

The role of family in the intergenerational transmission of collective action

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Abstract

The present research demonstrates intergenerational influences on collective action participation, whereby parents' past and current participation in collective action (descriptive family norms) shape their children's participation in conventional and radical collective action via injunctive family norms (perception that parents value such participation). Two unique datasets were used: Dyads of activist parents and their adult children (Study 1, $N = 100$ dyads), and student activists who participated in a year-long, three-wave longitudinal study (Study 2, N s wave 1 = 1221, wave 2 = 960, and wave 3 = 917). Parents' past and current participation directly and indirectly predicted children's protest participation in Study 1, while Study 2 showed a similar pattern longitudinally: perceptions of parents' participation (descriptive family norm) and approval (injunctive family norm) predicted change in collective action participation over time. Together, results highlight family environment as a critical setting for the intergenerational transmission of protest.

Keywords: Descriptive and injunctive norms, intergenerational transmission, collective action

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“I just came from South Africa, a place that had been in a perpetual uprising since 1653, so the uprising had become a way of life in our culture and we grew up with rallies and strikes and marches and boycotts.” (Masekela, 2012).

Mass protests are changing the world as millions of people across countries participate in collective action addressing political, social, and climate change. As the above quote from South African activist and musician Hugh Masekela suggests, an important feature of mass protests in many societies is that they recur over the course of many years and decades, cycling forward in different forms from one generation to another (see also Barnes, 2019; Calhoun, 1993; Nwanevu, 2020; Tilly & Wood, 2013). In this paper, we address the intergenerational transmission of collective action participation by examining the role of family, focusing on norms as a central mechanism through which participation in protest transfuses from one generation to another.

Our current understanding of collective action and protest largely neglects the influence of close familial dynamics, which filter the impact of mass intergroup actions that took place in the past, and incubate those in the present. Prominent psychological theories of collective action typically emphasize proximal group factors such as appraisals of illegitimacy/unfairness and collective efficacy, collective emotions such as anger, and a sense of shared identity (Drury & Reicher, 2000; Tausch et al., 2011; van Zomeren, Leach, & Spears, 2012). Theories from sociological and political science perspectives, have similarly pointed to the role of individuals' immediate cost-benefit calculations, collective resources, and perceived political opportunities (Meyer & Tarrow, 1998; see Travaglino, 2014, for a review). The sociology of action has also highlighted that the expectations of important others are also important determinants of who will turn up to the barricades (Klandermans, 1984).

This presents a key challenge to the social psychology of collective action: how, in psychological terms, is adults' mass protest in the present day influenced by normative influences derived from their parent's collective action participation? One reason that this issue has not been systematically addressed may be because of the difficulty of implementing studies that involve both parents and their children. The present work addresses this limitation by surveying activist parents and their children (Study 1) and by conducting a large-scale, longitudinal panel study of the Chilean student movement (Study 2). In the two studies, we tested whether and how norms in the family environment predict participation in collective action, as a mechanism that helps to explain the transmission of collective action participation from one generation to another.

The influence of families on political action

Family socialization over years and decades is crucial for shaping the attitudes and behaviors of children in both individualistic and collectivist societies. Family influences are observable for a range of actions, from antisocial behavior (Thornberry, Freeman-Gallant, Lizotte, Krohn, & Smith, 2003) and substance abuse (Epstein, Bailey, Furlong, Steeger, & Hill, 2019), to healthy eating (Sumodhee, & Payne, 2016), or pro-environmental behaviors (Collado, Staats, & Sancho, 2019). There is also robust evidence associating parents' views with the political development of their children (Sears & Levy, 2003), children's political standpoints (Sears & Brown, 2013), and political experiences (Dotti Sani & Quaranta, 2015; Quintelier, Hooghe, & Badescu, 2007).

Building upon the above evidence, we test the hypothesis that parents are sources of normative influence that shape the social protest of the subsequent generation. While some studies have addressed the relationship between group norms and collective action (Louis, Taylor, & Douglas, 2005; Thomas & McGarty, 2009), the role of family norms has not been

addressed, and indeed the role of families *per se* has been comparatively neglected (cf., McAdam, 1986). The present research further distinguishes two elements of family norms (Cialdini, Reno, & Kallgren, 1990; Smith & Louis, 2008): the subjective perception of parents' participation in collective action (a descriptive norm), and of parents' approval of their children's participation (the injunctive norm).

Intergenerational transmission of norms guiding collective action participation

Group norms more generally play a central role in influencing people's behavior, specifying what is typical or desirable in a group or situation (e.g., Cialdini & Goldstein, 2004; Sherif, 1936). Conformity to norms may increase the approval of others and maintain relationships (Abrams, Palmer, Rutland, Cameron, & Van de Vyver, 2014), or lead to the anticipation of social support which has been shown to motivate collective action participation (Klandermans, 1984, 2013; van Zomeren, Spears, Fischer, & Leach., 2004). Indeed, a normative influence has been considered in models addressing collective action through the concept of social support. Klandermans (1984, 2013) highlighted two ways in which norms could influence action: via social rewards that motivate group members to participate in order to gain others' approval; and via the identity motive, an inner social obligation originating from identification with other participants that works as a drive to act on behalf of the collective in the ways that the norms prescribe. Importantly, this formulation of the motives underpinning normative influence rests on the approval of other group members: what Terry and Hogg (1996) identify as the group injunctive norm. Normative influence can also take the form of social support provided by other group members, which validates the sense of moral conviction, injustice, and efficacy and share the emotions, such as anger, that together drive action (van Zomeren et al., 2004; Bäck, Bäck, & Sivén, 2018; see also Drury & Reicher, 2009; Smith, Thomas, McGarty, & Mavor, 2009; Thomas, & McGarty, 2015).

We build on this previous work (Klandermans, 1984; van Zomeren et al., 2004) by considering the role of family norms, and in particular by explicitly distinguishing the roles of family descriptive and injunctive norms. Descriptive and injunctive norms have independent effects across a wide range of behaviors (Cialdini, Reno, & Kallgren, 1990). They should therefore be modelled separately rather than aggregated (Göckeritz et al., 2010), particularly in conflict contexts when they may be misaligned (Smith & Louis, 2008). Early research on norms and collective action has primarily examined the norms of other group members in general (e.g., the norms of other religious or national group members), whereas the intergenerational transmission of activism suggests that the family may be a particularly important locus of social influence when it comes to explaining how cycles of protest emerge over years and decades.

Injunctive and descriptive family norms are also distinct from other, related concepts in collective action research, such as social support. For one thing, social support signals whether others share one's opinion in the here and now (opinion support; van Zomeren et al., 2004), or would support action in the future (action support; van Zomeren et al., 2004). In contrast, a descriptive family norm signals what one's parents *actually did*, offering a concrete example rooted in action taken (even decades) earlier. More generally, descriptive norms may shape action independent of social support or approval, by conveying the action that is effective and appropriate in the context (Cialdini et al., 1990). Injunctive norms can also be a source of group members' senses of moral obligation and duty, which can spur actions that seem to lack instrumental benefits (Louis et al., 2005; Terry & Hogg, 1999). Together, these norms create referent informational influence, shaping the standards according to which individuals' decisions are made. In the present studies, then, we examined what children perceive about their parents' participation in collective action (descriptive norms), and whether children think their parents value or encourage their children to participate in collective action (injunctive norms).

Finally, we also extend research on normative social influence more generally by examining how descriptive and injunctive norms predict each other (Eriksson, Strimling, & Coultas, 2015; Paluck & Shepherd, 2012). We specifically address whether children's perceived injunctive family norms about collective action are predicted by their perceptions of their parents' participation in collective action (cf. Tankard & Paluck, 2016). That is, the observation or knowledge that parents participated in the past and/or present collective action (descriptive norms) should predict the perception that their parents approve of such behavior by their children (perceived injunctive norms). However, reciprocal feedback loops are also possible, with changes in children's behavior also influencing family injunctive norms, and via this, parents' current behavior. We therefore tested the effects in both directions in a longitudinal study in the context of a large-scale social movement (Study 2). In so doing, the research contributes to the study of normative influence more broadly, beyond collective action itself.

The present research

The present research was conducted in Chile, where student protests in the last decade have become the most powerful force of social change since the 1980s' protests toppled Pinochet's dictatorship. This is an ideal context in which to examine intergenerational normative influences on collective action because the generation that protested against Pinochet's dictatorship are the parents of the students protesting in the present day. This research seized the opportunity to test the relationship between parental participation in the Pinochet-era protests to children's protest participation now, using two unique datasets: (1) parent-child dyads with parents who were active in the Pinochet-era protests in Chile, whose children were of an age to participate in protests in the present day (Study 1); and (2) a year-long, three-wave longitudinal study of students' participation in contemporary student movements (Study 2), in relation to perceptions of their parents' activism.

The distinction between conventional and radical collective action is also increasingly important in conceptual models and research on collective action (see for instance Tausch et al., 2011; Wright, Taylor, & Moghaddam, 1990). Even though both are collective behavioral responses to perceived inequality, conventional collective action follows commonly-accepted social rules and does not disrupt the status quo, whereas radical collective action directly threatens the existing social order (Wright, Taylor, & Moghaddam, 1990). Considering this in the context of the student movement in Chile, we measured and distinguished between radical and conventional forms of collective action because of the prior evidence that these can have different antecedents (Tausch et al., 2011). We did not have a theoretical basis to formulate specific directional hypotheses about the differential role of parental norms (descriptive and injunctive) to predict conventional versus radical collective action. However, by including the distinction in the design of the study, we are able to explore the role of family norms for both variables as another novel contribution of the present research.

Main predictions

We expected that parental descriptive norms (what parents reported doing) would predict childrens' perceived injunctive norms (what children perceive their parents approved of) about participation in collective action (H1). Additionally, we hypothesized that adult children's participation in collective action would be predicted by parental descriptive norms through perceived injunctive norms (H2). Finally, based on the evidence that political participation is relatively consistent over time (Jennings & Niemi, 1981), we propose an auxiliary hypothesis in which we expect that past parental participation would predict present parental participation (H3). Based on parent-child dyads, Study 1 tested all three hypotheses, whereas Study 2 tested H1 and H2 longitudinally.

Study 1

Method

Participants. One hundred parent-child Chilean dyads took part in the study. These dyads were composed of 44 mother-daughter dyads, 16 father-son dyads, 15 mother-son dyads, 23 father-daughter dyads and two dyads in which children did not report their sex. The sample of parents included 40 males and 60 females ($M_{age} = 52.7$, $SD_{age} = 7.30$, range = 43-70). In the sample of children, 31 were males and 67 females ($M_{age} = 22.8$, $SD_{age} = 2.68$, range = 18-31). The justification of sample size and composition of participants of Study 1 is further elaborated in Supplementary Materials.

All participants were recruited using key informants instructed to look for parents inside their network of acquaintances that met the following criteria: (1) to have participated in social movements or collective action against the military dictatorship between the year 1980 and the year 1988; and (2) to have a son or daughter between 18 and 35 years old. All 100 parents had participated in social movements or collective action during the 1980s at different levels. While 56 of the children were active participants or had participated in the Chilean student movement, the remainder were much less involved or not involved at all in collective action.

Procedure. Study 1 utilized questionnaires and semi-structured interviews (see full questionnaire in Supplementary Materials). However, the present analysis focuses on the data gathered from questionnaires only. There were two versions of the questionnaire: one for parents and one for children; questions regarding participation in the specific social movements of each group (parents or children) were adapted accordingly.

Links to the questionnaires were distributed by email, which had been voluntarily provided by each participant in the recruitment phase. After giving informed consent that guaranteed confidentiality and anonymity, participants completed the questionnaire. After

completing the questionnaire, which took around 30 minutes, each participant was rewarded with CLP \$7000 (~USD \$11).

Measures.

As can be seen in Table 1, the parents' questionnaire tapped past and present descriptive norms, and parents' injunctive norms about children's participation. The children's questionnaire measured injunctive norms and children's participation in conventional and radical collective action.

Results

Descriptives. Means, standard deviations, and correlations (all indicating positive and significant associations) are presented in Table 2.

Analytic strategy. Path analysis with manifest variables was performed using Mplus 7.1 (Muthén & Muthén, 2012), using maximum likelihood estimation (see Supplementary Materials, Study 1, cut-off and fit indices).

Table 1

Description of measures, items and scales of Study 1 & 2

Name	Description	Study	N° items	Scale Items	Scale
Parents' past descriptive norms	Parents' participation in collective action during the dictatorship	Study 1	8	Gatherings; demonstrations; Casseroles [Pot-banging ritual protests]; Demonstrations at universities; Signing of letters or petitions; Cultural or musical events with political connotation; Political actions involving violence; "NO" campaign for the 1988 plebiscite.	'Yes' (1) or 'no' (0)
Parents' present descriptive norms	Descriptive norms in the present were operationalized in terms of parents' current participation in collective action.	Study 1	3	Signed a letter or petition supporting a cause; Attended a march or political demonstration; Used social networks to express your opinion on social issues. ($\alpha = .67$)	From 1 = <i>never</i> , to 5 = <i>very frequently</i>
Parents' injunctive norms about children's participation (adapted from Green, Adams, & Turner, 1988)	Expectations about their children's participation in the student movement	Study 1	2	"I value or would value my child to participate in the student movement", and "I encourage or would encourage my child to participate in the student movement". ($r = .85$)	From 1 = <i>totally disagree</i> , 5 = <i>totally agree</i>
Children's injunctive norms	Children's perceived injunctive family	Study 1 & 2	2	"My family values that I participate in the student movement" and "My family encourages me to participate in the student movement".	From 1 = <i>totally disagree</i> , 5 = <i>totally agree</i>

	norm (i.e., the extent to which they saw their parents as valuing and encouraging them to participate in collective action)			(Study 1 $r = .85$; Study 1 $r_{T1} = .76$; $r_{T2} = .78$ and $r_{T3} = .78$)	
Children's conventional collective action (adapted from Tausch et al., 2011)	Children indicated how often they had participated in actions of the student movement during the last six months.	Study 1 & 2	4	Participate in discussion meetings or assemblies; spread information about the student movement in social networks (Study 1 conventional action $\alpha = .85$; Study 2 conventional action $\alpha_{T1} = .81$; $\alpha_{T2} = .81$ and $\alpha_{T3} = .84$)	From 1 = <i>never</i> , to 5 = <i>very frequently</i>
Children's radical collective action (adapted from Tausch et al., 2011)	Children indicated how often they had participated in actions of the student movement during the last six months.	Study 1 & 2	4	Confronting the police in protests; participate in barricades; participate in occupations of universities or public buildings; block streets or roads. (Study 1 radical action $\alpha = .90$; Study 2 radical action $\alpha_{T1} = .82$; $\alpha_{T2} = .85$ and $\alpha_{T3} = .78$)	From 1 = <i>never</i> , to 5 = <i>very frequently</i>
Perceived parent present descriptive norms	Children's perceived parent present descriptive norms	Study 2	3	"Signing a letter or petition supporting a cause", "Attending a march or political manifestation" or "Using social networks to express their opinion on social issues" during the last six months. ($\alpha_{T1} = .77$; $\alpha_{T2} = .78$ and $\alpha_{T3} = .81$)	From 1 = <i>never</i> , to 5 = <i>very frequently</i>

Table 2

Descriptive statistics and correlations, Study 1

	Range	<i>M</i>	<i>SD</i>	<i>N</i>	1	2	3	4	5	6
1. Past descriptive norms	0.0-1.0	0.65	0.13	100	1	.31**	.36**	.20*	.25*	.30**
2. Present descriptive norms	1.0-5.0	2.59	1.02	100		1	.52***	.47***	.29**	.42***
3. Parents' injunctive norms (about children's participation)	1.0-5.0	4.09	0.94	100			1	.38***	.25*	.32**
4. Children's injunctive norms	1.0-5.0	2.77	0.96	100				1	.34***	.32**
5. Children's participation in conventional collective action	1.0-5.0	2.80	1.12	100					1	.69***
6. Children's participation in radical collective action	1.0-5.0	1.70	0.98	100						1

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

Intergenerational transmission of norms in guiding collective action. The hypothesized model specified parents' past and current participation (descriptive norms), and their injunctive norms about children's participation, as the key points of intergenerational transmission of collective action. On the one hand, parents' current participation (present descriptive norms) and parents' injunctive norms about their children's participation in collective action were expected to be predicted by parents' *past* participation during the dictatorship (past descriptive norms). In turn, parents' current participation (present descriptive norms) and their injunctive norms about their children's participation were expected to predict their *children's* perceived injunctive norms: i.e., children infer their parents' expectations from what the parents do (descriptive norms) and say (self-reported expectations). These injunctive norms based on their parents' expectations were in turn expected to predict participation in collective action.

The model fitted the data very well, exhibiting parameters in the expected range, except for the slightly higher-than-ideal RMSEA. Consistent with H3, parents' descriptive norm of participation in the past positively predicted their participation in the present. Consistent with H1, parents' injunctive norms about their children's participation were significantly predicted by both parents' past and present descriptive norms. The positive indirect path from past descriptive norms to injunctive norms via present descriptive norms was also significant (see Figure 1).

Consistent with H2, parent's present descriptive norms also predicted their children's perceived injunctive norms which in turn predicted participation in conventional collective action (see Figure 1). Specifically, children's perceptions of their parents' injunctive norm regarding their participation in collective action was directly predicted both by parents' injunctive norms about their children's participation, and by parents' own participation in current collective action (present descriptive norms). Children's perceptions of their parents' injunctive

norms in turn positively predicted children's own participation in conventional action, revealing an indirect association between parents' participation and children's own participation, consistent with H2. Thus, seeing parents participating in political actions in the present predicted the perception that parents valued and encouraged children to participate in collective action too, which in turn predicted children's involvement in conventional collective action, though the indirect effect was not quite significant (see Supplementary Materials, Table 1).

There was also evidence of intergenerational transmission that was *not* accounted for through children's inferences about their parents' injunctive norms: parents' current participation in political actions positively and directly predicted children's participation in radical collective action in the present (see Figure 1). This in turn created an indirect association between parents' past political participation during Pinochet's time, and their children's radical action in the present. The direct associations summarized above also resulted in other indirect associations (see Supplementary Materials, Table 1). In sum, Study 1 provided evidence in favor of our main predictions regarding intergenerational influences on when and why people participate in different forms of collective action.

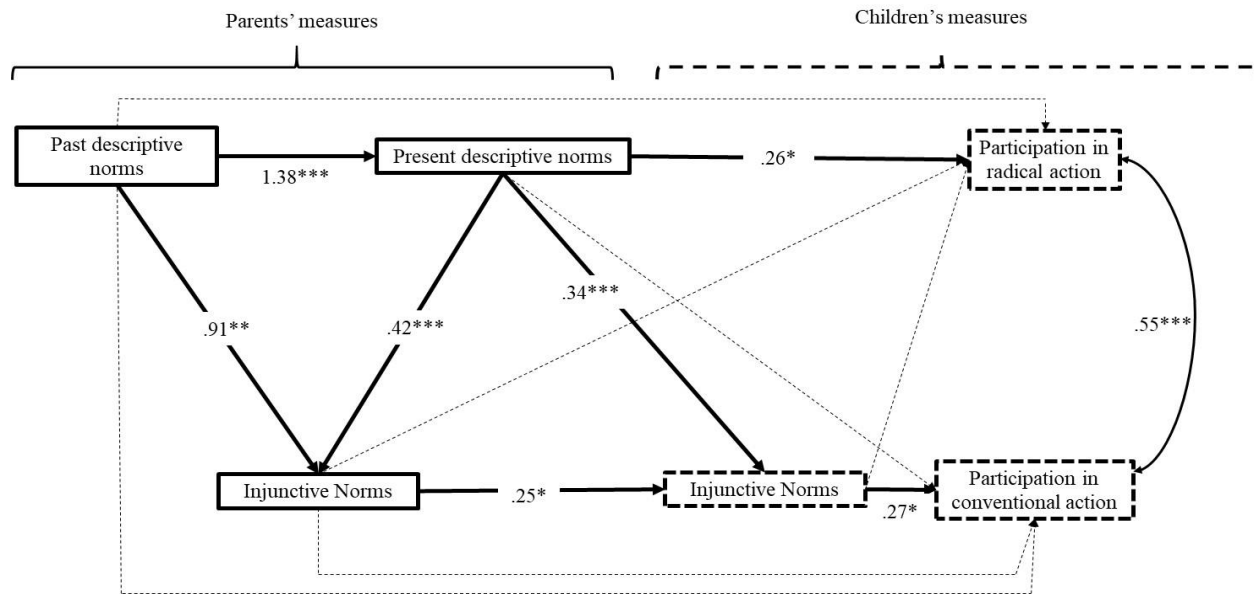


Figure 1. Intergenerational transmission of norms and participation, Study 1

Note. Boxes with dotted line are variables answered by children ($N = 100$) and boxes with solid lines are variables answered by parents ($N = 100$). $\chi^2(5) = 7.83$; $p = .166$; CFI = .984; TLI = .935; RMSEA = .075; SRMR = .043. Unstandardized coefficients are reported. The dotted lines show non-significant paths. * $p < .05$; ** $p < .01$; *** $p < .001$.

While the results are suggestive, reverse causalities also cannot be ruled out by design: children's present participation might be the basis for parents to rationalize a supportive norm, for example. Parents' present-day participation or descriptive norm may also bias their recall of their own past activism. Furthermore, parents in Study 1 participated in protests in a highly-repressive and violent past political context, during a dictatorship, while the present-day protests occur within a more democratic context. The strength of parents' influence may vary when conditions are more similar for parents and children's activism.

We addressed these issues in Study 2, using a longitudinal panel design, in the context of a nationwide student movement. This allowed us to examine the dynamic association between family descriptive and injunctive norms and students' participation in conventional and radical

collective actions over time. We thus developed a fully autoregressive cross-lagged panel design and performed tests of the bi-directional effects of each construct.

Study 2

Method

Participants. Freshmen college students from different universities in Santiago, Chile, were recruited in the first wave of a longitudinal panel study ($N = 1221$; $M_{\text{age}} = 18.89$, $SD_{\text{age}} = 1.6$; 34% men, 66% women), 960 (33% men, 67% women) of whom responded at the second wave after six months, and 926 of whom responded at the third wave after 12 months (33% men, 67% women). Sample size justification is elaborated in Supplementary Materials.

Procedure. Participants were recruited by research assistants in their classrooms or through social networks (e.g., Facebook). A written procedure first explained to participants the aim of the study, its longitudinal nature, and the reward system. Interested participants provided their emails, received the Qualtrics survey link, gave informed consent, and answered the questionnaire, which took around 45 minutes. The first wave was administered in May-June 2017. Participants received CLP \$8000 (~USD \$11), CLP \$9000 (~USD \$12) and CLP \$11000 (~USD \$15) respectively for waves 1-3.

Measures.

The same scales and items used for children in Study 1 were retained in the survey of Study 2 (see full questionnaire in Supplementary Materials). All measures were the same over the three waves of the study, and all scales showed good reliability (see Table 1 & 2 respectively). In addition, participants were asked about their parents' present descriptive norm, adapting the scale used for parents in Study 1.

Results

Descriptives. Means, standard deviations, scale reliabilities, and correlations of constructs over time are presented in Table 3. All associations among and between variables were positive and significant (see Table 2 and Supplementary Materials Table 4 & 5).

Table 3

Descriptive Statistic, reliability measures and correlations, Study 2

	Items	Range	<i>M</i>	<i>SD</i>	α	Cor.	<i>r</i> T1-T2	<i>r</i> T2-T3
Present descriptive norms								
T1		1.0-5.0	1.64	.75	.77	-	.67**	.61**
T2		1.0-5.0	1.68	.76	.78	-		
T3		1.0-5.0	1.68	.82	.81	-		
Injunctive norms								
T1		1.0-5.0	2.62	1.10	-	.76	.66**	.71**
T2		1.0-5.0	2.57	1.04	-	.78		
T3		1.0-5.0	2.64	1.03	-	.78		
Participation in conventional collective action								
T1		1.0-5.0	2.39	1.01	.81	-	.78**	.74**
T2		1.0-5.0	2.26	.98	.81	-		
T3		1.0-5.0	2.50	1.09	.84	-		
Participation in radical collective action								
T1		1.0-5.0	1.28	.60	.82	-	.66**	.63**
T2		1.0-5.0	1.25	.57	.85	-		
T3		1.0-5.0	1.36	.65	.78	-		

Note. ** $p < .01$

Analytic strategy.

We tested in sequence four cross-lagged longitudinal models (autoregressive, unidirectional forward, unidirectional reverse and bidirectional), which are reported in full in the Supplementary Materials, Study 2, along with Tables 8 and 9 of the Supplementary Materials. For simplicity, in the text we focus on the final bidirectional models.

Conventional collective action: Bidirectional longitudinal models.

The bidirectional model was freely estimated, but with autoregressive paths that were constrained to be equal in magnitude between T_1 and T_2 , and T_2 and T_3 , and equivalent paths that were constrained to be equal in magnitude between different time points (see Figure 2).

In this model, the paths from the hypothesized forward model are significant: present descriptive family norms at Time 1 predicted change in respondents' conventional collective action over time, including indirectly via change in injunctive norms (see Supplementary Materials, Table 6). However, a recursive effect was evident in the final model, indicating a possible reciprocal influence between present descriptive norms and injunctive norms over time. A similar recursive effect was also discernable between injunctive norms and participation in collective action, suggesting a reciprocal influence between these variables as well. In contrast, the paths from participation in collective action to parents' descriptive norms were not significant from T_1 to T_2 or from T_2 to T_3 . When estimated altogether, the reverse paths (the effect of conventional collective action on present descriptive norms) are not significantly different from zero.

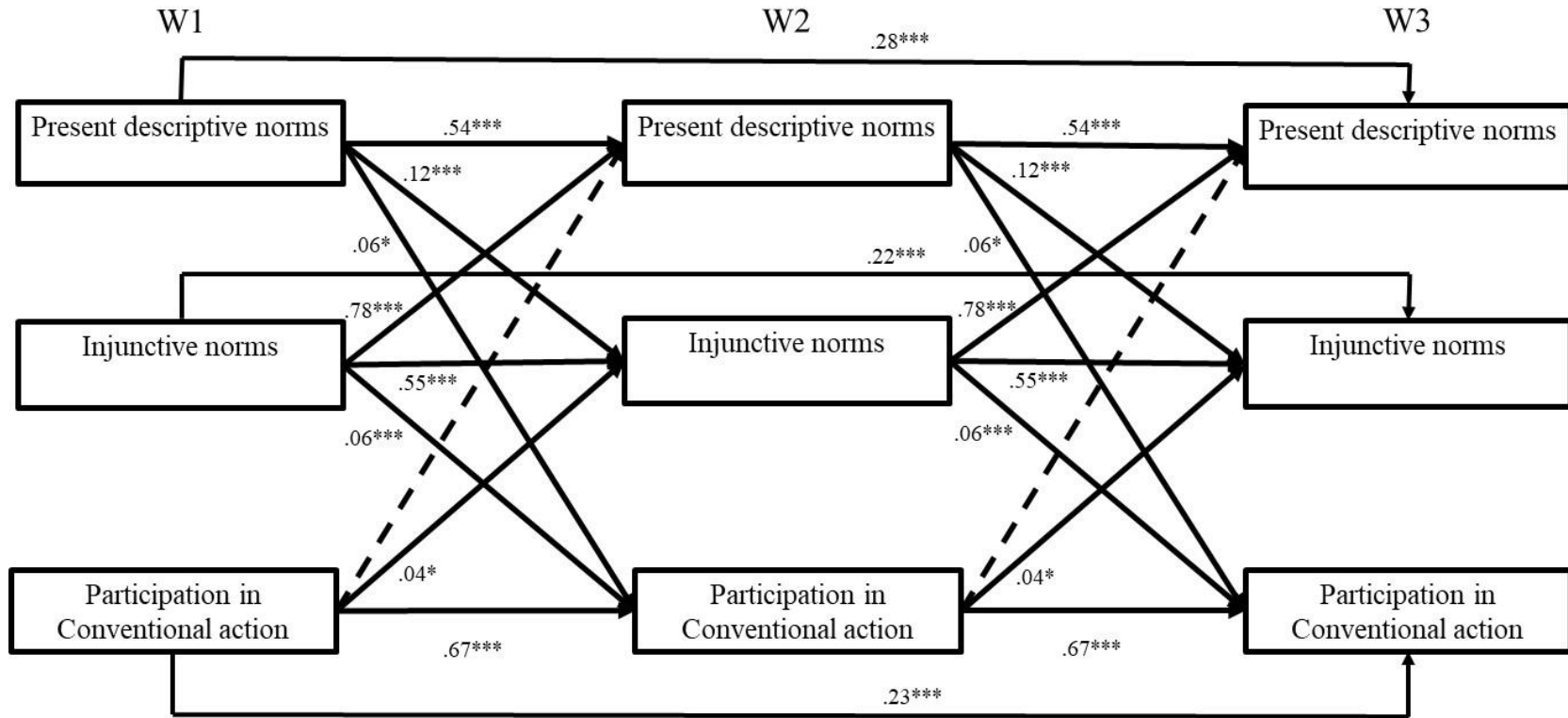


Figure 2. Full longitudinal bidirectional model for conventional collective action, Study 2

Note: * Full longitudinal bidirectional model showing the mediation of the relationship between present descriptive norms and participation in conventional collective action over time via Injunctive norms (Model d2 in Table 3). ($N = 1214$): $\chi^2(15) = 66.890$; $p = .012$; CFI = .984; TLI = .965; RMSEA = .053; SRMR = .042. Unstandardized coefficients were reported; the dotted lines show non-significant paths. For clarity, covariates within time points and non-significant paths values were not depicted. Covariates, however, were all positive and significant, ranging from .20 to .34 within Time 1; from .06 to .10 within Time 2 and from .06 to .07 within Time 3. $p < .05$; *** $p < .001$. For further information not reported in Figure 2, see Table 2 Supplementary Materials.

Radical collective action models: Bidirectional longitudinal models

As in the conventional collective action model, autoregressive paths were constrained across time points, and bidirectional paths were constrained to be equal in magnitude over time (see Figure 3). Perceptions of parents' descriptive norms (participation in political action) did not directly predict participation in radical action either from T_1 to T_2 or from T_2 to T_3 . Likewise, participation in radical action did not directly predict perceptions of parents' participation in political action either from T_1 to T_2 or from T_2 to T_3 . Nevertheless, when both paths were estimated, perceptions of parents' descriptive norms significantly predicted change in injunctive norms, both from T_1 to T_2 and from T_2 to T_3 . Injunctive norms at T_2 in turn significantly predicted change in participation in radical action over time. In contrast, participation in radical action failed to predict change in injunctive norms, either from T_1 to T_2 or from T_2 to T_3 , limiting support for the reverse indirect effect. Again, the recursive effect indicating a possible reciprocal influence between present descriptive norms and injunctive norms over time was evident in the final model.

In sum, Study 2 reveals that parents' descriptive and injunctive norms predict children's protest actions longitudinally, replicating the results of Study 1. The findings are consistent with a causal model of parents' protest participation influencing children's protest participation through the perceived injunctive norm, although some recursive paths were also observed. When both directions of influence are modelled, parents' descriptive norms predict children's conventional action and their radical action via the perceived injunctive norm.

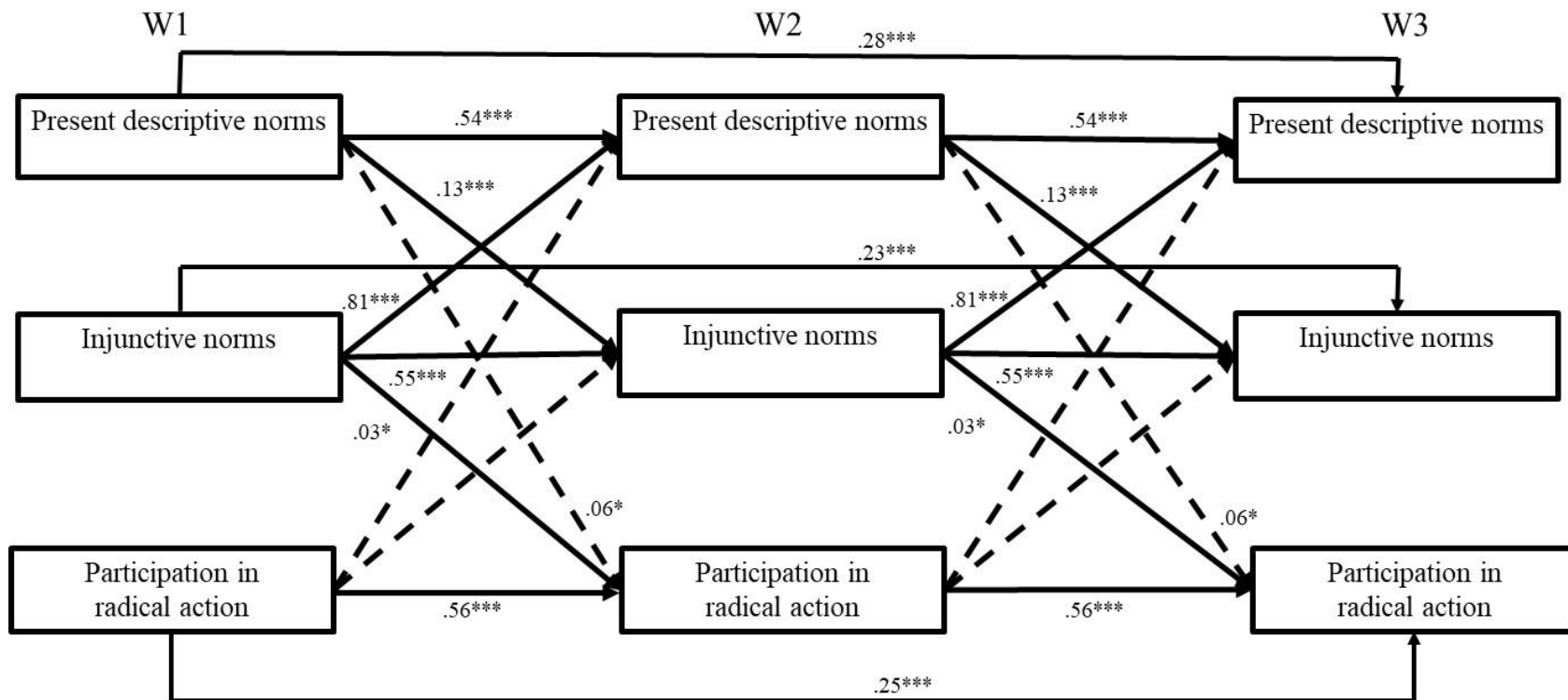


Figure 3. Full longitudinal bidirectional model for radical collective action, Study 2

Note. Full longitudinal bidirectional model showing the mediation of the relationship between present descriptive norms and participation in radical collective action over time via injunctive norms (Model d2 in Table 4). (N = 1215): $\chi^2(14) = 44.575$; $p = .013$; CFI = .985; TLI = .963; RMSEA = .042; SRMR = .039. Unstandardized coefficients were reported; the dotted lines show non-significant paths. For clarity, covariates within time points and non-significant paths values were not depicted. Covariates, however, were all positive and significant, ranging from .09 to .27 within Time 1; from .02 to .10 within Time 2 and from .03 to .05 within Time 3. * $p < .05$; *** $p < .001$. For further information not reported in Figure 3, see Table 3 in Supplementary Materials.

General Discussion

As social movements thrive across the globe, we examined whether and how the family environment can influence collective action and protest, operating as a mechanism through which mass protest in the present is shaped by past generations' collective action. Analyses of two unique data sets from ongoing social movements in Chile offer converging evidence for the intergenerational transmission of political engagement from parents to children through descriptive and injunctive family norms. To our knowledge this is the first test of a normative mechanism underpinning the intergenerational transmission of collective action participation.

Consistent with our hypotheses, parents' descriptive norms predicted their children's participation in conventional collective actions indirectly via injunctive family norms in both datasets. In the case of radical actions, the predicted pattern was significant in the longitudinal study (Study 2). The unanticipated finding that children's participation in radical action in Study 1 was predicted directly by parents' descriptive norms (i.e., parents' self-reported past and present participation), and not indirectly through injunctive norms, suggests that familial influences may work through slightly different norm-based mechanisms for conventional and radical action, depending on the context experienced by parents when they participated in the past. Parents' political participation during the dictatorship (a time where all political actions were banned and repressed) may have prompted those parents to discourage their children from participating in radical forms of collective actions, which could be perceived as risky and dangerous (Cornejo et al., 2020). Parents' past participation still directly predicts radical collective action among their children, despite possible parental disapproval. This is consistent more broadly with evidence that when descriptive and injunctive norms are misaligned, descriptive norms still

directly predict behavior (see also, Smith & Louis, 2008). For parents who did not experience risks when they participated (which is probably the case of most parents in Study 2), descriptive and injunctive norms are probably aligned regarding conventional and radical collective actions of their children. Future studies could evaluate the validity of this interpretation, separately measuring parental norms (descriptive and injunctive) regarding conventional and radical actions.

While Study 1 allowed us to examine both ‘sides’ of the intergenerational dynamic in parent-child dyads in which parents were all actively involved in collective action, Study 2 offered a unique, longitudinal test of the hypotheses using a large sample in the context of an ongoing social movement. Participants of Study 2 were recruited regardless of their parents’ past engagement in collective action, allowing us to test the generalizability of results concerning the intergenerational role of norms beyond samples of activist parents (Study 1). Study 2 confirmed the expected indirect predictive effect of descriptive norms through injunctive norms on conventional and radical actions. In addition, Study 2 provided evidence of reciprocal influences between family descriptive and injunctive norms, and between participation in conventional collective action and injunctive family norms. Regarding the latter effect, it may be that participating in conventional collective actions prompts family conversations about that participation (Cornejo et al., 2020), which further reveals or amplifies parents’ approval of such action. Thus, the dynamic between collective action participation and family normative influences may cycle forward into future collective action participation through changes in perceptions of family injunctive norms.

As well as being a unique test of the intergenerational transmission of collective action, Study 2 is also to our knowledge the first longitudinal test of the role of descriptive and injunctive norms in predicting change in the levels of self-reported collective action

participation. It adds also to the very small number of studies that have studied large-scale social movements longitudinally at all (e.g., Blackwood & Louis, 2012; Tausch & Becker, 2013; Thomas, Zubielevitch, Sibley, & Osborne, 2019; Vestergren, Drury, & Chiriac, 2018). In addition, the study used self-reported behavior as an outcome, rather than behavioral intentions.

More broadly, the findings highlight the importance of understanding collective action and protest in the historical and familial contexts within which they occur. We highlight the family as a setting in which the intergenerational transmission of protest can occur through norm-based mechanisms that link the past and the present of protests in a society. We encourage future research to build upon these findings with research in other settings. Replicating the dual pathway influence of family descriptive and injunctive norms suggested by the findings of Study 1 would also be a fruitful next step. Beyond this, there is much scope to examine other psychological processes through which group and family dynamics interrelate, such as through familial social representations (Hilton & Liu, 2017), narratives (Mazzocco, Green, Sasota, & Jones, 2010), or even more circumscribed shared appraisals of injustice and efficacy (van Zomeren et al., 2012). These representations of ‘our’ past protests may in turn be incorporated into identities and actions in the here-and-now, providing a point of connection with and platform for a new generation of current-day collective action.

It is important to highlight that this study was done in a non-WEIRD context (Henrich, Heine, & Norenzayan, 2010), in a country with a collectivistic culture. In this sense, our research contributes to the need for more diverse contexts in which to study collective action. Collectivist societies are numerous, and highly represented in nations experiencing social and political protests. However, most previous studies have been

conducted in individualistic contexts, and it may be reasonable to assume that family influences are more consequential in collectivistic societies. Yet, the literature on family political socialization has largely been conducted in individualistic societies and still shows a high degree of consistency between parents and children in political beliefs (Sears & Brown, 2013). Comparative research in different cultural environments and in individualistic and collectivistic societies would be a fruitful next step.

One limitation of the present research concerns the ideological standing of the sample. Because Chilean protests against the dictatorship in the past, and student protests in recent years, have been associated with the political left, we do not have evidence about the role of parental norms for parents and children who identify with right-wing political groups. The emergence of new protest movements promoting conservative issues, such as opposition to immigration, opens the possibility of filling this gap. A second limitation is the retrospective nature of data in Study 1. This issue is more difficult to address, unless we rely on longitudinal studies, which have not been conducted in our context. On the other hand, Study 2 was based only on the younger generation. Therefore, it was only their perception, not the information from parents, that was included in the model. This limitation is hard, but possible to overcome, with longitudinal studies with dyads. Finally, we did not restrict the gender composition of the dyads, and they were in fact not well balanced (as described in the method section of Study 1). While we did not have enough statistical power to conduct meaningful comparisons based on the gender composition of the dyads, with stratified, larger samples the role of gender could be explored in future studies.

As protests in Chile, the USA, and elsewhere have captured the world's headlines, the present research has examined intergenerational mobilization and radicalization, testing

one important, normative, mechanism through which this mobilization occurs. We have provided evidence for the family as a critical site of transmission through which the past shapes the present and the future through collective action. In so doing, we take a step towards integrating into psychological models of group members' actions the historical processes that shape groups' and individuals' present.

References

- Abrams, D., Palmer, S. B., Rutland, A., Cameron, L., & Van de Vyver, J. (2014). Evaluations of and reasoning about normative and deviant ingroup and outgroup members: Development of the black sheep effect. *Developmental Psychology, 50*(1), 258-271 doi: 10.1037/a0032461
- Bäck, E. A., Bäck, H., & Sivén, D. (2018). Why Engage in Collective Action? The Conditional Effect of Social Support and Efficacy on Protest Participation. *Basic and Applied Social Psychology, 40*(1), 49–59.
<https://doi.org/10.1080/01973533.2017.1422128>
- Barnes, M. (2019, September). *Hong Kong in Protest*. Retrieved January 16, 2020, from <http://origins.osu.edu/article/hong-kong-protest-china-extradition-umbrella>
- Blackwood, L. M., & Louis, W. R. (2012). If it matters for the group then it matters to me: Collective action outcomes for seasoned activists. *British Journal of Social Psychology, 51*, 72-92.
- Calhoun, C. (1993). “New Social Movements” of the Early Nineteenth Century. *Social Science History, 17*(3), 385–427. JSTOR. <https://doi.org/10.2307/1171431>
- Cialdini, R. B., & Goldstein, N. J. (2004). Social Influence: Compliance and Conformity. *Annual Review of Psychology, 55*(1), 591–621. doi: 10.1146/annurev.psych.55.090902.142015
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology, 58*, 1015–1026.

- Collado, S., Staats, H., & Sancho, P. (2019). Normative influences on adolescents' self-reported pro-environmental behaviors: The role of parents and friends. *Environment and Behavior, 51*(3), 288–314.
- Cornejo, M., Rocha, C., Castro, D., Varela, M., Carvacho, H., Manzi, J., González, R., Jiménez-Moya, G., Álvarez-Werth, B., Valdenegro, D., Cheyre, M., & Livingstone, A. (2020). *The intergenerational transmission of participation in collective action: The role of conversation and political practices in the family*. [Manuscript submitted for publication]. Escuela de Psicología, Pontificia Universidad católica de Chile.
- Dotti Sani, G. M., & Quaranta, M. (2015). Chips off the old blocks? The political participation patterns of parents and children in Italy. *Social Science Research, 50*, 264-276. doi: <http://dx.doi.org/10.1016/j.ssresearch>.
- Drury, J., & Reicher, S. (2000). Collective action and psychological change: The emergence of new social identities. *British Journal of Social Psychology, 39*(4), 579-604.
- Drury, J., & Reicher, S. (2009). Collective Psychological Empowerment as a Model of Social Change: Researching Crowds and Power. *Journal of Social Issues, 65*, 707-725. doi:[10.1111/j.1540-4560.2009.01622.x](https://doi.org/10.1111/j.1540-4560.2009.01622.x)
- Epstein, M., Bailey, J. A., Furlong, M., Steeger, C. M., & Hill, K. G. (2019). An intergenerational investigation of the associations between parental marijuana use trajectories and child functioning. *Psychology of Addictive Behaviors*.
- Eriksson, K., Strimling, P., & Coultas, J. C. (2015). Bidirectional associations between descriptive and injunctive norms. *Organizational Behavior and Human Decision Processes, 129*, 59-69.

- Göckeritz, S., Schultz, P. W., Rendón, T., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2010). Descriptive normative beliefs and conservation behavior: The moderating roles of personal involvement and injunctive normative beliefs. *European Journal of Social Psychology, 40*(3), 514-523.
- Green, C. W., Adams, A. M., & Turner, C. W. (1988). Development and validation of the school interracial climate scale. *American Journal of Community Psychology, 16*(2), 241-259.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*(2-3), 61-83.
- Hilton, D. J., & Liu, J. H. (2017). History as the narrative of a people: From function to structure and content. *Memory Studies, 10*(3), 297–309.
<https://doi.org/10.1177/1750698017701612>
- Jennings, M. K., & Niemi, R. (1981). *Generations and Politics: A Panel Study of Young Adults and Their Parents*. Princeton, NJ: Princeton University Press.
<https://doi.org/10.1515/9781400854264>
- Klandermans, B. (1984). Mobilization and participation: Social-psychological expansions of resource mobilization theory. *American Sociological Review, 49*, 583-600.
- Klandermans, B. (2013). Motivation and Types of Motives (Instrumental; Identity, Ideological Motives). In *The Wiley-Blackwell Encyclopedia of Social and Political Movements* (eds D.A. Snow, D. Della Porta, B. Klandermans and D. McAdam).
doi:[10.1002/9780470674871.wbespm133](https://doi.org/10.1002/9780470674871.wbespm133)
- Louis, W. R., Taylor, D. M., & Douglas, R. L. (2005). Normative influence and rational conflict decisions: Group norms and cost-benefit analyses for intergroup behavior. *Group Processes & Intergroup Relations, 8*(4), 355-374.

- Masekela, H. (2012, March 12). I don't think I have the power to forgive. (D. Smith, Interviewer) *The Guardian*. Retrieved from <https://www.theguardian.com/theobserver/2012/mar/04/hugh-masekela-interview-mandela-corruption>
- Mazzocco, P. J., Green, M. C., Sasota, J. A., & Jones, N. W. (2010). This story is not for everyone: Transportability and narrative persuasion. *Social Psychological and Personality Science*, *1*(4), 361-368.
- McAdam, D. (1986). Recruitment to high-risk activism: The case of freedom summer. *American Journal of Sociology*, *92*(1), 64-90.
- Meyer, D. S., & Tarrow, S. (1998). A movement society: Contentious politics for a new century. *The social movement society: Contentious politics for a new century*, 1-28.
- Muthén, L. K., & Muthén, B. O. (2012). *Mplus statistical modeling software: Release 7.0*. Los Angeles, CA: Muthén & Muthén.
- Nwanevu, O. (2020, January 1). The Rise of the Permanent Protest. Retrieved January 16, 2020, from <https://newrepublic.com/article/155893/rise-permanent-protest-decade-from-hell>.
- Paluck, E. L., & Shepherd, H. (2012). The salience of social referents: A field experiment on collective norms and harassment behavior in a school social network. *Journal of Personality and Social Psychology*, *103*(6), 899–915. doi: 10.1037/a0030015
- Quintelier, E., Hooghe, M., & Badescu, G. (2007). Parental influence on adolescents' political participation: a comparison of Belgian, Canadian and Romanian survey data. International Conference on Political Socialisation, Date: 2007/10/08-2007/10/10, Location: Örebro, Sweden.

- Sears, D. O., & Brown, C. (2013). Childhood and adult political development. In L. Huddy, D. O. Sears, & J. S. Levy (Eds.), *The Oxford handbook of political psychology*, 59–95. Oxford University Press.
- Sears, D. O., & Levy, S. (2003). Childhood and adult political development. In D. O. Sears, L. Huddy, & R. Jervis (Eds.), *Oxford handbook of political psychology*, (pp. 60-109). New York, NY, US: Oxford University Press.
- Sherif, M. (1936). *The psychology of social norms*. New York: Harper and Row.
- Smith, J. R., & Louis, W. R. (2008). Do as we say and as we do: The interplay of descriptive and injunctive group norms in the attitude–behaviour relationship. *British Journal of Social Psychology*, 47(4), 647-666.
- Smith, L. G., Thomas, E. F., & McGarty, C. (2015). “We must be the change we want to see in the world”: Integrating norms and identities through social interaction. *Political Psychology*, 36(5), 543-557.
- Sumodhee, D., & Payne, N. (2016). Healthy eating beliefs and intentions of mothers and their adult children: An intergenerational transmission perspective. *Journal of Health Psychology*, 21(12), 2775–2787. <https://doi-org.pucdechile.idm.oclc.org/10.1177/1359105315586214>
- Tankard, E. M., & Paluck, E. L. (2016). Norm perception as a vehicle for social change. *Social Issues and Policy Review*, 10(1), 181-211. doi: 10.1111/sipr.12022
- Tausch, N., & Becker, J. C. (2013). Emotional reactions to success and failure of collective action as predictors of future action intentions: A longitudinal investigation in the context of student protests in Germany. *British Journal of Social Psychology*, 52(3), 525-542.

- Tausch, N., Becker, J. C., Spears, R., Christ, O., Saab, R., Singh, P., & Siddiqui, R. N. (2011). Explaining radical group behavior: Developing emotion and efficacy routes to normative and nonnormative collective actions. *Journal of personality and social psychology, 101*(1), 129.
- Terry, D. J., & Hogg, M. A. (1996). Group Norms and the Attitude-Behavior Relationship: A Role for Group Identification. *Personality and Social Psychology Bulletin, 22*(8), 776–793. <https://doi.org/10.1177/0146167296228002>
- Terry, D. J., & Hogg, M. A. (Eds.). (1999). *Attitudes, behavior, and social context: The role of norms and group membership*. Psychology Press.
- Thomas, E. F., McGarty, C., & Mavor, K. I. (2009). Aligning Identities, Emotions, and Beliefs to Create Commitment to Sustainable Social and Political Action. *Personality and Social Psychology Review, 13*(3), 194–218. <https://doi.org/10.1177/1088868309341563>
- Thomas, E. F., & McGarty, C. A. (2009). The role of efficacy and moral outrage norms in creating the potential for international development activism through group-based interaction. *British Journal of Social Psychology, 48*, 115–134. doi:10.1348/014466608X313774
- Thomas, E. F., Zubielevitch, E., Sibley, C. G., & Osborne, D. (2019). Testing the Social Identity Model of Collective Action longitudinally and across structurally disadvantaged and advantaged groups. *Personality and Social Psychology Bulletin. <https://doi.org/10.1177/0146167219879111>*

- Thornberry, T. P., Freeman-Gallant, A., Lizotte, A. J., Krohn, M. D., & Smith, C. A. (2003). Linked lives: The intergenerational transmission of antisocial behavior. *Journal of Abnormal Child Psychology*, *31*(2), 171-84.
<http://dx.doi.org.pucdechile.idm.oclc.org/10.1023/A:1022574208366>
- Tilly, C., & Wood, L. J. (2013). *Social movements, 1768-2012* (3rd ed). Paradigm Publishers.
- Travaglino, G. A. (2014). Social sciences and social movements: The theoretical context. *Contemporary Social Science*, *9*, 1-14, DOI: 10.1080/21582041.2013.851406
- van Zomeren, M., Leach, C. W., & Spears, R. (2012). Protesters as “Passionate Economists”: A Dynamic Dual Pathway Model of Approach Coping With Collective Disadvantage. *Personality and Social Psychology Review*, *16*(2), 180-199.
- van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is! Explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology*, *87*, 649-664.
- Vestergren, S., Drury, J., & Chiriac, E. H. (2018). How collective action produces psychological change and how that change endures over time: A case study of an environmental campaign. *British Journal of Social Psychology*, *57*, 855-877.
- Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990) The relationship of perceptions and emotions to behavior in the face of collective inequality. *Social Justice Research* *4*, 229–250 . <https://doi.org/10.1007/BF01048399>