions were met by partialing reliable and relatively homogenous measures that showed only moderate intercorrelations and confirming the effects with structural equation modeling (Study 4). We also clarified the theoretical mechanism underlying the partial effects. Using partialing has an important advantage: It allows researchers to measure different forms of in-group positivity indirectly, with a lower likelihood of responses being affected by participants' impression management concerns. This approach is easily implemented and, if used cautiously, might be more reliable than other indirect methods, including implicit ones. These advantages notwithstanding, partialing makes the current effects more difficult to interpret or to apply in real life. For example, the findings do not easily translate to individual cases, as narcissistic and non-narcissistic in-group positivity might often coexist (see Stoeber, Kobori, & Brown, 2014, for a discussion of similar effects in the context of perfectionism). Therefore, in the future it would be useful to develop tools that capture narcissistic and non-narcissistic in-group positivity more directly, without the need to covary out the variance shared between these two constructs.

The current findings are important for understanding the foundations of in-group positivity, and its consequences for intergroup attitudes. Previous studies found that lack of control increases in-group bias and negative out-group attitudes (Agroskin & Jonas, 2010, 2013; Aydin et al., 2014; Fritsche et al., 2008, 2013; Greenaway et al., 2014), which are robustly predicted by collective narcissism. Non-narcissistic in-group positivity, on the other hand, is more likely to foster tolerance and openness to other groups (Golec de Zavala, Cichocka, & Bilewicz, 2013). As demonstrated in Study 4, the two forms of in-group positivity can serve to further explain the link between personal control and out-group hostility. Indeed, non-narcissistic in-group positivity mediated the link between increased control and out-group tolerance, whereas narcissistic in-group positivity mediated the relationship between lack of control and out-group hostility (although the latter effect was only marginally significant). Future research should elucidate the consequences of personal control for other intragroup and intergroup outcomes.

Our hypotheses were supported in two countries: Poland and the United States. To facilitate the comparability of our findings, in all studies we focused only on national in-group positivity. Previously, narcissistic and non-narcissistic in-group positivity have also been studied in the context of other social categories, such as college peers (e.g., Golec de Zavala, Cichocka, & Bilewicz, 2013; Golec de Zavala, Cichocka, & Iskra-Golec, 2013). Effects of control motivation on other social identities await future empirical examination. Future studies would also do well to test other motivational factors as predictors of narcissistic and non-narcissistic in-group positivity. It is at least plausible that parallel findings would be observed for existential, epistemic, or relational motives. Presumably, turning to the in-group could compensate for threats to a variety of human needs. Because this mechanism is compensatory, it is more likely to foster defensive narcissistic in-group positivity. This would be in line with Fromm's (1973) and Adorno's (1963/1998) claims that collective narcissism covers a weak and threatened ego. At the same time, we suspect that satisfaction of epistemic or relational needs might not be as efficient in promoting non-narcissistic in-group positivity. As argued by self-determination theory, feelings of control and autonomy are essential for optimal psychological outcomes (Deci & Ryan, 2000). Therefore, satisfaction of the fundamental human motivation for control might be crucial for shaping secure investment of the self in social groups, which might help foster more inclusive social identities. In times when Western countries are facing a refugee and immigration crisis, understanding ways in which we can achieve this seems more pressing than ever.

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CONFLICT OF INTERESTS

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

NOTES

[1] Personal control can be differentiated from certainty (people can be certain about their future, and at the same time feel that they do not control their fate; Fritsche et al., 2013) or power (which additionally presumes the capacity to influence other people; Keltner, Gruenfeld, & Anderson, 2003).

[2] One possible explanation for the nonsignificant effects is that a decrease in control might not manifest itself in explicit reports of control taken immediately after the manipulation, due to the defensive tendency to first show passive avoidance of motivationally relevant discrepancies (including those between the available vs. desired personal control; see Jonas et al., 2014).

[3] Two participants were excluded despite reporting American nationality because they expressed doubts about it in the comments (one said he or she identified more with a different nationality, and another questioned the use of the term *American* to refer to U.S. identity).

[4] Positive out-group intentions (e.g., helping) were also measured as filler items. When we added positive intentions as indices of latent out-group intentions, the effects were similar to those obtained for hostile intentions only, but the model fit was poor, for the measurement model $\chi^2(770) = 3256.73$, $p < .001$, CFI = .73, RMSEA = .09, SRMR = .11. The survey also included a measure of emotions toward out-groups (e.g., admiration-disgust), but we did not find similar effects for this variable: Time 1 out-group emotions did not significantly predict Time 2 control or the two types of in-group positivity, and Time 1 control and the two types of in-group positivity did not significantly predict Time 2 out-group emotions.

REFERENCES

Adorno, T. (1998). *Critical models: Interventions and catchwords*. New York, NY: Columbia University Press. (Original work published 1963)

Agroskin, D., & Jonas, E. (2010). Out of control: How and why does perceived lack of control lead to ethnocentrism? *Review of Psychology*, *17*, 79–90.

Agroskin, D., & Jonas, E. (2013). Controlling death by defending ingroups—Mediational insights into terror management and control restoration. *Journal of Experimental Social Psychology*, *49*, 1144–1158. https://doi.org/10.1016/j.jesp.2013.05.014

Amiot, C. E., & Aubin, R. M. (2013). Why and how are you attached to your social group? Investigating different forms of social identification. *British Journal of Social Psychology*, *52*, 563–586. https://doi.org/10.1111/bjso.12004

Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin*, *130*, 80–114. http://dx.doi.org/10.1037/0033-2909.130.1.80

Aydin, N., Krueger, J. I., Frey, D., Kastenmüeller, A., & Fischer, P. (2014). Social exclusion and xenophobia: Intolerant attitudes toward ethnic and religious minorities. *Group Processes & Intergroup Relations*, *17*, 371–387. https://doi.org/10.1177/1368430213510569

Balcerczyk, I. (2014). The subjective model of the civil society in terms of Pope John Paul II. In A. Jarosz (Ed.), *Good governance and civil society: Selected issues on the relations between state, economy and society* (pp. 115–130). Newcastle upon Tyne, UK: Cambridge Scholars.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Blank, T., & Schmidt, P. (2003). National identity in a united Germany: Nationalism or patriotism? An empirical test with representative data. *Political Psychology*, *24*, 289–312. https://doi.org/10.1111/0162-895X.00329

Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues*, *55*, 429–444. https://doi.org/10.1111/0022-4537.00126

Cai, H., & Gries, P. (2013). National narcissism: Internal dimensions and international correlates. *PsyCh Journal*, *2*, 122–132. https://doi.org/10.1002/pchj.26

Cameron, J. E. (2004). A three-factor model of social identity. *Self and Identity*, *3*, 239–262. https://doi.org/10.1080/13576500444000047

Cichocka, A., Golec de Zavala, A., Marchlewska, M., & Olechowski, M. (2015). Grandiose delusions: Collective narcissism, secure ingroup identification and belief in conspiracies. In M. Bilewicz, A. Cichocka, & W. Soral (Eds.), *The psychology of conspiracy* (pp. 42–61). London, UK: Routledge.

Cichocka, A., Marchlewska, M., & Golec de Zavala, A. (2016). Does self-love or self-hate predict conspiracy beliefs? Narcissism, self-esteem and the endorsement of conspiracy theories. *Social Psychological and Personality Science*, *7*, 157–166. https://doi.org/10.1177/1948550615616170

Cichocka, A., Marchlewska, M., Golec de Zavala, A., & Olechowski, M. (2016). "They will not control us": In-group positivity and belief in intergroup conspiracies. *British Journal of Psychology*, *107*, 556–576. https://doi.org/10.1111/bjop.12158

Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology*, *112*, 558–577. https://doi.org/10.1037/0021-843X.112.4.558

Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology*, *53*, 1024–1037. https://doi.org/10.1037/0022-3514.53.6.1024

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*, 227–268. https://doi.org/10.1207/S15327965PLI1104_01

De Figueiredo, R. J., & Elkins, Z. (2003). Are patriots bigots? An inquiry into the vices of in-group pride. *American Journal of Political Science*, *47*, 171–188. https://doi.org/10.1111/1540-5907.00012

Dhont, K., Van Hiel, A., & Hewstone, M. (2014). Changing the ideological roots of prejudice: Longitudinal effects of ethnic intergroup contact on social dominance orientation. *Group Processes & Intergroup Relations*, *17*, 27–44. https://doi.org/10.1177/1368430213497064

Druckman, D. (1994). Nationalism, patriotism, and group loyalty: A social psychological perspective. *Mershon International Studies Review*, *38*, 43–68. https://doi.org/10.2307/222610

Emmons, R. A. (1987). Narcissism: Theory and measurement. *Journal of Personality and Social Psychology*, *52*, 11–17. https://doi.org/10.1037/0022-3514.52.1.11

Erikson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: Norton.

Frey, D., & Rez, H. (2002). Population and predators: Precondition for the Holocaust from a control-theoretical perspective. In L. S. Newman & R. Erber (Eds.), *Understanding genocide* (pp. 188–221). Oxford, UK: Oxford University Press.

Fritsche, I., Jonas, E., Ablasser, C., Beyer, M., Kuban, J., Manger, A., & Schultz, M. (2013). The power of we: Evidence for group-based control. *Journal of Experimental Social Psychology*, *49*, 19–32. https://doi.org/10.1016/j.jesp.2012.07.014

Fritsche, I., Jonas, E., & Fankhänel, T. (2008). The role of control motivation in mortality salience effects on ingroup support and defense. *Journal of Personality and Social Psychology*, *95*, 524–541. https://doi.org/10.1037/a0012666

Fromm, E. (1973). *The anatomy of human destructiveness*. London, UK: Pimlico.

Gagné, M. (2003). The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation and Emotion*, *27*, 199–223. https://doi.org/10.1023/A:1025007614869

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*, 331–362. https://doi.org/10.1002/job.322

Golec de Zavala, A., & Cichocka, A. (2012). Collective narcissism and anti-Semitism in Poland. *Group Processes and Intergroup Relations*, *15*, 213–229. https://doi.org/10.1177/1368430211420891

Golec de Zavala, A., Cichocka, A., & Bilewicz, M. (2013). The paradox of in-group love: Differentiating collective narcissism advances understanding of the relationship between in-group and out-group attitudes. *Journal of Personality*, *81*, 16–28. https://doi.org/10.1111/j.1467-6494.2012.00779.x

Golec de Zavala, A., Cichocka, A., Eidelson, R., & Jayawickreme, N. (2009). Collective narcissism and its social consequences. *Journal of Personality and Social Psychology*, *97*, 1074–1096. https://doi.org/10.1037/a0016904

Golec de Zavala, A., Cichocka, A., & Iskra-Golec, I. (2013). Collective narcissism moderates the effect of in-group image threat on intergroup hostility. *Journal of Personality and Social Psychology*, *104*, 1019–1039. https://doi.org/10.1037/a0032215

Golec de Zavala, A., Cichocka, A., Orehek, E., & Abdollahi, A. (2012). Intrinsic religiosity reduces intergroup hostility under mortality salience. *European Journal of Social Psychology*, *42*, 451–461. https://doi.org/10.1002/ejsp.1843

Greenaway, K. H., Haslam, S. A., Cruwys, T., Branscombe, N. R., Ysseldyk, R., & Heldreth, C. (2015). From "we" to "me": Group identification enhances perceived personal control with consequences for health and well-being. *Journal of Personality and Social Psychology*, *109*, 53–74. http://dx.doi.org/10.1037/pspi0000019

Greenaway, K. H., Louis, W. R., Hornsey, M. J., & Jones, J. M. (2014). Perceived control qualifies the effects of threat on prejudice. *British Journal of Social Psychology*, *53*, 422–442. https://doi.org/10.1111/bjso.12049

Greenberg, J., Pyszczynski, T., Solomon, S., Simon, L., & Breus, M. (1994). Role of consciousness and accessibility of death-related thoughts in mortality salience effects. *Journal of Personality and Social Psychology*, *67*, 627–637. https://doi.org/10.1037/0022-3514.67.4.627

Jackson, J. W., & Smith, E. R. (1999). Conceptualizing social identity: A new framework and evidence for the impact of different dimensions. *Personality and Social Psychology Bulletin*, *25*, 120–135. https://doi.org/10.1177/0146167299025001010

Jans, L., Postmes, T., & Van der Zee, K. I. (2012). Sharing differences: The inductive route to social identity formation. *Journal of Experimental Social Psychology*, *48*, 1145–1149. https://doi.org/10.1016/j.jesp.2012.04.013

Jonas, E., McGregor, I., Klackl, J., Agroskin, D., Fritsche, I., Holbrook, C., ... Quirin, M. (2014). Threat and defense: From anxiety to approach. In J. M. Olson & M. P. Zanna (Eds.), *Advances in experimental social psychology* (Vol. *49*, pp. 219–286). San Diego, CA: Academic Press.

Kay, A. C., Gaucher, D., Napier, J. L., Callan, M. J., & Laurin, K. (2008). God and the government: Testing a compensatory control mechanism for the support of external systems. *Journal of Personality and Social Psychology*, *95*, 18–35. https://doi.org/10.1037/0022-3514.95.1.18

Kay, A. C., Whitson, J. A., Gaucher, D., & Galinsky, A. D (2009). Compensatory control: Achieving order through the mind, our institutions, and the heavens. *Current Directions in Psychological Science*, *18*, 264–268. https://doi.org/10.1111/j.1467-8721.2009.01649.x

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, *110*, 265–284. https://doi.org/10.1037/0033-295X.110.2.265

Kernis, M. H. (2005). Measuring self-esteem in context: The importance of stability of self-esteem in psychological functioning. *Journal of Personality*, *73*, 1569–1605. https://doi.org/10.1111/j.1467-6494.2005.00359.x

Kerr, N. L., & Kaufman-Gilliland, C. M. (1997). "... and besides, I probably couldn't have made a difference anyway": Justification of social dilemma defection via perceived self-inefficacy. *Journal of Experimental Social Psychology*, *33*, 211–230. https://doi.org/10.1006/jesp.1996.1319

Kosterman, R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology*, *10*, 257–274. https://doi.org/10.2307/3791647

Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology*, *74*, 763–773. https://doi.org/10.1037/0022-3514.74.3.763

Leach, C. W., Van Zomeren, M., Zebel, S., Vliek, M. L., Pennekamp, S. F., Doosje, B., ... Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology*, *95*, 144–165. https://doi.org/10.1037/0022-3514.95.1.144

Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002) To parcel or not to parcel: Exploring the question and weighing the merits. *Structural Equation Modeling*, *9*, 151–173. https://doi.org/10.1207/S15328007SEM0902_1

Little, T. D., Preacher, K. J., Selig, J. P., & Card, N. A. (2007). New developments in latent variable panel analyses of longitudinal data. *Journal of Behavioral Development*, *31*, 357–365. https://doi.org/10.1177/0165025407077757

Locke, K. D. (2009). Aggression, narcissism, self-esteem, and the attribution of desirable and humanizing traits to self versus others. *Journal of Research in Personality*, *43*, 99–102. https://doi.org/10.1016/j.jrp.2008.10.003

Lynam, D. R., Hoyle, R. H., & Newman, J. P. (2006). The perils of partialling: Cautionary tales from aggression and psychopathy. *Assessment*, *13*, 328–341. https://doi.org/10.1177/1073191106290562

Lyons, P. A., Coursey, L. E., & Kenworthy, J. B. (2013). National identity and group narcissism as predictors of intergroup attitudes toward undocumented Latino immigrants in the United States. *Hispanic Journal of Behavioral Sciences*, *35*, 323–335. https://doi.org/10.1177/0739986313488090

Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, *79*, 602–616. https://doi.org/10.1037//0022-3514.79.4.602

Marchlewska, M., & Cichocka, A. (2017). An autobiographical gateway: Narcissists avoid first-person visual perspective while retrieving self-threatening memories. *Journal of Experimental Social Psychology*, *68*, 157–161. https://doi.org/10.1016/j.jesp.2016.06.003

Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, *12*, 177–196. https://doi.org/10.1207/S15327965PLI1204_1

Mullin, B. A., & Hogg, M. A. (1998). Dimensions of subjective uncertainty in social identification and minimal intergroup discrimination. *British Journal of Social Psychology*, *37*, 345–365. https://doi.org/10.1111/j.2044-8309.1998.tb01176.x

Mummendey, A., Klink, A., & Brown, R. (2001). Nationalism and patriotism: National identification and out-group rejection. *British Journal of Social Psychology*, *40*, 159–172. https://doi.org/10.1348/014466601164740

Muthén, L. K., & Muthén, B. O. (1998–2012). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén and Muthén.

Paulhus, D. L., Robins, R. W., Trzesniewski, K. H., & Tracy, J. L. (2004). Two replicable suppressor situations in personality research. *Multivariate Behavioral Research*, *39*, 303–328. https://doi.org/10.1207/s15327906mbr3902_7

Postmes, T., Haslam, S. A., & Jans, L. (2012). A single-item measure of social identification: Reliability, validity, and utility. *British Journal of Social Psychology*, *52*, 597–617. https://doi.org/10.1111/bjso.12006

Roccas, S., Klar, Y., & Liviatan, I. (2006). The paradox of group-based guilt: Modes of national identification, conflict vehemence, and reactions to the in-group's moral violations. *Journal of Personality and Social Psychology*, *91*, 698–711. https://doi.org/10.1037/0022-3514.91.4.698

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, *52*, 141–166. https://doi.org/10.1146/annurev.psych.52.1.141

Schatz, R. T., Staub, E., & Lavine, H. (1999). On the varieties of national attachment: Blind versus constructive patriotism. *Political Psychology*, *20*, 151–174. https://doi.org/10.1111/0162-895X.00140

Skinner, E. A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology*, *71*, 549–570. https://doi.org/10.1037/0022-3514.71.3.549

Stoeber, J., Kobori, O., & Brown, A. (2014). Examining mutual suppression effects in the assessment of perfectionism cognitions: Evidence supporting multidimensional assessment. *Assessment*, *21*, 647–660. https://doi.org/10.1177/1073191114534884

Stollberg, J., Fritsche, I., & Bäcker, A. (2015). Striving for group agency: Threat to personal control increases the attractiveness of agentic groups. *Frontiers in Psychology*, *6*, 649. https://doi.org/10.3389/fpsyg.2015.00649

Stronge, S., Cichocka, A., & Sibley, C. (2016). Narcissistic self-esteem or optimal self-esteem? A latent-profile analysis of self-esteem and psychological entitlement. *Journal of Research in Personality*, *63*, 102–110. https://doi.org/0.1016/j.jrp.2016.06.016

Tajfel, H. E. (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. London: Academic Press.

Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist*, *38*, 1161–1173. https://doi.org/10.1037/0003-066X.38.11.1161

Van Veelen, R., Otten, S., & Hansen, N. (2011). Linking self and ingroup: Self-anchoring as distinctive cognitive route to social identification. *European Journal of Social Psychology*, *41*, 628–637. https://doi.org/10.1002/ejsp.792

Vignoles, V. L., Regalia, C., Manzi, C., Golledge, J., & Scabini, E. (2006). Beyond self-esteem: Influence of multiple motives on identity construction. *Journal of Personality and Social Psychology*, *90*, 308–333. https://doi.org/10.1037/0022-3514.90.2.308

Whitson, J. A., & Galinsky, A. D. (2008). Lacking control increases illusory pattern perception. *Science*, *322*, 115–117. https://doi.org/10.1126/science.1159845

Yampolsky, M. A., & Amiot, C. E. (2013). Priming self-determined and non-self-determined group identification: Effects on well-being and ingroup bias. *Group Dynamics: Theory, Research, and Practice*, *17*, 137–149. https://doi.org/10.1037/a0032825

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