

Special Thematic Section on "Societal Change"

From Correlation to Causation: The Cruciality of a Collectivity in the Context of Collective Action

Jacquelien van Stekelenburg^{*a}, Natasha C. Anikina^a, Wim T. J. L. Pouw^b, Igor Petrovic^a, Naomi Nederlof^a

[a] Department of Sociology, Faculty of Social Sciences, VU University, Amsterdam, the Netherlands. [b] Department of Psychology, Faculty of Social Sciences, Erasmus University, Rotterdam, the Netherlands.

Abstract

This paper discusses a longitudinal field study on collective action which aims to move beyond student samples and enhance mundane realism. First we provide a historical overview of the literature on the *what* (i.e., antecedents of collective action) and the *how* (i.e., the methods employed) of the social psychology of protest. This historical overview is substantiated with meta-analytical evidence on how these antecedents and methods changed over time. After the historical overview, we provide an empirical illustration of a longitudinal field study in a natural setting—a newly-built Dutch neighbourhood. We assessed changes in informal embeddedness, efficacy, identification, emotions, and grievances over time. Between t_0 and t_1 the residents protested against the plan to allow a mosque to carrying out their services in a community building in the neighbourhood. We examined the antecedents of protest *before* [t_0] and *after* [t_1] the protests, and whether residents participated or not. We show how a larger social network functions as a catalyst in steering protest participation. Our longitudinal field study replicates basic findings from experimental and survey research. However, it also shows that one antecedent in particular, which is hard to manipulate in the lab (i.e., the size of someone's social network), proved to be of great importance. We suggest that in overcoming our most pertinent challenge—causality—we should not only remain in our laboratories but also go out and examine real-life situations with people situated in real-life social networks.

Keywords: collective action, historical overview of social psychology of protest, social embeddedness, longitudinal field study, emergent action

Journal of Social and Political Psychology, 2013, Vol. 1(1), 1–99, doi:10.5964/jspp.v1i1.38

Received: 2013-06-21. Accepted: 2013-10-24. Published (VoR): 2013-12-16.

Handling Editor: Andrew Livingstone, University of Exeter, Exeter, United Kingdom

*Corresponding author at: Department of Sociology, VU University, De Boelelaan 1081, 1081HV Amsterdam, the Netherlands. E-mail: j.van.stekelenburg@vu.nl



This is an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Who we know, where we meet these people and whether we feel that we can make a difference will make us protest or stay home. The relation between efficacy, embeddedness and protest has been extensively explored based on social capital theories (Brehm & Rahn, 1997; Lin, 1999; Welzel, Inglehart, & Deutsch, 2004) with the argument that the more embedded people are, the more efficacious they feel and the more they protest. However, are efficacious people more inclined to become members of organizations or do people become efficacious in

their networks? We do not know. Social psychologists attempt to resolve this puzzle by applying experimental methods. These experiments have a high internal validity, and have the potential to make strong causal statements. However, researchers commonly apply laboratory experiments in ways which are detached from natural settings resulting in low ecological validity. Indeed, collective action researchers should ask themselves whether lab respondents—often students—, who report high intentions to protest, are really willing to “take it onto the streets”. We cannot be sure about it. First, because the correlation between intentions and actual participation is moderate at best. Obviously, experimental studies that employ behavioural measures are a step closer to the natural behaviour of interest, collective action participation, and yet this is often low cost/low risk collective action such as donating money or signing petitions. Secondly, and perhaps more important, we do not know whether artificially-created grievances, identification, efficacy etc. are comparable to “real-life” indignation stemming from imperilled interests or violated principles. This paper discusses a real-life longitudinal field study on collective action which aims to move beyond student samples and enhance mundane realism.

First, we provide a historical overview of the literature which should give us a good impression of the roots of the *what* (i.e., antecedents of collective action) and the *how* (i.e., the methods employed) of the social psychology of protest, and thereby the tensions and challenges inherent to its object of study (see also [Jahoda, 2007](#); [Kruglanski & Stroebe, 2012](#)) To substantiate our claims, we provide meta-analytical evidence (both in terms of the changing independent variables over the years as well as the changing methods).

After the historical overview of theoretical and methodological approaches to the social psychology of protest, we provide an empirical illustration of a longitudinal field study in a natural setting—a newly-built Dutch neighbourhood. Within approximately one month of arrival, inhabitants received a survey, followed up with another survey two months later. These surveys assessed changes in informal embeddedness, efficacy, identification, emotions, and grievances over time. Between t_0 and t_1 the neighbourhood was in turmoil as the city government had given permission to a mosque to carry out their services in a community building in the neighbourhood. The residents of the neighbourhood protested against this decision. Our longitudinal design offers us the opportunity to examine the antecedents of protest *before* [t_0] and *after* [t_1] the protests, and whether residents participated in the protests or not. We show how a larger social network functions as a catalyst in steering protest participation.

Obviously, the new residents do not enter the neighbourhood as *tabulae rasae*. On the one hand—on a more contextual level—a broader, right-wing populist atmosphere created a fertile breeding ground for anti-Islam sentiments, while—on a more individual level—the political socialization of the new residents in terms of, for instance, feelings of efficacy, political skills etc. took place in the period prior to their arrival. To assess this “pre-arrival state”, we aimed to recruit respondents within a month of arrival [t_0]. Notwithstanding these pre-arrival influences, it is crucial for the assessment of the importance and development of embeddedness that individual and relational changes are mapped through time *while the social organization within the community started from scratch*. Based on this design, our study examines a truly social dimension to social protest.

We will conclude that our longitudinal field study replicates basic findings from experimental and survey research. However, our longitudinal field study enabled us to show that one antecedent in particular, which is hard to manipulate in the lab (i.e., the size of someone’s social network), proved to be of great importance. This indicates that longitudinal field studies deserve a more prominent role in collective action studies (rather than their current marginal role). In overcoming our most pertinent challenge—causality—we should not only remain in our laboratories but also go out and examine real-life situations with people situated in real-life social networks.

A History of the Social Psychology of Protest

Social psychology has evolved through two branches, one in psychology and the other in sociology, with the larger of the two being the psychological branch (Farr, 1996). The two branches clearly differ in terms of the level of analysis, basic assumptions, method and areas of research in studying collective actionⁱ (Oishi, Kesebir, & Snyder, 2009). The roots of the *sociological* branch are European, contextual, comparative and non-positivistic. The roots of the *psychological* branch find their origin in the United States, where the behavioural and experimental approach became dominant (Schruijer, 2012). The social psychology of protest has been approached from both branches.ⁱⁱ Examples from the sociological branch are: *The social psychology of collective action* by Gamson (1992), and *The social psychology of protest* by Klandermans (1997). Examples of the psychological branch are *The social psychology of collective action: identity, injustice and gender* by Kelly and Breinlinger (1996), and *Strategic collective action: Social psychology and social change* (Wright, 2008).

After World War II the two social psychologies of protest developed almost independently. While the psychological branch was practically non-existent in the 1950s, the sociological branch was booming. Classical theories from that period essentially viewed discontent as the origin of protest and depicted protesters as “people who do not accept the normal political techniques of a society [therefore they] must be dangerous and irrational” (Rogin, 1967, pp. 272-273). The works of Blumer (1951), Davies (1962), Gurr (1970), Smelser (1962), and Turner and Killian (1987) are classic examples of this research tradition. The first two are associated with symbolic interactionism, describing social movements as phenomena emerging through the interaction among dissatisfied people. Smelser is associated with structural functionalism, an approach that defines social movements as a process to restore equilibrium in a society. Davies and Gurr (amongst others) brought the concept of relative deprivation to the field.

In the 1960s, Western democracies were enjoying the high-water mark of the post-World War II economic growth and personal security. This contrasted with the poverty and suffering that much of the Western world saw in the 1930s and 1940s. Still, the late 1960s were marked by an enormous growth of social movement activity: students, civil rights, peace, women, and environmental movements all flourished and protested against the ruling elite and order. The classical theories developed in 1950s were not able to account for this proliferation of social movement activity since they held that the main causal source of protest was *declining* as opposed to *growing* welfare. This required new theoretical approaches. In the 1970s several new approaches appeared. Such approaches emphasize the distribution of resources and the importance of political opportunities for the emergence of social movements. This new theoretical focus emphasised the *structural* rather than *psychological* aspects of protest. Consequently, the sociological branch of the social psychology of protest was pushed to the margins, while sociological and political scientific approaches became—and still are—the major paradigms in the social movement literature. This is not to say that the sociological branch was abandoned all together: there were some isolated but influential voices, such as Bert Klandermans’ proposition that efficacy is the social psychological reflection of resources and political opportunities (Klandermans, 1984). Sociologists “accused” his work of being too psychological (Schrager, 1985), to which Klandermans responded that social psychological approaches are a necessity as long as people differ in their reactions despite living under similar structural circumstances. This reasoning became *the* fundamental rationale for the social psychological study of protest.

The downturn of the sociological branch is confirmed by a re-analysis of the meta-analysis of Van Zomeren, Postmes, and Spears (2008). These authors meta-analyzed over 60 articles on collective action published between 1974 and 2009, incorporating over 200 studies.ⁱⁱⁱ Our re-analysis of their data shows that 69% of the collective

action studies between 1974 and 1989 were conducted by the sociological branch, while this figure decreased to only 17% between 1989 and 1999. Importantly, it was not the case that the social psychology of protest declined in popularity overall; rather it was the case that the psychological branch increased markedly (see Table 1). The re-analysis also reveals that, although grievances as predictors of protest disappeared from sociological and political scientific approaches, they remain in the domain of the social psychology of protest. In fact, a stable 40% of the studies conducted between 1974 and 2009 adopted injustice (grievances) as their primary independent variable.

Table 1

Paradigmatic development of the social psychology of protest from 1974-2009: Predictors

Period	No. of Studies	Discipline: Sociology vs Social Psych		Most important IV		
		% Sociology	Injustice	Efficacy	Identity	
1974-1989	32	69% Soc	44%	50%	6%	
1990-1999	40	17% Soc	40%	25%	35%	
2000-2009	173	22% Soc	39%	22%	39%	

In the 1970s, a burgeoning European social psychology was distancing itself from the dominant American social cognition paradigm. The overly individualistic, reductionist and asocial American perspective, it was argued (e.g., Billig, 1976; Taylor & Brown, 1979; Turner & Oakes, 1986), made it very difficult to properly theorize about large-scale group phenomena like intergroup conflict, social protest, social change, and crowd events (Hogg & Williams, 2000). The emerging European social psychology—at the heart of which was social identity theory (Tajfel & Turner, 1979)—wanted to reintroduce the collective self to the mainstream of social psychology by specifying individual cognitive processes and wider social (intergroup) processes and, most important, the way they interrelate. This perspective helped to bring the psychological branch back to prominence in the social psychology of protest, as confirmed by the re-analysis of Van Zomeren’s data: 35% of the studies between 1990 and 1999 had identity as their main independent variable, against only 6% from 1974 to 1989 (see Table 1).

The dominance of the “cold” cognitive approach in the 1980s was followed by a “warm” affective turn. Concerns were raised about the relative lack of focus on emotions and motives in explaining social behaviour (Franzoi, 2009). In the early 1990s, a number of social psychologists sought to establish a more balanced view by blending the traditional “hot” and “cold” perspectives into what some have termed the “Warm Look” (e.g., Evans, 2008; Franzoi, 2009). This Warm Look appears to be important in the context of protest. In fact, the cognitive component of injustice (as reflected in the observation that one receives less than the standard of comparison) has been found to have less influence on protest participation than the affective component (as expressed by such feelings as dissatisfaction, indignation and discontent about these outcomes; Van Zomeren et al., 2008).

The period since 2000 saw an explosive growth of the psychological branch. Table 1 indicates that 173 studies (against 32 and 40 in respectively 1974-1989 and 1990-1999) were conducted in this period, of which 78% were conducted by social psychologists. In addition to an increase *and* normalization of collective action participation (Dalton, Van Sickle, & Weldon, 2010; Meyer & Tarrow, 1998), the role of intergroup emotions theory (IET; Smith, 1993) cannot be neglected. Mackie and Smith (2002) developed IET to show that intergroup relations can best be understood in terms of motivating forces elicited by emotions that group members feel about their own and other groups. After IET appeared in the social psychological protest literature, 63% of the studies conducted

between 2004 and 2009 departed from IET (based on our re-analysis of the meta-analysis of [Van Zomeren et al., 2008](#)). Hence, IET helped to place collective action firmly on the research agendas of social psychologists.

This brief review indicates that social psychological answers to the question as to why people protest have been provided in terms of grievances, efficacy, identity, and emotions. However, in practice all these concepts are clearly interwoven. This is precisely what the psychological branch to date focuses on. [Simon and colleagues \(1998\)](#) proposed a *dual path model* of protest participation in which they distinguished between an instrumental and an identity pathway. In several studies Simon and his collaborators show that both instrumentality and identification make unique contributions to the prediction of willingness to participate. Rather than replacing instrumentality as an explanatory paradigm, identification was added to the explanation as a second pathway. [Van Zomeren and colleagues \(2004\)](#) also propose a dual path model, comprising an instrumental and an emotion pathway. They assert the importance of emotions as motivators, again without replacing the instrumental pathway. In our own work we integrated these elements into a single theoretical framework, and we proposed a fifth element to consider: social embeddedness ([Klandermans et al., 2008](#)). In the empirical illustration below, we examine how these antecedents predict protest participation later in time. Before doing so, we will provide a short overview of the theoretical background of each of these antecedents (for a more extensive overview, see [Van Stekelenburg & Klandermans, 2007, 2013](#)).

Grievances

At the heart of every protest are grievances, be it the experience of illegitimate inequality, feelings of relative deprivation, feelings of injustice, moral indignation about some state of affairs, or a suddenly imposed grievance ([Klandermans, 1997](#)). Illegitimate inequality is the core concept in relative deprivation and social justice theories. Suddenly imposed grievances refer to an unexpected threat or incursion upon people's rights or circumstances ([Walsh, 1981](#)). Feelings of relative deprivation result from the comparison of one's situation with a standard—be it one's past, someone else's situation, or a cognitive standard such as equity or justice ([Folger, 1986](#)). If the comparison results in the conclusion that one is not receiving what one deserves, a person experiences relative deprivation. [Runciman \(1966\)](#) referred to relative deprivation based on personal comparisons as egoistic deprivation and to relative deprivation based on group comparisons as fraternalistic deprivation. Research suggests that fraternalistic deprivation is particularly important for engagement in protest ([Major, 1994](#); [Martin, 1986](#); [Walker & Mann, 1987](#)).

Efficacy

Efficacy refers to the individual's expectation that it is possible to alter conditions or policies through protest ([Gamson, 1992](#)). For the perception of the possibility of change to take hold, people need to perceive the group to be able to unite and fight for the issue *and* they must perceive the political context as receptive to the claims made by their group. The first refers to *group efficacy*: the belief that group-related problems can be solved by collective efforts ([Bandura, 1997](#)), and the second refers to *political efficacy*: the belief that political actions can have an impact on the political process ([Campbell, Gurin, & Miller, 1954](#)). Several studies have shown that feelings of efficacy are highly correlated with participation in protest and this relation also proved to be important meta-analytically ([Van Zomeren et al., 2008](#)). [Klandermans \(1984, 1997\)](#) showed that people are more likely to participate in movement activities when they believe this will help to redress their grievances at affordable costs. In turn, [Mummendey, Kessler, Klink, and Mielke \(1999\)](#) proposed that group, rather than personal efficacy, predicts protest participation.

Identity

Social psychological studies report consistently that the more people identify with a group, the more they are inclined to protest on behalf of that group (De Weerd & Klandermans, 1999; Kelly & Breinlinger, 1995; Mummendey et al., 1999; Reicher, 1984; Simon et al., 1998). This relation has also been confirmed meta-analytically (Van Zomeren et al., 2008). Why is group identification such a powerful motivational push to protest? In addition to shared fate, shared emotions, and enhanced efficacy, identification with others involved generates a felt inner obligation to behave as a “good” group member (Stürmer, Simon, Loewy, & Jörgen, 2003). Together these dynamics explain why group identification functions as a “stepping stone” to a politicized identity (Simon & Klandermans, 2001).

Emotions

Van Zomeren and colleagues (2004) assert that group-based anger is an important motivator of protest participation. Anger is seen as *the* prototypical protest emotion (Van Stekelenburg & Klandermans, 2007). For those of us who have been part of protest events or watched reports on protest events in the news media, this is hardly surprising. Indeed, it is hard to conceive of protest detached from anger. A relation between anger and efficacy also exists: People who perceive the ingroup as strong are more likely to experience anger and desire to take action; people who perceive the ingroup as weak are more likely to feel fearful and to move away from the outgroup (Devos, Silver, & Mackie, 2002; Klandermans, Van der Toorn, & Van Stekelenburg, 2008). Although anger is seen as the prototypical protest emotion, contempt, shame, sympathy and outrage have also been related to protest (Kamans, Otten, & Gordijn, 2011; Kim, 2002; Leonard, Moons, Mackie, & Smith, 2011; Tausch et al., 2011; Van Stekelenburg & Klandermans, 2007; Van Zomeren et al., 2004). Recent research has also found that pride felt after collective action is an important predictor for future participation in collective action (Tausch & Becker, 2013).

Social Embeddedness

The decision to take part in protest is not taken in social isolation. On the contrary, individual grievances and feelings are transformed into group-based grievances and feelings within social networks. Networks function as a “socialization device” and a “recruitment device” (Passy, 2001). Social networks function as a socialization device in that they enable the formation of a mobilization potential and provide or reinforce political awareness around a given protest issue. On the other hand, the recruitment function of networks plays a role at the end of the process by creating a contact between the potential participant and the movement (Passy, 2001). The effect of interaction in networks on the propensity to participate in politics is contingent on the amount of political discussion that occurs in social networks and the information that people are able to gather about politics as a result (McClurg, 2003). Klandermans and colleagues (2008) provide evidence for such mechanisms—individuals who felt efficacious were more likely to participate in protest provided that they were embedded in social networks, which offer an opportunity to discuss and learn about politics. In other words, this is where people talk politics and thus where perspectives on the socio-political world are constructed and people are mobilized for protest. It is therefore of utmost importance to look at collective action participation in its natural configuration, namely social networks (Siegel, 2009).

Methodological Approaches to the Social Psychology of Protest

The present review has so far documented how the psychological branch gained prominence over the sociological branch in the field of the social psychology of protest. This disciplinary shift is of course not without consequences for methodological approaches, both in terms of methods employed and sampling. Sociological social psychologists use shared social knowledge from a macro-or meso-level culture to explain relatively enduring patterns of symbolic social interaction, and use psychology at the micro-level, typically—though not always—investigating these matters with qualitative methods. Psychological social psychologists, on the other hand, typically deal with the factors that lead us to behave in a given way in the (imagined) presence of others, and look at the conditions under which certain behaviour/actions and feelings occur. In general, they have a preference for laboratory-based, empirical findings. The volume *Methods of social movement research*, edited by Klandermans and Staggenborg (2002), provides an interesting overview of the methods employed by sociological social psychologists of protest, ranging from survey research, discourse analysis, event analysis, interviewing, participant observation, case study, and network analysis. Remarkably, experiments and scenario studies are not discussed in this volume. Psychological social psychologists, on the other hand, consider experimentation to be the way to reach causal inferences and often rely on student samples in order to assess causal claims (Greenwood, 2004). In her historical overview of the social psychology, Schruijer (2012, p. 9) describes how laboratory experiments became the norm:

A new meaning of ‘experimentation’ came with Lewin, for whom the experimental situation constituted a situation in which group properties and not individual properties were to be studied. Under the influence of Festinger a new meaning of experimentation emerged yet again. For him an experiment was a tool to demonstrate causal relationships between independent and dependent variables under ‘pure’ circumstances, unconfounded by other variables. From studying real groups, social psychology shifted to studying statistical groups where individuals were randomly allocated to ad hoc groups (Danziger, 2000). By the mid-1970s laboratory experimentation had become programmatic and normative (Stam, Radtke, and Lubek, 2000).

Following the disciplinary shift in the social psychology of protest, we would expect a decrease of survey research and an increase in experimental methods with student samples over the last four decades. Again a re-analysis of Van Zomeren and colleagues’ (2008) meta-analytical overview provides insightful information on this historical development.

Van Zomeren and colleagues categorized the 245 studies into experimental studies (involving *laboratory experiments* defined by random assignment to experimental conditions) and non-experimental studies (not involving random assignment to conditions). Non-experimental studies involve *scenario studies* (defined by the absence of random assignment and by the “imagined” reality of collective disadvantage), *survey studies* (defined by the absence of random assignment and by the reality of collective disadvantage), and *field studies* (defined by the absence of random assignment and by the collection of data in the context of a real protest event).

In the 1970s-1980s—when the sociological branch was dominant—78% of the studies employed survey methods, while experiments were completely absent. After 2000—when the psychological branch became dominant—35% of the studies employed experimental methods (Table 2).

Table 2

Paradigmatic development of the social psychology of protest from 1974-2009: Methods

Period	No. of studies	Discipline	Sample	Method			
		% Sociology	% Non-students	Experiment	Scenario	Survey	Field
1974-1989	32	69% Soc	87%	0%	9%	78%	13%
1990-1999	40	17% Soc	65%	28%	10%	62%	0%
2000-2009	173	22% Soc	54%	35%	2%	54%	9%

While the sheer number of all types of studies went up, the considerable increase in share of experimental method studies is at the expense of survey and scenario studies. Field studies remain a minority throughout the four decades (perhaps biased by the somewhat stringent definition of field study as *Collection of data during protest events*). A similar shift also occurred in relation to who participated in studies of protest. Studies conducted in the 1970s-1980s reported samples where approximately 90% were non-students, while in studies conducted after 2000 nearly half of all participants were students. Hence, the increase in the number of social psychologists in the field of collective action was associated with an increase in student samples and laboratory experiments. It should be noted, however, that while student samples and laboratory experiments are employed in 45% of the psychological studies of protest (60/134), this figure is still considerably lower than that for social psychology as a whole, where 80-90% of papers concern student samples and laboratory experiments (Henry, 2008).

This overview of methodological trends shows that over time experiments and survey research became the dominant approaches in the social psychology of protest. Each method has its own strengths, weaknesses and challenges. In what follows we will provide a short overview of each method. We will provide illustrations of studies conducted with the method, present illustrative findings from such studies, and indicate the strengths, weaknesses and challenges of the method.

Experiments

An experiment involves randomly assigning participants to groups (e.g., experimental and control), and the direct manipulation of one or more independent variables to determine the effect(s) on some outcome (the dependent variable), while controlling other relevant factors. Most social psychology experiments have excellent control over extraneous and confounding variables, and they typically have mediating and moderating variables incorporated in the design. Consequently, most social psychology experiments are convincingly able to demonstrate sophisticated causal patterns of relationships. An example is Simon and colleagues' experimental study on identity-affirming functions of social movement support. In two laboratory experiments they manipulated possession of identity (certain as opposed to uncertain). They found that people who strongly identified with the peace movement showed more movement support (i.e., made more monetary donations to the peace movement) under conditions of uncertain as opposed to certain possession of identity as a movement supporter. They concluded that movement support serves an identity affirming function under such conditions (Simon, Trötschel, & Dähne, 2008). Another example of an experimental approach comes from Van Zomeren and colleagues (2004), who conducted three experiments that showed that disadvantaged group members' feelings of group-based anger and group efficacy beliefs independently predicted their collective action tendencies. Experimental manipulations of procedural unfairness and emotional support predicted group-based anger, whereas an experimental manipulation of instrumental support predicted group efficacy. Based on these experiments, they concluded that emotion-focused versus problem-focused

coping processes are context-dependent, and that their activation depends on the emotional and contextual resources people have available and put to use (Van Zomeren et al., 2004).

Experiments thus enable us to test causal sequences that determine (intended) collective action behaviour with a degree of control that is most often not feasible outside the laboratory. This strength, however, comes with the drawback of generalizability. As researchers must find a way to reduce the process or mechanism of interest to something that can be studied in a laboratory over a short period of time, phenomena are often studied within an “empirical vacuum with respect to the original events of interest” (Greenwood, 2004, p. X). This context-stripping may limit ecological validity, generalizability, and consequently, the societal relevance of laboratory results (Berkowitz & Donnerstein, 1982). Experiments come with yet another weakness, as social psychologists tend to restrict their experimental methodology to that of student samples (Henry, 2008). The external validity at question here is not about the artificiality of the laboratory setting, but to what extent research findings from student samples are an accurate description of how individuals in the broader world typically think, feel, and behave (Henry, 2008; Sears, 1986). The challenge that is to a degree inherent to experiments is thus to enhance mundane experimental realism. The second challenge, not inherent to the experimental method per se but certainly associated with it through common practice, is moving beyond student samples.

Scenario Studies

Scenario studies are defined by Van Zomeren and colleagues (2008) as the imagined reality of collective disadvantage and by the absence of random assignment and are often used in social psychological experimentation. The word “scenario” is rooted in theatre. It refers to a script-like characterization of an imagined sequence of future events and needs to be plausible and internally consistent to be accepted and useful (see Kirsch [2007] for a review of scenario planning literature).

Scenario studies are much rarer than experiments, but we found an interesting example of an experiment involving scenarios carried out by Shepherd, Spears, and Manstead (2013). In 2002, the President of the United States (George W. Bush) and the Prime Minister of Great Britain (Tony Blair) announced that American and British troops were going to be deployed in Iraq to search for weapons of mass destruction and to free the Iraqi people. It was in reference to this context that Shepherd et al. (2013) developed their scenario. They used a scenario of an aversive event that seemed plausible but had not yet taken place. Participants were informed that the study concerned their thoughts about the current situation in Iran. They read a brief report summarizing Iran’s alleged nuclear missile program. This outlined the allegation that Iran was developing nuclear weapons, and described the sanctions imposed on Iran by the United Nations, together with Britain’s stance on this issue. The report said that the British Foreign Secretary stated that he would not rule out the use of military force against Iran. To make this more concrete, participants were told that British forces might bomb Iran’s nuclear facilities if Iran did not start to comply with the United Nations. Shepherd et al. (2013) investigated the motivations and the role of (anticipated) group emotions that people can have to act collectively. They found that illegitimacy significantly predicted the anticipation of group-based guilt, shame and anger. Additionally, anticipated group-based shame and anger positively predicted collective action against a proposed ingroup transgression, such as the use of military force against Iran’s alleged nuclear weapons program. Moreover, the relation between illegitimacy and collective action was mediated by anticipated group-based anger and partially mediated by anticipated group-based shame.

In terms of mundane realism scenario studies are, compared to experiments, a step in the right direction (given that the scenarios often frame “real” issues, are pre-tested and judged to be plausible and internally consistent^{iv}).

However, scenario studies still often involve placing participants in an unfamiliar (laboratory) context where factors that normally affect behaviour, such as social norms, attitudes, and social motives have relatively little impact. Therefore, one has to remain cautious in generalizing from this artificial environment to natural settings. An advantage of scenario studies—this time compared to field studies—is that the use of scenarios allows researchers to force the pace of the research, because they do not have to wait for natural or social events to reproduce the appropriate scenario needed to investigate a particular issue. Also, scenarios allow the researcher to select when and possibly where a study will take place. Finally, they provide an opportunity to study behaviour that rarely occurs or that cannot easily be studied in another way, collective action participation being an example. A weakness of this method, or at least of how it has been practiced, is the reduced ability of inferring causality, as most scenario studies are correlational and no random assignment of respondents takes place. However, this weakness is in some scenario studies inventively and elegantly resolved by installing experimental conditions into the scenario. In fact, this is precisely what [Shepherd and colleagues \(2013\)](#) did in Study 3, where they manipulated both the salience and valence of anticipated group-based emotions. Another important question is whether “imagined” scenarios evoke real-life feelings and thoughts that can translate into “real” rather than intended behaviour. We do not know whether imagined grievances and indignation are similar to “real” intergroup disadvantages. Moreover, overall levels of group-based guilt are actually generally very low in studies of it ([Leach, Bou Zeineddine, & Čehajić-Clancy, 2013](#)). Survey research attempts to tackle this issue of ecological validity.

Survey Studies

[Van Zomeren and colleagues \(2008\)](#) defined survey studies by the reality of collective disadvantage—in contrast to the “imagined” reality of scenario studies—and again with the absence of random assignment. Survey research is widely applied in the social sciences. The broad area of survey research encompasses any measurement procedures that involve asking questions of respondents ([Oppenheim, 1992](#)). A “survey” can be anything from a short paper-and-pencil questionnaire to an intensive one-on-one in-depth interview. Survey research has changed dramatically in the last ten years. Paper-pencil surveys have partly been superseded by Internet or cell phone surveys, and a whole new variation of group interview has evolved as focus group methodology.

Both questionnaires and interviews are widely used in collective action studies.^v Take, for example, survey studies by [Simon and colleagues \(1998, Stürmer, Simon, Loewy, & Jörger, 2003\)](#). In these studies, members of the fat acceptance, the elderly and the gay movements were surveyed about their motives to participate in the respective movements. Another example is a study by [H. J. Smith, Cronin, and Kessler \(2008\)](#) wherein, as part of a mail survey about their work experiences, university faculty members reported their emotional reactions to group inequities in faculty pay and benefits. Their results indicate that sadness, fear, and anger are distinct emotional responses to a collective disadvantage. Hence, rather than laboratory-created disadvantages, or imagined disadvantages in scenario studies, these faculty members experienced “real” collective disadvantages which evoked emotions with a correspondingly “real” intensity. Group-based anger mediated the relationship between collective disadvantage and willingness to protest whereas group-based sadness mediated the relationship between collective disadvantage and organizational loyalty ([H. J. Smith et al., 2008](#)). The study by [Linden and Klandermans \(2007\)](#) on extreme right-wing activist careers provides an example of interview research. Life-history interviews conducted with thirty-six extreme right activists in the Netherlands revealed that becoming an extreme right activist was a matter of continuity, conversion, or compliance. It was this method—skilfully employed by Annette Linden—which enabled her to get access to this “inaccessible” group. The life-history interviews, which could take up to three hours, created a trustful atmosphere in which even the most suspicious activist was willing to share information.

The recently developed opinion-based group method (McGarty, Blüch, Thomas, & Bongiorno, 2009) adds to the toolkit of social psychological research. The method involves bringing groups of people together who are at least sympathizers of a cause, and asking them to engage in a planning session where they are to agree on strategies that can be used to further that cause. Their intentions to act in line with that cause are then measured and compared to people who did not engage in a group planning session (McGarty et al., 2009). Through group-based interaction, processes of consensus and dissensus can be observed which are likely to resemble “talking politics” in everyday settings. This method is designed to observe and monitor how shared grievances, shared identity, and shared norms of action are created in social interaction rather than by surveying isolated individuals. Obviously, this is of great importance in the context of collective action, which is by definition a collective process (cf. Gamson (1992) for more on focus groups).

As surveys are about “real” collective disadvantages, mundane realism is often higher than experiments or scenario studies. However, this strength comes again with a weakness. Compared to experiments, survey research might have less control over extraneous and confounding variables. Moreover, no conclusions can be drawn on causal direction, because all measures incorporated in the design—dependent and independent variables, but also mediating and moderating variables—are often collected at one moment in time. In other words, most survey research is correlational in nature. However, some collective action studies show that clever research designs may enhance causal interpretations of the findings (e.g., the aforementioned opinion-based group method). Clever designs are characterized by the virtue of comparison (Klandermans, 2013), such as comparison over time or between movements, demonstrations, or cross-national. Comparative research enables the examination of similarities and differences across contexts, and as such furthers our theorizing on collective action. A panel study conducted by Stürmer and Simon (2004) on the effect of identification with the German gay movement on collective action participation provides an interesting example. These authors designed a panel study with a one-year interval and an additional follow-up telephone survey three years after the initial measurement. During the second measurement gay marriage was high on the political and public agenda, which, according to the authors, would politicize gay identity. They found that identification with the gay movement predicted participation; however, when the political conflict flared up, identification with the broader disadvantaged group (i.e., gays in general) also predicted identification. Thus, the challenge of survey research is to map out the causal sequences that determine collective action behaviour of “real” people in real life situations.

Field Studies

Van Zomeren and colleagues (2008) defined field studies by the collection of data during a protest event and by the absence of random assignment. According to this definition, respondents are only those who participate in these protests. Accordingly, the motivational and emotional constellation of protesters versus non-protesters cannot be compared. We therefore slightly extend this definition of field research by defining it as research that takes place in a natural setting outside of a laboratory. In a field study, participants do not know that they are in a study or an experiment and naturally undertake the treatment or experimental conditions. Tunnell (1979) defines three theoretically independent dimensions commonly used in field designs: natural behaviour, natural setting, and natural treatment. Although each of these dimensions injects a bit of the real world into psychological research, each reflects a separate aspect of reality. The natural behaviour dimension concerns the dependent variable in the research design (e.g., participation vs. non-participation). Natural behaviour is not established or maintained for the sole purpose of conducting research, but is part of the person’s existing response repertoire. Natural setting refers to almost any setting outside the lab, in which people “naturally” find themselves. The third dimension,

natural treatment, refers to a naturally occurring discrete event to which the subject is exposed. The event (which serves as a “treatment” in design vocabulary) is natural in that the subject would have experienced it with or without the presence of a researcher. Natural treatments are temporally bounded processes and do not include variables such as gender, ethnicity, or educational level. Examples of natural treatments are mobilization campaigns, moral shocks, and suddenly imposed grievances. In correlational designs, all participants receive the same treatment, while in experimental designs using natural treatments, only a selected sub-set of participants receive the treatment; for example, some are reached by a mobilization campaign, while others are not (see, e.g., [Klandermans & Oegema, 1987](#)).

Studies on “real” collective action behaviour in natural settings are relatively rare in the social psychology of protest. A good example is [Klandermans’ \(1984\)](#) longitudinal field study on action intentions in a labour union campaign during collective negotiations. From the end of November 1978 through July 1979 the author interviewed union members about once a month, always shortly before or after an important event. The advantage of this design is that it illustrates the course of the campaign by comparing the outcomes of the successive interviews, while the effect of a single event can also be examined by comparing the outcomes of the interviews before and after that event ([Klandermans, 1984](#)). Another example is [Tausch and Becker’s \(2013\)](#) study on students’ protests. These authors designed a two-wave longitudinal study in the context of student protests against tuition fees in Germany, which was conducted before and after collective action had resulted in both a success and a failure. They examined how emotional responses to success and failure of collective action relate to willingness to engage in future collective action. They found that both pride (in response to success) and anger (in response to failure) motivate future collective action. Tausch and Becker seized the opportunity of successful and failed student protests to design a quasi-experimental “before” and “after” treatment field study. This design enabled them to examine how psychological reactions to the outcomes of collective action shape motivations to engage in such action in the future, which is a blind spot in the literature. Ironically, they did use student samples, *but* in field research with “real” collective disadvantages and “real” collective action.

A final example of field studies shows that the Internet can also figure as “a natural setting”, where “natural behaviour” is exhibited. [Van Stekelenburg, Oegema, and Klandermans \(2010\)](#) examined polarizing public debates as they developed on the Internet over time. They employed automated content analysis to analyze postings of two opposing web forums used by native Dutch and Moroccan-Dutch youngsters between 2003 and 2005. This period encompassed several devastating intergroup incidents: the murder of Theo van Gogh and bomb attacks in Madrid and London, which functioned as “natural treatments”. Their content analysis showed how the debates on the two web forums were shaped by the incidents and polarized over time. Collective identities politicized and radicalized, social judgments polarized, and emotions intensified, with hate and fear prominent. These three examples show how social psychologists of protest seize the opportunity of “real life” events to turn them into quasi-experimental study designs on “real” collective disadvantages leading to “real” collective action. As such, these studies attempt to move from correlation to causation, while securing high mundane realism.

We hasten to note, however, that the advantage of mundane realism also comes with drawbacks. First, random assignment of subjects to experimental conditions is usually not possible. Moreover, it may be hard to find a selection of comparable dependent measures across studies. Likewise, researchers need to be creative and inventive in finding appropriate comparison and control groups to ensure that the research effect is due to the natural-process treatment and not to extraneous factors. The use of standardized procedures—as in laboratory experiments—is thus of utmost importance. Therefore, although field studies are an improvement in terms of mundane realism,

one should still be cautious when generalizing findings that emerge from one setting to other settings. Take, for instance, the online identification processes on populist right-wing and Moroccan Dutch web forums: we cannot assume that these findings generalize straightforwardly to identity processes in the offline world. Field research also tends to be more expensive and involves more resources compared to social psychological laboratory research.

In what follows we provide an empirical illustration of a longitudinal quasi-experimental field study in which we examined whether collective action participation is truly collective behaviour. The problem with previous collective action studies—including longitudinal field studies—is that by the time researchers enter the stage much of the factors that determine mobilization and participation are already in place. That is, people are already embedded in networks, already identify with groups, share grievances and emotions etc. This implies that the evidence pointing to the cruciality of a collectivity in the context of collective action we have today is correlational, and limits causal inferences. In our empirical illustration we monitor the emergence of a collectivity in a newly-developing neighbourhood. Within approximately a month of their arrival (t_0), the new inhabitants received a survey, and a follow-up survey six months later (t_1). Between t_0 and t_1 the neighbourhood was in turmoil due to the fact that the city government had given permission to a mosque to use a community building in the neighbourhood for their services. Several actions were staged between t_0 and t_1 , including community meetings, petitions, and letters written to politicians. The issue politicized rapidly and nearly 50% of our sample participated in at least one of the actions.

We show how the size of a social network functions as a catalyst in steering collective participation. Importantly—in terms of causality—individual and relational changes are mapped through time *while all social organization within the community started from scratch*. Consequently, t_0 corresponds to the start of the “treatment”, which—in this illustration—is the formation of a collectivity. Moreover, the unconnected new inhabitants form the baseline for the group at t_1 , when networks and feelings of attachment have started to form. Hence, the longitudinal design where social relations start from zero allows us to detect cause and effect, and thus examine issues of causality. The emerging neighbourhood functions practically as a “natural laboratory”.

The Cruciality of a Collectivity in the Context of Collective Action

A VINEX location in Utrecht, the Netherlands, forms our “natural laboratory”. VINEX *Vierde Nota Ruimtelijke Ordening Extra*; translated as Fourth Memorandum Spatial Planning Extra (see [Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer \[V.R.O.M\], 1991](#)) refers to a policy briefing note of the Dutch Ministry of Housing, Spatial Planning and Environment released in 1988, wherein large outer city areas were singled out for massive new housing development. In practice, whole suburbs may emerge within a year. VINEX locations are very well known across the Netherlands, but are likely to be less familiar to non-Dutch readers. To provide the reader with a “feel” of our natural laboratory, we include some pictures ([Figure 1a](#), [Figure 1b](#), and [Figure 1c](#)). [Figure 1a](#) is at the very start of the construction phase, both of our project and neighbourhood. [Figure 1b](#) shows the construction phase three months later, and [Figure 1c](#) shows one of the authors surveying in the neighbourhood seven months after [Figure 1a](#). This visual impression reveals how within the time span of seven months a whole neighbourhood is established. These suburbs are thus perfect locations to monitor the emergence of a collectivity.



Figure 1a-c. Photo impression of the emergence of a so-called VINEX location. Figure 1a at the very start, Figure 1b after three and Figure 1c after seven months

Our illustration takes an important yet rarely tested assumption in collective action literature serious, namely the cruciality of a collectivity in the context of collective action. If indeed collective action *is* collective by nature, one would expect that—given that all inhabitants start with zero contacts when they enter the community^{vi}—the inhabitants who have more informal contacts at t_0 (= one month after entering the neighbourhood) participated more in community related collective action. After all, if all start with 0 contacts, the networks of those people who have more contacts after one month must, by definition, have grown faster than people who have less contacts. We expect that participants and non-participants in protest will differ on the previously described antecedent of collective action: grievances, efficacy, and identification. Most important, as social networks are crucial for the emergence of shared grievances, efficacy, identification and emotions, we expect that informal embeddedness works as a catalyst for the social psychological antecedents of collective action.

Methods

Design

The basis of our research is a longitudinal survey study. Data were collected between June 2011 and November 2011. There were six months between the administering of the two questionnaires. As the final release of the newly-built homes was spread over a period of several months, we continuously contacted new inhabitants and added them to our sample. Respondents were asked to fill out online surveys (using Qualtrics software), covering general questions on collective action and social demographics. The goal of the surveys was to capture the development of the collectivity from the very beginning.

Sample

The neighbourhood of Graauwaart in the city of Utrecht, the Netherlands, was chosen as the area to conduct our research in. In 2010 it was the largest VINEX construction project in the country. The neighbourhood had 588 houses, which were delivered by the contractor within a small amount of time (4 years, from 2009 to 2013) and a small spatial radius (78.823 m²). The types of houses built were: social housing (26.8%), rental apartments (15.3%), and privately owned housing (57.9%).^{vii} Over the period of our study, the new inhabitants moved into their houses, dispersed over six streets. At t_0 our sample population consisted of 87 households containing 110 persons, as in some households two inhabitants participated. The total amount of houses built at t_0 was approximately 228. Therefore, our study sample contained 38% of the households in the neighbourhood. At t_1 our sample included 40 households containing 60 persons, meaning that 55% of the respondents dropped out after t_0 . At that time approximately 360 houses were built, meaning that our sample included 11% of the households. The neighbourhood mainly consists of young families (59% of the households) and the average household size was 2.8 persons (Central Bureau of Statistics CBS, 2011).

Recruitment

We recruited prospective participants during short door-to-door interviews (approximately 5 minutes) within a month of their arrival in the neighbourhood. During this first contact we informed them of the nature of the study and asked for consent to participate in the research and their e-mail address. Additionally, some questions were asked concerning their first opinion of the neighbourhood, and the reason for declining to participate when relevant. A short brochure was provided as well, in which more information about the research could be found. Participants were also informed that if they completed the questionnaire they would be entered into a raffle to win one of two vouchers of which the amount increased with each questionnaire.

Measures

In each wave the participants received an e-mail with a link that directed them to an online questionnaire. The questionnaires included, among others, questions on the following:

Grievances — Whether inhabitants were aggrieved about the imminent establishment of a mosque in their neighbourhood was determined by asking them to rate their (dis)agreement with the following statement: “The neighbourhood needs a religious centre”. They were asked to rate their opinion from 1 (*completely disagree*) to 7 (*completely agree*). This statement reflects the discourse applied in the discussion around the plans for the mosque. The organizers of the protest framed the discussion (in typical Dutch fashion) in politically correct terms. That is, neither Islam nor the mosque were specifically addressed; rather the issue was reframed by the organisers of the protests in terms of “the need for a religious centre”. This grievance variable thus taps directly into the frame of the organisers that the *neighbourhood was not in need of a religious centre*. This question was asked at t_1 (after the protests).

Collective Efficacy — This variable was measured by asking the participants to rate their (dis)agreement with the following statement: “If enough people in my neighbourhood demand change the position of people in Graauwaart will improve”, “If enough people demand change, politicians will listen”, and “People like me can improve the position of people in Graauwaart”. We created an averaged composed measure of the three variables (Chronbach’s alpha = .83), which loaded on one factor (eigenvalue 2.2, explaining 74% of the variance). Again participants were

asked the extent to which they agreed with the statements on a scale ranging from 1 (*completely disagree*) to 7 (*completely agree*). These questions were asked at t_0 .

Identification with the Neighbourhood — Identification was directly assessed through the statements “I identify with Grauwaart”, “I feel committed to Grauwaart”, and an affective component “When I think of Grauwaart I feel pride”, answered on a scale from 1 (*completely disagree*) to 7 (*completely agree*). We created an averaged composed measure of the three variables (Chronbach’s alpha = .79), which loaded on one factor (eigenvalue 2.1, explaining 70% of the variance). These questions were asked at t_0 .

Informal Embeddedness — This variable was assessed by asking participants about the amount of social contacts they had in the neighbourhood with the question “How many people do you know in Grauwaart?” Participants could respond by entering a number. This question was asked at t_0 .

Protest Participation — This was assessed with three questions regarding the protest activities that were staged against the establishment of a religious centre in the neighbourhood. Participants could answer with “yes” or “no” to the following questions: “Where you present at the neighbourhood gathering?”, “Did you sign the petition?”, “Where you present at the municipal debate?” We created a scale by counting the number of activities a respondent had participated in, ranging from 0 = no activities to 3 = 3 activities. This question was asked after the protests at t_1 .

Results

Protest emerged between t_0 and t_1 . To find out what caused people to participate, we examined the differences between participants and non-participants. Therefore we only used the participants who filled out both questionnaires. This left us with a total of 50 inhabitants. First, we compared the means of the two groups on the antecedents of protest: grievances, feelings of collective efficacy, identification, and informal embeddedness (see Table 3).

Table 3

Means and standard deviations of participants that did (not) participate in protest, and correlations between the variables contributing to protest.

No protest participation ($n = 27$)						
Variables at t_0	<i>M</i>	<i>SD</i>	1	2	3	4
1. Grievances	4.8	1.5	--			
2. Collective efficacy	4.1	1.1	.17	--		
3. Identification	3.9	1.3	.39*	.03	--	
4. Informal embeddedness	6.6	5.4	.07	.09	.21	--
Protest participation ($n = 23$)						
Variables at t_0	<i>M</i>	<i>SD</i>	1	2	3	4
1. Grievances	5.9	0.3	--			
2. Collective efficacy	4.7	1.2	.23	--		
3. Identification	4.8	1.3	.25	.61*	--	
4. Informal embeddedness	12.5	7.5	.12	.60*	.54*	--

Notes. All means differ significantly between the two groups at $p < .05$ level.

* $p < .05$.

People who participated in at least one of the protests scored higher on all mentioned variables. Protesters were more aggrieved ($M = 5.9$, $SD = 0.3$), meaning they disagreed more with the imminent establishment of a mosque than the non-protesters ($M = 4.8$, $SD = 1.5$), $t(48) = -3.41$, $p = .001$. They also felt more efficacious ($M = 4.7$, $SD = 1.2$) than non-protesters ($M = 4.1$, $SD = 1.1$), $t(48) = 2.10$, $p = .041$. Protesters identified more strongly with the neighbourhood ($M = 4.8$, $SD = 1.3$) than non-protesters ($M = 3.9$, $SD = 1.3$), $t(48) = 2.44$, $p = .018$. The groups also differed significantly in terms of their informal embeddedness: protesters had acquired more social contacts in the first month ($M = 12.5$, $SD = 7.5$) than non-protesters ($M = 6.6$, $SD = 5.4$), $t(48) = 3.21$, $p = .002$. All these findings are in line with previous findings. People who feel more efficacious, who are more embedded, more aggrieved, and have higher identification are more likely to protest.

The correlational pattern between these variables also differed in each group. The antecedents of protest were all related to each other in the protesters' group, while this was not the case in the group of non-protesters (see Table 3). This means that within the group of protesters there were strong associations between their feelings of identification, informal embeddedness and collective efficacy. Specifically, feelings of identification ($r = .40$, $p = .05$) and informal embeddedness ($r = .63$, $p < .001$) at t_0 were strongly associated with actual protest participation at t_1 . Although in the non-protest group there was also a significant correlation between grievances and identification, $r = .39$, $p = .044$, the other correlations did not reach significance. Whereas in the group of protesters this correlation was lower, $r = .25$, $p = .24$, the group of protesters showed especially strong correlations between collective efficacy, identification and informal embeddedness. Efficacy and identification/embeddedness correlated $.61$ ($p < .001$) and $.60$ ($p < .001$), respectively, in the group of protesters, while these correlations were much lower in the non-protesters group, $.03$ ($p = .87$) and $.09$ ($p = .65$), respectively.

We conducted a hierarchical regression with protest participation as the outcome variable and grievances, efficacy, identification and informal embeddedness as predictors. The model predicted 45% of the variance in protest participation at t_1 , whereof 40% was predicted by predictors measured at t_0 (i.e., collective efficacy, identification and informal embeddedness, as grievances were suddenly imposed grievances that were measured at t_1).

In the first step we entered grievances, which did not have a direct effect on protest participation ($\beta = .21$, $p = .14$). In the second step we entered efficacy, which did have a direct effect on protest participation, the more efficacious people felt at t_0 , the more they participated in protest at t_1 ($\beta = .36$, $p = .01$). In the third step we entered identification with the neighbourhood, which did have a strong effect on protest participation: the more people identified with the neighbourhood at t_0 , the more they participated in protest at t_1 ($\beta = .45$, $p < .001$). Interestingly, when identification was entered in the equation, the influence of grievances on protest participation reached statistical significance, potentially indicating suppression. While grievances had a weak positive correlation with protest participation, when grievances and identification were taken into account, stronger identification predicted stronger grievances and more protest participation. Hence grievances and identification with the neighbourhood were strongly related in explaining protest participation. Efficacy, on the other hand, lost its significant influence on protest. This implies that the relationship between efficacy and protest participation was mediated by identification. As Table 4 reveals, the standardized regression coefficient between efficacy and protest participation decreased substantially when controlling for identification.

Table 4

Hierarchical regression of protest participation on grievances, collective efficacy, identification and informal embeddedness.

	Model 1	Model 2	Model 3	Model 4
Grievance	.21	.22	.28*	.27*
Efficacy		.36**	.17	.02
Identity			.45***	.30*
Informal embeddedness				.42***
Model <i>F</i>	1.95	4.22*	6.64***	7.84***
<i>Df</i>	(1,41)	(2,40)	(3,39)	(4,38)
<i>R</i> ²	.05	.17	.34	.45
<i>R</i> ² change		.12**	.17***	.11***

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

In the final step we entered informal embeddedness, which had a strong and independent effect on protest participation ($\beta = .39, p < .01$). The more social contacts people acquired within the first month of their arrival, the more they participated in protest. When entering informal embeddedness, grievances remained significant, implying that the relationship between grievances and protest was not influenced by the amount of social contacts. The betas of efficacy and identification, on the other hand, both decreased by .15. This implies that the relationship between efficacy and protest participation was not only mediated by identification, but also by informal embeddedness. The same can be said for identification. As Table 4 reveals, the standardized regression coefficient between identification and protest participation decreased substantially when controlling for informal embeddedness (Step 3: $\beta = .45, p < .001$; Step 4: $\beta = .30, p = .04$; Sobel $z = 2.70, p < .001$). Thus, the relationship between identification and protest participation was partially mediated by the amount of contacts people acquired in the first month of arrival.^{viii}

Taken together these results indicate that the measures at t_0 —informal embeddedness, identification and collective efficacy—strongly related to each other, the more so for people who participated in protests at t_1 . Together this cluster translates into protest participation, yet only informal embeddedness and identification directly influenced protest participation (see Figure 2 for an explanatory model). Identification with the neighborhood rather than the amount of social contacts strengthened the experience of suddenly imposed grievances at t_1 . Hence, sharedness emerged not so much in the *number* of contacts but rather in the experience of psychological connectedness, which points to the cruciality of a collectivity in the context of collective action.

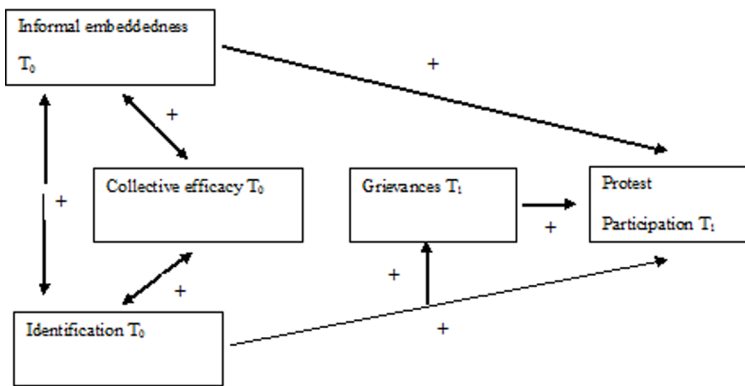


Figure 2. Explanatory model of the three variables at Time 0 and their effect on suddenly imposed grievances and protest participation at Time 1.

Discussion

The aim of this illustrative study was to gauge the importance of having a collective in a real-world emergence of collective action. We operationalized this assertion in the context of a newly-built neighbourhood (VINEX) in which a group of newly arrived-inhabitants was monitored at two different time points following their arrival. We monitored the antecedents of collective action together with informal embeddedness; that is, how many social contacts people acquired within the first month of their arrival in the new neighbourhood. Between t_0 and t_1 collective action emerged which allowed us to identify the interrelations of its antecedents in a before-and-after design. We reasoned that if collective action is truly collective, one would expect those inhabitants who acquired more extended networks in the first month to have a stronger likelihood of participating in collective action. Our findings were consistent with this prediction. Firstly, as previous research in collective action would predict, non-protesters felt, compared to protesters, less aggrieved and efficacious, identified less with the neighbourhood and were less proud of it at t_0 . Interestingly, and as predicted, participants in protest reported to have twice as many contacts in the neighbourhood (informal embeddedness) as did non-participants at t_0 .

Importantly, collective efficacy, grievances, and pride were directly related to protest participation, and were greatly influenced by informal embeddedness and identification. In fact, informal embeddedness and identification were precisely those components which connected the individual to the collectivity, illustrating the cruciality of a collective in the context of collective action. This study also illustrates how components which are hard to manipulate in the laboratory—growing networks and identification—play a predictive role in the context of the social psychology of protest. It may therefore be seen as a first cautious step in verifying causal relations outside of the laboratory. Admittedly, the amount of “nodes” is a rather crude measure for informal embeddedness. Future research could focus, for instance, on what happens between the nodes. What information and emotions do people share? Do they talk politics? How is consensus or polarization accomplished? Do they mobilize consensus, and/or do they mobilize for action? A longitudinal network analysis would be a perfect method to accomplish such a task.

This study also illustrates that in addition to laboratory experiments, other routes to causal inferences are possible. We agree with Henry (2008), who argues that evidence for causality is too often interpreted in either-or terms, such that either you have it (via experimentation) or you do not (non-experimentation). Alternatively, he continues, evidence for causality should be thought of as existing on a continuum. Such a continuum could range from cor-

relational field studies to highly-controlled laboratory experiments, with internal and external validity often inversely related. That is, laboratory experiments are high on internal validity but tend to be low on external validity, while field research is high on external validity, but tends to be low on internal validity. Thus, the challenge of experimental research is to strengthen external validity, while field research should aim for more internal validity.

No study conducted in social psychology is perfect, and neither is ours. In terms of causality, perhaps the most salient shortcoming is that we were not able to test a fully cross-lagged panel design in which each measure at t_1 is predicted by the set of t_0 measures. Because grievances were suddenly imposed, and by definition not present at t_0 , neither was the opportunity to protest available (around that specific issue). Hence, variables tapping into these protests and its antecedents were examined *after* the protests at t_1 . Moreover, as we had only two measurement points (before and after the protest), we were not able to assess the growth of the network over time. Therefore we could, for instance, not assess whether a growing network would lead over time to more identification and shared grievances and emotions. Finally, a more general remark as noted by several analysts (e.g., [Singer & Willett, 2003](#)) also affected our study. Namely, two time points are insufficient to make strong causal claims about the relations between the variables. Thus, while a cross-lagged panel design might provide some information about causal ordering, it may also be less than optimal.

Indeed, since there will always shortcomings in choosing a particular design over another, replicating theoretical ideas across different domains and methodologies is very valuable. Take, for example, the phenomenon of relative deprivation. Originally, relative deprivation theory proposed that collective action participation is motivated by profound affective reactions. However, empirical work in the 1980s and 1990s focused more on people's cognitive interpretations of inequality. Yet, in line with the traditional assumptions of relative deprivation theory, recent meta-analytical studies found that although cognitions of group-based deprivation do predict collective action, affective reactions to deprivation such as dissatisfaction and resentment seem to be more powerful motivators for collective action ([H. J. Smith & Ortiz, 2002](#); [Van Zomeren et al., 2008](#)). These findings were based on a variety of methods and contexts. *Retrospective* ([Dubé & Guimond, 1986](#)), *prospective* ([Hafer & Olson, 1993](#)), *experimental* (e.g., [Van Zomeren et al., 2004](#)), *field studies* (e.g., [Van Stekelenburg, Klandermans, & Van Dijk, 2011](#)), as well as *meta-analytical* ([Van Zomeren et al., 2008](#)) studies showed that group deprivation is strongly associated with collective action participation. Each time a phenomenon is replicated—preferably across different contexts, samples and methods—, we gain confidence in its generalizability.

The collective action literature in social psychology has been built over the past several decades on a foundation of evidence gathered largely from student samples. As rich, detailed, logical, and comprehensive as this body of literature is, what does it tell us about the reality of this form of political behaviour? For example, both developmental issues (prototypical protesters are “highly educated young men”; [Dalton et al., 2010](#)) as well as the liberal culture of the university (liberal values tend to converge with protest participation; [Dalton et al., 2010](#)) may be influencing the pattern of results for these student samples. The question as to what laboratory-based studies tell us about the reality of collective action behaviour is therefore still relevant. Nevertheless, this article is not meant to be a call to stop using student samples in collective action research. Instead, it is a call to consider the many, varied, creative approaches that we may turn to for converging evidence that what we study goes beyond the context of students in university settings.

Possible sources beyond laboratory settings and college student responding include general population surveys (e.g., World Values Survey, Eurobarometer etc.), archival research, and adult convenience samples. In addition,

the Internet is proving to be a valuable resource for data collection on general adult samples (e.g., Nosek, Greenwald, & Banaji, 2005; Van Stekelenburg et al., 2010; Van Stekelenburg & Boekkooi, 2013). Although many of these populations are also convenience samples with their own idiosyncratic generalizability problems, they provide converging evidence to accompany our student samples in giving us greater confidence in the theoretical ideas we test. Whether the methodology involves college students in a lab, adults surveyed or “observed” over the Internet or at a demonstration, general population data sets and their idiosyncratic operationalizations of political behaviour, or non-experimental Internet data, each methodology by itself is flawed in its own way and cannot definitively reveal the nature of any social psychological phenomenon by itself. However, each methodology also carries with it certain strengths, and when those strengths converge to tell a coherent story, we can make more confident claims about the *who*, the *why* and the *when* of collective action participation.

Ultimately, the social psychology of protest seeks to understand natural political behaviour following natural treatments, taking place in natural settings. This makes observing political behaviour in its natural context not only an irreplaceable method for this endeavour, but one that comes with many challenges. The biggest challenge will perhaps be to integrate both the level of control usually found in the laboratory and the natural dimensions associated with the field. We need a keen eye to recognize naturalistic dimensions and learn to exploit them. In doing so, we can also take inspiration from other disciplines, for example political scientists who conduct so-called field experimentation, a methodology that involves experimental interventions in real-world settings (e.g., Druckman, Green, Kuklinski, & Lupia, 2006). Experiments or quasi-experiments may also be embedded into survey and/or scenario methodology that can be more easily distributed to non-student samples. And finally, non-experimental methods can rely on other techniques for making causal inferences, such as longitudinal analyses (Tausch & Becker, 2013, and the present illustration). There is a great deal of flexibility and creativity available to those seeking to branch out beyond student sample use, also for experimentation.

Notes

i) In the words of Wright and colleagues (1990) an individual takes part in collective action “any time that [she or he] is acting as a representative of the group and the action is directed at improving the conditions of the entire group.” Wright (2001) proposes a simple taxonomy of possible forms of political action. In response to some political issue, people can choose to stay inactive; if they get into action, they can engage in individual or collective action; and collective action can be noncontentious or contentious.

ii) For ease of reading, we use the terms “sociological branch” and “psychological branch” to refer to respectively the sociological social psychology of protest and the social psychological social psychology of protest.

iii) We would like to thank Martijn van Zomeren and his colleagues for generously making the data available to us.

iv) Nowadays many experimental studies of collective action do also pre-test their scenarios on precisely these criteria (i.e., plausibility and internal consistency).

v) Note that because of the quantitative focus of Van Zomeren et al.’s (2008) meta-analysis, their analysis only comprises survey studies based on questionnaires; survey studies based on interviews are not taken into account.

vi) This might well be different in other countries or other estates. Take social housing, were “new” residents often tend to come from similar, older estates that are being readied for demolition. Even private owners might tend to move to new estates as a loose “network” (though spread over time) as they want to maintain old social networks but in a “better” neighbourhood. These VINEX locations are, however, known for their “newness”. In fact, we asked our respondents how many people in the

new neighborhood they knew before arrival. Only one person knew one other. Therefore, it is safe to assume that the social embeddedness after one month has developed from scratch.

vii) We also included two blocks of households (t_0 : 32; t_1 : 6) that were already delivered by the constructor in 2010 since they were situated in the center of the neighborhood and therefore likely to influence social dynamics. Although this situation may be undesirable from a quasi-experimental design perspective, it is an inevitable part of field research with dynamic social units. We tried to capture the real-life vicissitudes of these neighborhoods by surveying these “old” blocks, as opposed to neglecting them.

viii) We also tested the possibility that identification and embeddedness simply share variance in a non-directional sense, and that the association between embeddedness and protest also goes down when identification is entered. This turned out not to be the case (β embeddedness Step 1 = .59, $p < .001$, and Step 2 = .53, $p < .001$, while identification in Step 2 contributed non-significantly to protest participation ($\beta = .16$, $p = .20$).

Funding

The research is conducted with a grant on ‘Communication in social networks: working at the edge of social sciences and computer science’. For 28 academy assistants (of which 7 participated in this project) granted by the Royal Netherlands Academy of Arts and Sciences [KNAW] of €280.000,- in total for 4 projects. Awarded to Jacqueliën van Stekelenburg, Peter Groenewegen and Marjolein Broese.

Competing Interests

The authors have declared that no competing interests exist.

Acknowledgments

The authors have no support to report.

References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Berkowitz, L., & Donnerstein, E. (1982). External validity is more than skin deep: Some answers to criticisms of laboratory experiments. *The American Psychologist*, 37, 245-257. doi:10.1037/0003-066X.37.3.245
- Billig, M. (1976). *Social psychology and intergroup relations*. London, United Kingdom: Academic Press.
- Blumer, H. (1951). Social movements. In A. M. Lee (Ed.), *New outline of the principles of sociology* (pp. 199-220). New York, NY: Barnes & Noble.
- Brehm, J., & Rahn, W. (1997). Individual-level evidence for the causes and consequences of social capital. *American Journal of Political Science*, 41(3), 999-1023. doi:10.2307/2111684
- Campbell, A., Gurin, G., & Miller, W. E. (1954). *The voter decides*. Evanston, IL: Row, Peterson.
- CBS. (2011). *CBS in uw buurt* [Data file with municipality statistics]. Retrieved from <http://www.cbsinuwbuurt.nl/#pageLocation=index> on May 30th 2013
- Dalton, R., Van Sickle, A., & Weldon, S. (2010). The individual-institutional nexus of protest behaviour. *British Journal of Political Science*, 40(1), 51-73. doi:10.1017/S000712340999038X
- Danziger, K. (2000). Making social psychology experimental: A conceptual history, 1920–1970. *Journal of the History of the Behavioral Sciences*, 36(4), 329-347. doi:10.1002/1520-6696(200023)36:4<329::AID-JHBS3>3.0.CO;2-5

- Davies, J. (1962). Toward a Theory of Revolution. *American Sociological Review*, 27, 5-19. doi:10.2307/2089714
- Devos, T., Silver, L. A., & Mackie, D. M. (2002). Experiencing intergroup emotions. In D. M. Mackie & E. R. Smith (Eds.), *From prejudice to intergroup emotions: Differentiated reactions to social groups* (pp. 111-134). Philadelphia, PA: Psychology Press.
- De Weerd, M., & Klandermans, B. (1999). Group identification and political protest: Farmers' protest in the Netherlands. *European Journal of Social Psychology*, 29, 1073-1095. doi:10.1002/(SICI)1099-0992(199912)29:8<1073::AID-EJSP986>3.0.CO;2-K
- Druckman, J. N., Green, D. P., Kuklinski, J. H., & Lupia, A. (2006). The growth and development of experimental research in political science. *American Political Science Review*, 100(4), 627-635. doi:10.1017/S0003055406062514
- Dubé, L., & Guimond, S. (1986). Relative deprivation and social protest: The personal-group issue. In J. M. Olson, C. P. Herman, & M. P. Zanna (Eds.), *Relative deprivation and social comparison: The Ontario symposium* (Vol. 4, pp. 201-216). Hillsdale, NJ: Erlbaum.
- Evans, J. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annual Review of Psychology*, 59, 255-278. doi:10.1146/annurev.psych.59.103006.093629
- Farr, R. M. (1996). *The roots of modern social psychology*. Cambridge, MA: Blackwell.
- Folger, R. (1986). Rethinking equity theory: A referent cognitions model. In H. W. Bierhoff, R. L. Cohen, & J. Greenberg (Eds.), *Justice in social relations* (pp. 145-162). New York, NY: Plenum.
- Franzoi, S. L. (2009). The history of social psychology. In S. L. Franzoi (Ed.), *Social psychology* (5th ed., pp. 4-14). New York, NY: McGraw-Hill.
- Gamson, W. A. (1992). *Talking politics*. New York, NY: Cambridge University Press.
- Greenwood, J. (2004). *The disappearance of the social in American social psychology*. Cambridge, MA: Cambridge University Press.
- Gurr, T. (1970). *Why men rebel*. Princeton, NJ: Princeton University Press.
- Hafer, C. L., & Olson, J. M. (1993). Beliefs in a just world, discontent, and assertive actions by working women. *Personality and Social Psychology Bulletin*, 19(1), 30-38. doi:10.1177/0146167293191004
- Henry, P. J. (2008). College sophomores in the laboratory redux: Influences of a narrow data base on social psychology's view of the nature of prejudice. *Psychological Inquiry*, 19(2), 49-71. doi:10.1080/10478400802049936
- Hogg, M. A., & Williams, K. D. (2000). From I to we: Social identity and the collective self. *Group Dynamics*, 4(1), 81-97. doi:10.1037/1089-2699.4.1.81
- Jahoda, G. (2007). *A history of social psychology: From the eighteenth century enlightenment to the Second World War*. Cambridge, United Kingdom: Cambridge University Press.
- Kamans, E., Otten, S., & Gordijn, E. H. (2011). Threat and power in intergroup conflict: How threat determines emotional and behavioral reactions in powerless groups. *Group Processes & Intergroup Relations*, 14(3), 293-310. doi:10.1177/1368430210372525
- Kelly, C., & Breinlinger, S. (1995). Identity and injustice: Exploring women's participation in collective action. *Journal of Community & Applied Social Psychology*, 5(1), 41-57. doi:10.1002/casp.2450050104

- Kelly, C., & Breinlinger, S. (1996). *The social psychology of collective action: Identity, injustice and gender*. London, United Kingdom: Taylor & Francis.
- Kim, H. (2002). Shame, anger, and love in collective action: Emotional consequences of suicide protest in South Korea, 1991. *Mobilization: An International Quarterly*, 7(2), 159-176.
- Kirsch, K. (2007). *A review of scenario planning literature*. Munich, Germany: GRIN Verlag.
- Klandermans, B. (1984). Mobilization and participation: Social-psychological expansions of resource mobilization theory. *American Sociological Review*, 49(5), 583-600. doi:10.2307/2095417
- Klandermans, B. (1997). *The social psychology of protest*. Oxford, United Kingdom: Blackwell.
- Klandermans, B. (2013). The dynamics of demand. In J. Van Stekelenburg, C. M. Roggeband, & B. Klandermans (Eds.), *The future of social movement research: Dynamics, processes and mechanisms*. Minneapolis, MN: University of Minnesota Press.
- Klandermans, B., & Oegema, D. (1987). Potentials, networks, motivations, and barriers: Steps toward participation in social movements. *American Sociological Review*, 52, 519-531. doi:10.2307/2095297
- Klandermans, B., & Staggenborg, S. (Eds.). (2002). *Methods of social movement research*. Minneapolis, MN: University of Minnesota Press.
- Klandermans, B., Van der Toorn, J., & Van Stekelenburg, J. (2008). Embeddedness and identity: How immigrants turn grievances into action. *American Sociological Review*, 73(6), 992-1012. doi:10.1177/000312240807300606
- Kruglanski, A. W., & Stroebe, W. (Eds.). (2012). *Handbook of the history of social psychology*. New York, NY: Psychology Press.
- Leach, C. W., Bou Zeineddine, F., & Čehajić-Clancy, S. (2013). Moral immemorial: The rarity of self-criticism for previous generations' genocide or mass violence. *Journal of Social Issues*, 69(1), 34-53. doi:10.1111/josi.12002
- Leonard, D. J., Moons, W. G., Mackie, D. M., & Smith, E. R. (2011). "We're mad as hell and we're not going to take it anymore": Anger self-stereotyping and collective action. *Group Processes & Intergroup Relations*, 14(1), 99-111. doi:10.1177/1368430210373779
- Lin, N. (1999). Building a network theory of social capital. *Connections*, 22, 28-51.
- Linden, A., & Klandermans, B. (2007). Revolutionaries, wanderers, converts, and compliants: Life histories of extreme right activists. *Journal of Contemporary Ethnography*, 36, 184-201. doi:10.1177/0891241606298824
- Mackie, D. M., & Smith, E. R. (Eds.). (2002). *From prejudice to intergroup emotions: Differentiated reactions to social groups*. New York, NY: Psychology Press.
- Major, B. (1994). From social inequality to personal entitlement: The role of social comparisons, legitimacy appraisals, and group memberships. *Advances in Experimental Social Psychology*, 26, 293-355.
- Martin, J. (1986). The tolerance of injustice. In J. M. Olson, C. P. Herman, & M. P. Zanna (Eds.), *Relative deprivation and social comparison: The Ontario symposium* (Vol. 4, pp. 217-242). Hillsdale, NJ: Erlbaum.
- McClurg, S. D. (2003). Social networks and political participation: The role of social interaction in explaining political participation. *Political Research Quarterly*, 56, 448-464.
- McGarty, C., Bliuc, A. M., Thomas, E. F., & Bongiorno, R. (2009). Collective action as the material expression of opinion-based group membership. *The Journal of Social Issues*, 65(4), 839-857. doi:10.1111/j.1540-4560.2009.01627.x

- Meyer, D. S., & Tarrow, S. (1998). *The social movement society: Contentious politics for a new century*. Lanham, MD: Rowman & Littlefield.
- Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (V. R. O. M). (1991). *Vierde nota over de ruimtelijke ordening extra*. Retrieved from http://ressourcesgd.kb.nl/SGD/19901991/PDF/SGD_19901991_0005706.pdf
- Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology*, *76*(2), 229-245. doi:10.1037/0022-3514.76.2.229
- Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2005). Understanding and using the implicit association test: II. Method variables and construct validity. *Personality and Social Psychology Bulletin*, *31*, 166-180. doi:10.1177/0146167204271418
- Oishi, S., Kesebir, S., & Snyder, B. H. (2009). Sociology: A lost connection in social psychology. *Personality and Social Psychology Review*, *13*, 334-353. doi:10.1177/1088868309347835
- Oppenheim, A. (1992). *Questionnaire design, interviewing and attitude measurement*. London, United Kingdom: Pinter.
- Passy, F. (2001). Socialization, connection, and the structure/agency gap: A specification of the impact of networks on participation in social movements. *Mobilization: An International Quarterly*, *6*(2), 173-192.
- Reicher, S. (1984). The St. Paul's riot: An explanation of the limits of crowd action in terms of a social identity model. *European Journal of Social Psychology*, *14*, 1-21. doi:10.1002/ejsp.2420140102
- Rogin, M. (1967). *The intellectuals and McCarthy: The radical specter*. Cambridge, MA: MIT Press.
- Runciman, W. G. (1966). *Relative deprivation and social justice*. London, United Kingdom: Routledge.
- Schrager, L. S. (1985). Private attitudes and collective action [Comment on Klandermans, ASR, October, 1984]. *American Sociological Review*, *50*, 858-859. doi:10.2307/2095509
- Schruijer, S. G. (2012). Whatever happened to the 'European' in European social psychology? A study of the ambitions in founding the European Association of Experimental Social Psychology. *History of the Human Sciences*, *25*(3), 88-107. doi:10.1177/0952695111427365
- Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology*, *51*(3), 515-530. doi:10.1037/0022-3514.51.3.515
- Shepherd, L., Spears, R., & Manstead, A. S. R. (2013). 'This will bring shame on our nation': The role of anticipated group-based emotions on collective action. *Journal of Experimental Social Psychology*, *49*(1), 42-57. doi:10.1016/j.jesp.2012.07.011
- Siegel, D. A. (2009). Social networks and collective action. *American Journal of Political Science*, *53*(1), 122-138. doi:10.1111/j.1540-5907.2008.00361.x
- Simon, B., & Klandermans, B. (2001). Towards a social psychological analysis of politicized collective identity: Conceptualization, antecedents, and consequences. *The American Psychologist*, *56*(4), 319-331. doi:10.1037/0003-066X.56.4.319
- Simon, B., Loewy, M., Stürmer, S., Weber, U., Freytag, P., Habig, C., . . . Spahlinger, P. (1998). Collective identification and social movement participation. *Journal of Personality and Social Psychology*, *74*(3), 646-658. doi:10.1037/0022-3514.74.3.646
- Simon, B., Trötschel, R., & Dähne, D. (2008). Identity affirmation and social movement support. *European Journal of Social Psychology*, *38*(6), 935-946. doi:10.1002/ejsp.473
- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. New York, NY: Oxford University Press.

- Smelser, N. J. (1962). *Theory of collective behavior*. New York, NY: Free Press.
- Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297-315). San Diego, CA: Academic Press.
- Smith, H. J., Cronin, T., & Kessler, T. (2008). Anger, fear, or sadness: Faculty members' emotional reactions to collective pay disadvantage. *Political Psychology, 29*(2), 221-246. doi:10.1111/j.1467-9221.2008.00624.x
- Smith, H. J., & Ortiz, D. (2002). Is it just me? The different consequences of personal and group relative deprivation. In I. Walker & H. J. Smith (Eds.), *Relative deprivation* (pp. 91-118). New York, NY: Cambridge University Press.
- Stam, H. J., Radtke, H. L., & Lubek, I. (2000). Strains in experimental social psychology: A textual analysis of the development of experimentation in social psychology. *Journal of the History of the Behavioral Sciences, 36*, 365-382. doi:10.1002/1520-6696(200023)36:4<365::AID-JHBS5>3.0.CO;2-S
- Stürmer, S., & Simon, B. (2004). The role of collective identification in social movement participation: A panel study in the context of the German gay movement. *Personality and Social Psychology Bulletin, 30*(3), 263-277. doi:10.1177/0146167203256690
- Stürmer, S., Simon, B., Loewy, M., & Jörgen, H. (2003). The dual-pathway model of social movement participation: The case of the fat acceptance movement. *Social Psychology Quarterly, 66*(1), 71-82. doi:10.2307/3090142
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In S. Worchel & W. G. Austin (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Chicago, IL: Nelson-Hall Publishers.
- 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. doi:10.1111/j.2044-8309.2012.02109.x
- 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 action. *Journal of Personality and Social Psychology, 101*, 129-148. doi:10.1037/a0022728
- Taylor, D. M., & Brown, R. J. (1979). Towards a more social social psychology? *British Journal of Social and Clinical Psychology, 18*, 173-180. doi:10.1111/j.2044-8260.1979.tb00322.x
- Tunnell, G. (1979). Three dimensions of naturalness: An expanded definition of field research. *Psychological Bulletin, 84*, 426-437. doi:10.1037/0033-2909.84.3.426
- Turner, R. H., & Killian, L. M. (1987). *Collective behavior* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Turner, J. C., & Oakes, P. J. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence. *The British Journal of Social Psychology, 25*, 237-252. doi:10.1111/j.2044-8309.1986.tb00732.x
- Van Stekelenburg, J., & Boekkooi, M. (2013). Mobilizing for change in a changing society. In J. van Stekelenburg, C. M. Roggeband, & B. Klandermans (Eds.), *The future of social movement research: Dynamics, mechanisms, and processes* (pp. 217-234). Minneapolis, MN: University of Minnesota Press.
- Van Stekelenburg, J., & Klandermans, B. (2007). Individuals in movements: A social psychology of contention. In C. M. Roggeband & B. Klandermans (Eds.), *The handbook of social movements across disciplines* (pp. 157-204). New York, NY: Springer.

- Van Stekelenburg, J., & Klandermans, B. (2013). The social psychology of protest. *Current Sociology*, 61, 886-905. doi:10.1177/0011392113479314
- Van Stekelenburg, J., Klandermans, B., & Van Dijk, W. W. (2011). Combining motivations and emotion: The motivational dynamics of collective action participation. *Revista de Psicología Social*, 26(1), 91-104. doi:10.1174/021347411794078426
- Van Stekelenburg, J., Oegema, D., & Klandermans, B. (2010). No radicalization without identification: How ethnic Dutch and Dutch Muslim web forums radicalize over time. In A. Azzi, X. Chrysoschoou, B. Klandermans & B. Simon (Eds.), *Identity and participation in culturally diverse societies: A multidisciplinary perspective* (pp. 256-274). Oxford, United Kingdom: Blackwell Wiley.
- Van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin*, 134, 504-535. doi:10.1037/0033-2909.134.4.504
- 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(5), 649-664. doi:10.1037/0022-3514.87.5.649
- Walker, L., & Mann, L. (1987). Unemployment, relative deprivation, and social protest. *Personality and Social Psychology Bulletin*, 13, 275-283. doi:10.1177/0146167287132012
- Walsh, E. J. (1981). Resource mobilization and citizen protest in communities around Three Mile Island. *Social Problems*, 29(1), 1-21. doi:10.2307/800074
- Welzel, C., Inglehart, R., & Deutsch, F. (2004). *Social capital, civil society, and collective action: What makes some publics more 'civic' than others?* Paper presented at the WVS conference, Budapest, 6-9 September 2004.
- Wright, S. C. (2008). Strategic collective action: Social psychology and social change. In *Blackwell Handbook of Social Psychology: Intergroup Processes* (pp. 409-430). Oxford, United Kingdom: Blackwell.
- Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology*, 58, 994-1003. doi:10.1037/0022-3514.58.6.994