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## **The Great Recession and Group-Based Control: Converting Personal Helplessness into Social Class In-Group Trust and Collective Action**

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*Economic crises can threaten individuals' sense of control. At the same time, these crises often result in collective responses, such as class-based protest (e.g.,*

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*the 99%), but also nationalism or xenophobia. We investigated how personal consequences of economic crises lead to both intragroup and intergroup responses and the role of control for these effects. Studies 1 and 2 show that personal income and fear of economic descent reduce people's personal control, which, in turn, fosters hostile interethnic attitudes (Study 1), and in-group trust toward one's own social class (Study 2). Study 3 tests the combined effect of personal control and salience of collective economic identity in an experimental field study in Germany and Spain. For Spanish participants, control deprivation increased collective efficacy when national economic identity was salient, which, in turn, increased collective action intentions. We discuss the conditions under which crisis-induced threat to personal control elicits collective responses and the consequences for intergroup relations, including across class lines.*

Societal crises, such as economic recessions, threaten people's sense of personal control, that is, their belief in their own ability to affect important aspects of their environment. During the Great Recession that began in 2008 and spread across most countries including the USA and the EU, international financial markets, institutions, or private rating agencies seemed to determine people's personal fate more than their personal investment or effort did. People lost their jobs or suffered severe cuts in their everyday income because of recession, despite personal efforts in personal job performance or residential moves. This crisis-induced state of personal helplessness can lead to personal apathy, retreat, and other depressive symptoms (Abramson, Seligman, & Teasdale, 1978; Riumallo-Herl, Basu, Stuckler, Courtin, & Avendano, 2014).

At the same time, an inbuilt mechanism might turn helpless individuals into collective actors. Motivated social-cognition work suggests that threat to personal control automatically increases collective thinking and action (Fritsche, Jonas, & Kessler, 2011). This may pave the way for increased intragroup coordination and collective efforts to fight crises (e.g., collective protest against conditions raised by creditor institutions, ethnocentric consumption of national products). However, collective responses can also have adverse consequences for intergroup relations (e.g., unconditional in-group bias, intergroup hatred).

This article presents three field studies that test the mechanisms of group-based control (Fritsche et al., 2011, 2013) in the context of economic crises, with particular implications for social-class conflict. Specifically, we test whether the established correlation between personal economic threat and hostile intergroup attitudes, such as national chauvinism and xenophobia, can trace back to threatened personal control. Further, collective responses to control threat might constructively cope with collective crises, as depersonalized in-group trust (e.g., trust toward others of one's own social class) and collective action intention. Finally, social identity salience may be a boundary condition for transforming personal helplessness into collective efficacy and engagement in a common cause.

### Group-Based Control

Humans have a basic desire to perceive the world as controllable through their autonomous self (e.g., Pittman, 1998; Stollberg, Fritsche, & Bäcker, 2015; White, 1959). Whereas perceived control motivates personal action and increases health, people who feel personally helpless often suffer personal apathy and depression (Abramson et al., 1978; Pittman, 1998). People regain a sense of personal control through increased effort by the self (primary control; Rothbaum, Weisz, & Snyder, 1982) or indirectly via secondary control (e.g., believing in external powers; Landau, Kay, & Whitson, 2015; Rothbaum et al., 1982).

Social in-groups may enable *extended primary control* when personal control is threatened. According to social identity research (Reicher, Spears, & Haslam, 2010; Tajfel & Turner, 1979), people define the self not only as their idiosyncratic person. Instead, group memberships determine people's sense of self across situations. For instance, a German may define the self as German when meeting people from a foreign country or as a member of a deprived social class when discussing societal divides. In these "we-thinking" situations, people adopt in-group norms and goals as norms and goals of the self. They do not think and act as individuals but as groups. According to the model of group-based control (Fritsche et al., 2011, 2013), this human capacity to mentally extend the self to a collective may help individuals regain a sense of control when *personal* control is threatened. Heuristically, people perceive groups as homogeneous agents, and salient social identity can increase people's sense of control (Greenaway et al., 2015). Thus, under threatened personal control, people may define their self in terms of an agentic in-group and demonstrate control on a collective level of self.

The model is supported by experimental evidence that salient personal helplessness (vs. salient personal control) increases the attractiveness of and identification with agentic (possible) in-groups (Stollberg et al., 2015); such helplessness also elevates basic ethnocentric responses, such as in-group bias (Agroskin & Jonas, 2013; Fritsche, Jonas, & Fankhänel, 2008; Fritsche et al., 2013; Greenaway, Louis, Hornsey, & Jones, 2014) and intentions to support the in-group (Fritsche et al., 2008, 2013). The latter effects seem most pronounced in highly identified individuals (Fritsche et al., 2013), and cannot easily be explained by other social identity motives, such as uncertainty reduction (Fritsche et al., 2013) or terror management (Agroskin & Jonas, 2013; Fritsche et al., 2008). Also, ethnocentric responses to personal control threat were highest when collective agency of important in-groups (e.g., a human-rights group) was at stake (Fritsche et al., 2013).

People use group memberships to restore feelings of control, but even more so, they actively create collective control in group contexts. For example, threat to personal control increased people's conformity with salient in-group norms favoring social change (Stollberg, Fritsche & Jonas, in press). People do not

necessarily become more conservative and rigid under control threat (Jost, Glaser, Kruglanski, & Sulloway, 2003), but they do become collective agents.

### **Hostile and (Potentially) Constructive Group-Based Responses to Economic Crises**

Both research and public discourse describe how economic crises affect people's social psychological functioning (Burgard, Ailshire, & Kalousova, 2013; Riumallo-Herl et al., 2014). Different social responses to the 2008 global crisis emerged. On the one hand, social movements, such as Occupy Wall Street or antiausterity movements in Greece or Spain, collectively addressed the supposed causes of the economic crisis. On the other hand, ethnocentric right-wing parties and movements, such as Front National in France or PEGIDA in Germany, appeared or gained public approval. Hostile ethnocentrism has long been discussed as a response to economic crisis; more systematic research found increased ethnocentric thinking in historical periods of economic hardship (Doty, Peterson, & Winter, 1991) or salient societal crises (Fritsche et al., 2011). Likewise, Spaniards increasingly blame specific out-groups (vs. global causes) for the economic crisis after thinking about lacking (vs. having) personal control (Bukowski, de Lemus, Rodriguez-Bailón, & Willis, 2016).

Beyond hostile ethnocentric responses, people might have potentially constructive collective responses to crises as well, such as in-group trust and collective action intention. Indeed, control threat increases people's readiness to engage in progroup behavior (Fritsche et al., 2008, 2013). Increased trust in fellow in-group members may prepare collective agency. Different types of trust include: generalized trust, an overall belief in human benevolence; relationism or interpersonal trust, which prioritizes maintaining secure relationships with specific people (e.g., friends); and depersonalized trust toward all, even personally unknown, social-category members (Fiske, Moya, Russell, & Bearn, 2012; Kenworthy & Jones, 2009).

Depersonalized trust may be both precursor and indicator of coordinated collective action within groups (Brewer, 2008) and thus associated with a sense of collective agency or control. In interpersonal relationships, trust can have a social regulatory effect for dealing with threats, such as uncertainty (e.g., Sorrentino, Holmes, Hanna, & Sharp, 1995). In a similar vein, salient societal crises (i.e., thinking about the consequences of Hurricane Katrina) increased depersonalized in-group trust in groups of high personal importance (Kenworthy & Jones, 2009). Here, we ask whether in-group trust might rise under economic crisis as well and if this can be explained by these crises depriving people of personal control.

Whether in-group trust or collective action intention may actually help to cope with collective crises depends on various factors. One is which in-group people use for restoring a sense of control and whether collective action of this group has

any relevance for tackling the crisis. For instance, identification and joint action as a deprived social class may reduce socioeconomic inequality and may in the long run elevate the economic status of low socioeconomic status (SES) people. Although social psychological research has uncovered mechanisms that prevent changing the societal status quo, such as people's belief in a just world or system justification (Jost, Gaucher, & Stern, 2015; Landau et al., 2015), group-based control may provide the ground for collectively challenging the status quo.

### **Overview of the Present Research**

We aimed to investigate the role of control motivation for understanding both intergroup and intragroup collective responses to economic crises. Some responses may be destructive for social coexistence (e.g., national chauvinism or xenophobia), while others may be more constructive (e.g., collective action for intergroup equality). We propose that economic crises potentially threaten people's sense of personal control because they reduce people's subjective control over their own socioeconomic future (i.e., fear of personal socioeconomic descent), and actual decreases in personal financial opportunities hamper various (economic) goal pursuits. Also, threatened personal control engenders group-based responses (i.e., ethnocentrism), leading to either unconditional in-group bias and intergroup hatred or the motivation to engage in collective goal pursuit (i.e., collective action) and in-group trust.

Study 1 tests the hypothesis that perceived personal control mediates the effects of feared personal economic decline and low personal income on chauvinistic and xenophobic responses. Utilizing a correlational design and a representative sample of German adults, this study aims to replicate previous experimental findings that personal threat increases ethnocentric attitudes, while adding a process explanation.

Study 2 sheds light on the collective intragroup processes that enable both destructive and constructive responses to threatened personal control, focusing on depersonalized in-group trust. Extending depersonalized trust to the in-group may both indicate and drive collective agency and thus group-based control. In a Spanish sample, we investigated whether the experience of personal economic descent as a consequence of the economic crisis undermines people's sense of control and this, in turn, increases depersonalized in-group trust (Kenworthy & Jones, 2009) in people's own social class.

Finally, Study 3 investigates collective efficacy beliefs and collective action intentions as potentially constructive intragroup responses to crisis-induced control threat in a field experiment. Building on studies showing that intentions to support a valued in-group following personal control deprivation are most pronounced when collective control seems to be at stake (Fritsche et al., 2013), we studied two countries, Germany and Spain, which were differentially affected by the ongoing

EU economic crisis. In each sample, we not only manipulated personal control salience, but also whether the economic aspects of national (vs. personal) identity were salient, to test the moderating role of collective threat salience for the effects of personal control on collective efficacy beliefs and collective action intentions.

## Study 1

Study 1 tested whether personal income and fear of socioeconomic descent predict ethnocentrism (national chauvinism, xenophobia), mediated via perceived personal control.

### *Method and Procedure*

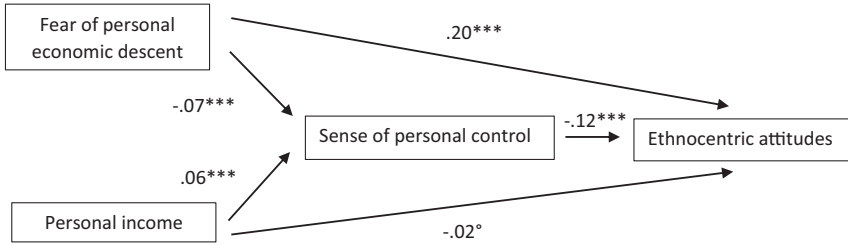
*Participants.* German nationals (1,300 female, 1,115 male), age  $M = 49.72$  ( $SD = 18.03$ ), participated in a randomized, representative face-to-face survey on right-wing attitudes in 2012 (“Mitte-Studie”; Decker, Kiess, & Brähler, 2012). Missing values on at least one focal variable excluded 70 participants, resulting in a final sample of 2,345 participants.

*Measures.* Among others, the following variables were of interest. Fear of personal economic decline was measured by one Likert-type item (“Do you worry about your personal economic situation?”; from 1 [*no worries at all*] to 7 [*very big worries*]).

For personal income, participants indicated 1 of 13 categories describing their monthly personal net income (1 = *below 500 EUR* [0.8% of participants indicated this category]; 2 = *500 to below 650 EUR* [0.9%]; 3 = *650 to below 750 EUR* [1.1%]; 4 = *750 to below 900 EUR* [2.1%]; 5 = *900 to below 1,000 EUR* [3.1%]; 6 = *1,000 to below 1,150 EUR* [4.1%]; 7 = *1,150 to below 1,250 EUR* [5.5%]; 8 = *1,250 to below 1,500 EUR* [12.3%]; 9 = *1,500 to below 2,000 EUR* [18.3%]; 10 = *2,000 to below 2,500 EUR* [17.3%]; 11 = *2,500 to below 3,500 EUR* [21.7%]; 12 = *3,500 to below 5,000 EUR* [10.2%]; 13 = *5,000 EUR and more* [2.6%]). The categories were designed to differentiate primarily among lower incomes.

Perceived personal control was measured by a German version of the spheres of control scale (Paulhus & Van Selst, 1990): nine items from the original scale and two new items, assessing how much personal control people perceived in general (e.g., “I can usually achieve what I want if I work hard for it”), in the interpersonal domain (e.g., “I’m not good at guiding the course of a conversation with several others”), and in the sociopolitical domain (e.g., “It is impossible to have any real influence over what big businesses do”),  $\alpha = .70$ .

Ethnocentrism comprised six items from chauvinism and xenophobia subscales of right-wing extremism (Decker, Hinz, Geißler, & Brähler, 2013): e.g., “It should be German policy makers’ first priority to assert Germany’s legitimate



**Fig. 1.** The mediation of parallel effects of fear of personal economic descent and personal income on ethnocentric attitudes through sense of personal control in Study 1. \*\*\* $p < .001$ ; °  $p < .10$ .

power” or “If jobs become scarce, foreigners should be sent home”), 1 (*do not agree*) to 7 (*agree*),  $\alpha = .90$ .

*Results and Discussion*

Fear of personal economic descent and low personal income both correlated with ethnocentric attitudes,  $r(2408) = .23, p < .001$  and  $r(2349) = -.10, p < .001$ . Hayes’ PROCESS Macro for SPSS (Hayes, 2013) tested whether perceived personal control mediates possible parallel effects of both fear of personal economic descent and current personal income on ethnocentric attitudes. We first analyzed the effect of fear of descent on ethnocentrism with personal control as possible mediator and personal income as a covariate. All mediation paths were significant (Figure 1, upper) as well as the indirect effect,  $IE = .008, SE = 0.003$  (95 % bias-corrected bootstrap CIs; 10,000 bootstrap samples; CI: .004, .015). After controlling for the mediator, a direct effect of fear of descent on ethnocentric attitudes remained significant, indicating partial mediation.

For the effect of low personal income on ethnocentrism, with personal control as possible mediator and fear of descent as a covariate, all mediational paths were significant (Figure 1, lower), which also held for the indirect effect,  $IE = -.01, SE = 0.002$  (95 % bias-corrected bootstrap CIs; 10,000 bootstrap samples; CI:  $-.012, -.004$ ). Here, the direct effect was only marginally significant,  $p = .09$ , leaving open whether other processes than threatened control may explain ethnocentric responses to lower personal income.

The parallel mediational model including both fear of personal descent and low personal income explains 7% of variance in ethnocentric attitudes,  $R^2 = .07$ . The completely standardized effect of the unique indirect effect is  $ab_{cs} = .01$  for fear of personal descent and  $ab_{cs} = -.02$  for personal income. This measure indicates the change in standard deviations of the dependent variable,

when the independent variable is increased by one standard deviation, which can be attributed to the mediating process (Hayes, 2013).

Taken together, the parallel indirect effects of fear of personal economic descent and low current personal income indicate that economic crises may foster ethnocentrism through independent factors that each threaten personal control. First, economic crises increase a sense of personal economic helplessness and threaten economic status in many people. This may decrease their personal sense of control with regard to sustaining their economic future, eliciting ethnocentric responses. Second, actual decreases in income during economic crises restrict the perceived control capabilities of individuals with poor financial resources.

Although indirect effects through perceived control are small, they help understand part of the underlying psychological process. Ethnocentric responses to lower income may trace to the control-depriving quality of low financial resources. However, fear of economic descent elicits processes that increase ethnocentrism beyond group-based control.

Study 1 addressed group-based control (Fritsche et al., 2011, 2013) as a specific process that may explain destructive intergroup conflict under economic crises. However, group-based control is not just a model of conflict. Given that control-deprived people want control on their identity's collective level, they prepare to act as group members, laying the ground for collective action. Studies 2 and 3 address this during national economic crises.

## Study 2

Study 2 aims to conceptually extend the findings on destructive intergroup attitudes (Study 1) to intragroup responses of in-group trust. As the economic crisis erodes equality, societies appear more divided, and generalized trust may drop. Also, depersonalized in-group trust can strengthen people's sense of group-based control. Thus, group-based control restoration could counter decreases in societal trust by elevating depersonalized in-group trust, as a collective response to crisis-threatened personal control. We look at social class as a possible control-restoring in-group. Specifically, depersonalized in-group trust in other people of the same social class should increase for people who perceive personal economic descent due to the economic crisis. Reduced sense of personal control should mediate the effect.

### *Method and Procedure*

*Participants.* Spanish volunteers (208 female, 190 male;  $M_{age} = 43.70$ ;  $SD = 11.35$ ) answered a printed questionnaire that included, among others, the variables of interest. Convenience sampling occurred in a southern Spanish city.



*Measures.* Perceived personal economic descent due to the crisis was measured by one item (MyWord, Social and Market Research, 2012): “Faced with the current economic situation and thinking about your and your family’s situation, do you believe that the economic crisis has made you descend in the social scale? Please mark the option that best reflects your current situation.” The items used were as follows: (1) *Yes, I used to be in the upper class, and now, I am in the upper-middle class*; (2) *Yes, I used to be in the upper-middle class, and now, I am in the middle class*; (3) *Yes, I used to be in the middle class, and now, I am in the lower-middle class*; (4) *Yes, I used to be in the lower-middle class, and now, I am in the lower class*; (5) *Yes, I used to be in the lower class, and now, I am in a very delicate situation, dreading a fall into poverty*; (6) *No, the crisis has not made me descend in the social scale*; (7) *No, the crisis has made me ascend in the social scale*; and (8) *I prefer not to answer*. Participants were grouped in two categories, those who indicated descending the social scale (options 1–5) ( $n = 181$ ) and those who did not (options 6–7) ( $n = 209$ ).

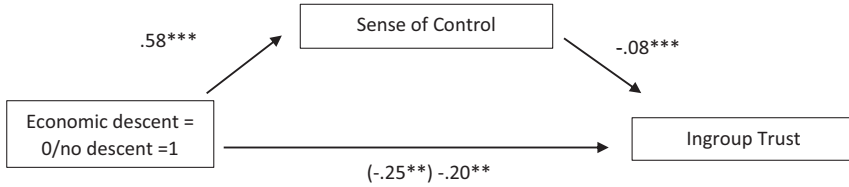
Sense of personal control was measured by 12 items (Lachman & Weaver, 1998) on two dimensions: personal mastery (e.g., “When I really want to do something, I usually find a way to succeed at it”) and perceived constraints (e.g., “Other people determine most of what I can and cannot do”). Items were rated on from 1 (*strongly disagree*) to 7 (*strongly agree*). We reversed-coded the perceived constraints dimension, then standardized and summed both dimensions to measure sense of personal control (Kraus, Piff, & Keltner, 2009),  $\alpha = .84$ .

We assessed depersonalized in-group trust by four items (Kenworthy & Jones, 2009), adapted to social class as the in-group (e.g., “I trust all members of my social class background”), rated on a scale from 1 (*totally disagree*) to 5 (*totally agree*),  $\alpha = .83$ .

### *Results and Discussion*

We tested whether sense of personal control mediates the effect of perceived personal economic descent on in-group (social class) trust (using PROCESS; Hayes, 2013). All paths were significant (Figure 2), as well as the indirect effect,  $IE = -0.04$ ,  $SE = 0.02$  (95 % bias-corrected bootstrap CIs; 10,000 bootstrap samples; CI:  $-.098$ ,  $-.014$ ). After controlling for the mediator, a direct effect of perception of economic descent on in-group trust remained significant, indicating partial mediation. Thus, belief in personal economic descent as due to the economic crisis undermines personal sense of control and this, in turn, increases the collective response of in-group trust. This conceptually replicates Study 1 in a different culture and for trust at a collective intragroup level (vs. hostile ethnocentrism at an intergroup level).

Trusting in-group social class can ameliorate negative consequences of economic crisis for people’s sense of control. This finding fits with personal control



**Fig. 2.** The mediation of perception of personal economic descent on in-group trust through sense of personal control in Study 2. \*\*\*  $p < .001$ ; \*\*  $p < .01$ .

also mediating the effect of lower SES on increased in-group (social class) trust (Navarro-Carrillo, Moya, & Valor-Segura, 2016). Beyond restoring psychological equanimity, increased in-group trust may prepare actual collective action to improve in-group conditions in times of crisis.<sup>1</sup>

Regarding the study's limitations, although the personal economic descent measure allows determining whether participants have descended in the social scale as a result of the crisis, it does not provide information about whether they dropped more than one rung in the social-class hierarchy. Also, even though we assume that the in-group (social class) trust measure is based on current social-class standing, participants may identify with their current social class or with their social class before (possible) descent due to the economic crisis.

### Study 3

Study 3 complements the previous studies in three regards. First, further investigating potentially constructive responses to personal control threat, we directly target collective action intention as a dependent variable and perceived collective efficacy as the mediator, indicating efforts at group-based control. Here, we focus collective action on the level of a national in-group (not social class, as in Study 2). Second, transcending the correlational designs of Studies 1 and 2, we apply an experimental approach that tests the *causal* impact of threatened personal control. Third, we extend our research to the collective boundary conditions that foster or hamper group-based control. Specifically, we look at whether socioeconomic threat imposed on the group due to economic recession can motivate even individuals who are individually control-deprived, to move toward collective action. Previous studies showed that combined threats (i.e., personal control threat, plus threats to group homogeneity and group agency) can increase in-group support

<sup>1</sup>We also analyzed the indirect effect of perceived personal economic descent on in-group (social class) trust through sense of personal control after dropping participants who ascended the social scale. However, no differences emerged, compared to analyses including them.

(Fritsche et al., 2013). Thus, group-level threats may catalyze group-based control to restore threatened personal control.

Study 3 was conducted in the context of the European economic crisis in Spring 2014. We compared two countries differently affected, namely, Spain and Germany. While Spain suffered from mass unemployment and severe cutbacks to public services, Germany was largely unaffected by the economic crisis (Eurostat, 2015). Thus, the economic crisis should impose a stronger threat to the collective agency of Spanish than to that of German participants. Collective efficacy and action intentions should increase when people were reminded of low (vs. high) personal control, when economic *national* identity was salient (but not when only economic *personal* identity was salient). This interaction should be more pronounced in the Spanish compared to the German sample, because the Spanish participants would perceive collective control to be simultaneously threatened, catalyzing the control motivation effects on efforts to demonstrate collective control (e.g., by bolstering collective efficacy and engaging in collective action; see Fritsche et al., 2013). For the German participants, salient membership in a highly agentic group should be sufficient to restore control (Stollberg et al., 2015), without further demonstration of collective control.

### *Method*

*Participants and design.* We conducted this study both online and using a printed version of the questionnaire at the Universities of Granada and Leipzig; 378 students were recruited via online social media (e.g., Facebook) or at university lectures. As an incentive, each participant was included in a raffle of two gift coupons worth € 50 each. Excluding participants holding non-German or non-Spanish citizenship ( $n = 13$ ) resulted in a final sample of 365 (157 German, 208 Spanish; 53 % female;  $M_{\text{age}} = 22.24$ ,  $SD_{\text{age}} = 4.16$ ). The experiment had a 2 (control salience: low/high)  $\times$  2 (economic identity: national/personal)  $\times$  2 (country: Spain/Germany) between-subjects design.

*Procedure.* First, participants received the control salience manipulation (cf. Whitson & Galinsky, 2008). In the low-control condition, participants read the following sentence (instructions for high control in parentheses): “Please remember a specific event at which something occurred and you had no (full) control over the situation. Please describe the situation in which you felt you had absolutely no (full) control—what happened, how did you feel, etc.” The control salience manipulation was followed by a German/Spanish version of the PANAS (Watson, Clark, & Tellegen, 1988) as a delay task; some threats produce effects only after a short delay, which speaks for their automatic nature (Fritsche et al., 2013).

Next was the manipulation of national economic identity (adapted from Haslam, Oakes, Reynolds, & Turner, 1999). The national economic identity

condition asked participants to name up to three things that Germany/Spain does economically often/seldom/well/bad, compared to other countries. The personal economic identity condition had participants name up to three things that they personally do economically often/seldom/well/bad. Both conditions gave examples: e.g., spend, invest, and earn money.

Dependent variables included one-item measures of collective efficacy (“I believe that we as a country can together deal effectively with the possible negative consequences of the economic crisis”); adapted from van Zomeren, Spears, Fischer, & Leach, 2004) and collective action intentions (“I am determined to get active for my country to overcome the economic crisis”), each rated on a scale from 1 (*not at all*) to 7 (*very much*).<sup>2</sup>

### *Results and Discussion*

We conducted two separate 2 (personal control: low/high)  $\times$  2 (salient economic identity: national/personal) analyses of variance for each country (Table 1 has cell means).<sup>3</sup> Although the Personal control  $\times$  Economic identity interaction for collective efficacy was significant in the Spanish sample,  $F(1,203) = 6.91$ ,  $p = .009$ ,  $\eta_p^2 = .033$ , it was not significant in the German sample,  $F(1,153) = 0.03$ ,  $p = .865$ ,  $\eta_p^2 = .000$ . Simple effects analyses for the Spanish sample showed that within the national-economic-identity condition, collective efficacy was significantly higher when personal control was low, compared to when it was high,  $F(1,203) = 4.44$ ,  $p = .036$ ,  $\eta_p^2 = .021$ . Threat to personal control had no effect when personal identity was salient. Viewed another way, within the low personal-control condition, collective efficacy was significantly higher when economic national identity versus personal identity was salient,  $F(1,203) = 10.71$ ,  $p = .001$ ,  $\eta_p^2 = .050$ . Identity salience did not have any effect in the high personal-control condition.

Collective action intentions showed a marginal personal control  $\times$  economic identity interaction in the Spanish sample,  $F(1,202) = 2.80$ ,  $p = .096$ ,  $\eta_p^2 = .014$ ,

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<sup>2</sup>The experiment included a number of other measures capturing approach motivation, in-group bias, intergroup similarity perceptions, perceptions of control before the measurement of collective efficacy and collective actions, and need for cognitive closure at the end of the questionnaire. Those measures were not analyzed for the current purpose.

<sup>3</sup>We had initially included country as an additional factor. Results showed a marginal main effect of economic identity,  $F(1,356) = 3.16$ ,  $p = .076$ ,  $\eta_p^2 = .009$ . Collective efficacy was marginally higher when economic national identity ( $M = 5.23$ ,  $SD = 1.58$ ) versus personal identity ( $M = 4.89$ ,  $SD = 1.74$ ) was salient. There was also a marginal control salience  $\times$  economic identity interaction,  $F(1,356) = 2.96$ ,  $p = .086$ ,  $\eta_p^2 = .008$ . Even though the three-way interaction of control salience  $\times$  economic identity  $\times$  country was not significant,  $F(1,356) = 2.07$ ,  $p = .152$ ,  $\eta_p^2 = .006$ , separate analyses by country revealed that the personal control  $\times$  economic identity interaction was completely driven by the Spanish sample.

**Table 1.** Means and Standard Deviations for Collective Efficacy and Intentions for Collective Action (Study 3)

	Spanish						German					
	Low control			High control			Low control			High control		
	Economic national identity (n = 53)	Economic personal identity (n = 47)	Economic national identity (n = 56)	Economic personal identity (n = 51)	Economic national identity (n = 29)	Economic personal identity (n = 33)	Economic national identity (n = 48)	Economic personal identity (n = 47)				
Collective efficacy	6.21 (0.97)	5.32 (1.60)	5.66 (1.37)	5.76 (1.44)	4.24 (1.33)	4.03 (1.65)	4.25 (1.64)	4.13 (1.66)				
Collective action intentions	5.66 (1.16)	5.24 (1.57)	5.34 (1.37)	5.55 (1.30)	3.38 (1.45)	2.97 (1.55)	3.38 (1.63)	3.06 (1.45)				

*Note.* Standard deviations are in parentheses.

but not in the German sample,  $F(1,153) = 0.04$ ,  $p = .844$ ,  $\eta_p^2 = .000$ . Simple effects analyses revealed no significant differences between economic personal identity conditions in the Spanish sample although the scores were in the expected direction.

Given the well-known association between collective efficacy and collective action intentions (van Zomeren et al., 2004), we tested whether our manipulations had indirect effects on collective action intentions via perceived collective efficacy in the Spanish sample. Consistent with the Control salience  $\times$  Economic identity interaction on collective efficacy, salient low control should lead to more collective action intentions via greater collective efficacy only when economic national (vs. personal) identity was salient. Indirect effect analyses with 10,000 bootstrap resamples using PROCESS (Hayes, 2013; Model 7) tested this moderated mediation assumption. As predicted, there was a significant positive indirect effect of low control on collective action intentions through greater collective efficacy, when economic national identity was salient ( $IE = 0.26$ ,  $SE = 0.12$ , bias-corrected 95% CI: 0.051, 0.536), but not when economic personal identity was salient ( $IE = -0.24$ ,  $SE = 0.16$ , bias-corrected 95% CI:  $-0.581$ , 0.051). The index of moderated mediation was also significant ( $B = 0.50$ ,  $SE = 0.21$ , bias-corrected 95% CI: 0.136, 0.964), suggesting that the conditional indirect effects in both experimental conditions significantly differed from each other. The direct effect of threat to control on collective action intentions in the national identity condition was not significant ( $B = -0.02$ ,  $SE = 0.16$ , bias-corrected 95% CI:  $-0.340$ , 0.304).

In sum, induced lack of personal control increased perceptions of collective efficacy and collective action intentions, when a challenged social identity was salient, but not when people were reminded of an efficacious personal or in-group identity. This conceptually replicates previous research on group-based control (Fritsche et al., 2013), showing that efforts to restore control on the group level following personal control threat were most pronounced when collective control was questioned. That is, when motivated to reestablish a sense of control through the self, people fight for in-group agency. Alternatively, salient membership in agentic groups may be sufficient to restore a sense of control immediately.

## General Discussion

Economic crises, such as the Great Recession, threaten individuals' sense of control. As Studies 1 and 2 indicate, this is true for different indicators of recession, such as low personal income and (feared) personal socioeconomic descent. As previous theorizing and research indicates, this increases the likelihood that people try to restore a sense of control on the collective level of their self. This ethnocentric response may have two sides.

*The Dark Side*

As the “we” becomes stronger when contrasted to a “they,” ethnocentric intergroup phenomena, such as in-group bias and outgroup discrimination, are to some degree inherent in social identity. Hence, people may try to achieve group-based control by derogating or openly discriminating against out-groups. This is expressed in the effects of low or threatened economic status and loss of personal control on hostile ethnocentrism (i.e., national chauvinism and xenophobia), as in Study 1. Although the effects economic crises have on hostile ethnocentrism appear in much previous research (e.g., Doty et al., 1991), we for the first time tested a group-based control account that may help to identify underlying processes (i.e., threatened control) and to tailor effective interventions. This account fits opposition to immigration among wealthy populations who experience threat to economic stability and presumably the ability to control it (Jetten, Mols, Healy, Spears, & Postmes, 2017).

*The Bright Side*

On the positive side, people search for group agency and utilize membership in efficacious social in-groups to restore a sense of control in times of personal helplessness. This is indicated by increased collective thinking, after threatened personal control, shown in all three studies. Even more so, intragroup responses of increased depersonalized trust (Study 2, with regard to class in-group) or perceived collective efficacy and intention to collectively fight the consequences of economic crisis (Study 3, with regard to a national in-group) suggest that automatic processes of group-based control may not just restore psychological equanimity but may even help actually solve societal crises. The Great Recession is an inherently collective problem with collective causes (e.g., bad investments, national debts, and economic systems) and collective consequences (e.g., mass unemployment, cuts in social welfare, and national humiliation). Hence, collective answers are warranted. Group-based control prepares people to act collectively, as within-group trust helps overcome social dilemmas (Brewer, 2008). Also, felt collective efficacy increases propensity to act on collective goals (Jugert et al., 2016), whether consumerism, charity, or changing economic systems.

When people are personally motivated to restore a sense of control, they invest even more in collective control when collective efficacy seems questioned (as it was the case for Spain; Study 3). This may shed some light on actual developments in countries like Spain or Greece, where many people engage in social movements that attempt to deal with the negative effects of the economic recession (e.g., fighting inequality). Based on the current findings, perhaps, identification on the national level (not social-class level) and some threat to group agency can mobilize the low-SES in-group by increasing perceived collective efficacy and enhancing

collective action tendencies. Also, this result addresses other findings of low group efficacy among low-SES individuals who support class-consistent cultural norms (Becker, Kraus, & Rheinschmidt-Same, 2017).

### *Limitations*

The correlational nature of Studies 1 and 2 makes it difficult to establish direct causality. However, Study 3's experimental results confirm the hypothesized causal effect of personal control deprivation on group-based responses to economic crises. Future studies should replace the one-item measures, used in Study 3, by established multi-item scales.

### *Lessons Learned for Intervention*

Processes of group-based control are automatic processes inherently blind to deliberate efforts at solving crises. Many experiments show that salient threat to basic motives results in ethnocentric responses that do not logically connect to the area of threat, and which occur following a delay (Study 3), or after subliminal priming (Fritsche et al., 2011). However, interventions may foster productive and societally beneficial consequences of these processes, while preventing their downsides. Prior work (Fritsche et al., 2011; Jonas & Fritsche, 2013) suggests three possible points of contact: reducing the threat, providing appropriate in-groups, and communicating prosocial norms.

*Reducing threat and increasing personal control.* Deprived personal control seems to be one critical process that transforms economic crisis into ethnocentrism. Thus, one safe way to prevent hostile ethnocentrism is to end adverse personal consequences of socioeconomic crises, such as fear of personal socioeconomic descent or personal economic hardship. If this is not feasible, improving perceived personal control over coping with the symptoms of crisis might be an alternative. This approach is evidence-based: Reminders of personal control in other areas of life reduced the effect of a salient decrease in job prospects, due to the global financial crisis, on expressions of generalized prejudice (Greenaway et al., 2014). Also, experiencing personal autonomy in dealing with relevant demands—such as considering the possibility of quitting one's job versus being fired—eliminated ethnocentric responses to salient job insecurity (Fritsche et al., 2013). Both personal empowerment and autonomy buffer the often-detrimental effects of economic crises on ethnocentrism. Indeed, democratic systems that confer personal self-determination, and thus control, show low involvement in internal or external violent conflicts (Alexander, Inglehart, & Welzel, 2012).



*Appropriate groups.* As economic crises, like the Great Recession, cannot be simply switched off, and as establishing personal control is often not possible, we may have to live with a certain degree of ethnocentric response in times of crisis. However, interventions can influence the direction of the effects, that is, which in-groups people select and to which norms these groups subscribe. Which groups people support depends on both their salience in a situation and people's personal propensity to use specific categories for classifying their social environment. Some social categories, such as nationality or ethnicity, may be of higher chronic importance than others (e.g., Stangor, Lynch, Duan, & Glass, 1992), which may be why we saw general effects on national chauvinism and ethnic xenophobia in Study 1 without increasing the salience of the national or ethnic category. As different groups may have different utility for actually solving the crisis, people should realize opportunities of constructive participation in groups that target solving the crisis or alleviate its adverse consequences in a nondestructive way (e.g., political action groups, welfare organizations). Thus, group identification might paradoxically prevent some forms of radicalization (cf. Jimenez-Moya, Spears, Rodriguez-Bailon, & de Lemus, 2015).

These considerations may also help to predict social-class-based action by low SES people whose personal socioeconomic control is severely limited (Study 1). When social class is a salient social self-category, threatened personal control may fuel class-based action, indicated by increased intraclass trust (Study 2). However, identification with low-SES people is often constrained by threat to self-esteem, at least in cultures with no shared mind-set of class struggle or where low-SES people are blamed for their personal condition. In addition, low-SES people may often perceive the collective efficacy of their socioeconomic group as low and any effort to change this as being futile. Summed up, class-based collective responses to threatened control may be rare phenomena as low-SES identity may not form easily and may be burdened with perceived low collective efficacy.

*Prosocial norms.* Ethnocentric responses to control-depriving societal crises are not always adverse. Acting as a group member means different things for different groups. Although some groups may hold norms of dominating out-groups and disapproving of intragroup deviance, others might be characterized by egalitarian and diversity norms or intergroup solidarity. Personal helplessness does not increase overall intolerance or intergroup aggressiveness, but rather elevates conformity with in-group norms (Stollberg et al., in press). For instance, threat increased proenvironmental behavior or reduced in-group bias when respective in-group norms were salient (Fritsche et al., 2011). In control-depriving crises, it should be crucial which social norms are both dominant in a society and salient in people's everyday contexts, as crises make people susceptible to normative influence.

As this article is being written, public norm perception of how to treat refugees is oscillating in Germany and many other European countries. Within a few weeks, media coverage switched from reporting on nation-wide attacks on refugee reception camps to featuring legions of voluntary helpers welcoming refugees from the Middle East, including German Chancellor Angela Merkel, who encouraged her compatriots to care for refugees. This public discourse about the shared norm should determine the direction that threat effects take, and thus whether economic crises end up in intergroup hostility or in pursuing collective endeavors that foster harmony and growth.

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