RUNNING HEAD: Social Identities Facilitate and Encapsulate

Social Identities Facilitate and Encapsulate Action-Relevant Constructs: A Test of the Social Identity Model of Collective Action

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Abstract

Three studies explore the recently elaborated *social identity model of collective action* (SIMCA; van Zomeren, Postmes & Spears, 2008) and an alternative, the *encapsulated model of social identity in collective action* (EMSICA; Thomas, McGarty & Mavor, 2009). These models both afford a central role to the function of social identities in promoting collective action, through affective reactions to injustice and group efficacy, but in different ways. Combined analyses of three samples (N = 305) using multi-group structural equation modelling showed that both SIMCA and EMSICA fit the data well but that the path from group efficacy to action was of small size. Results showed that social identity processes can both facilitate and encapsulate other action-relevant constructs, and highlight the importance of considering multiple causal pathways to action.

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Social psychology has much to say about conditions under which people will take action to overcome their own, or another group's, disadvantage. Starting with Le Bon's (1895) analysis of crowd behaviour, social psychologists have explored the psychological motivators and processes underpinning collective action for over a century (for reviews see Klandermans, 1997; Haslam, 2001). This paper focuses on two recent developments in that tradition that emphasise a central role of social identity. Specifically, van Zomeren, Postmes and Spears (2008) have recently conducted an integrative meta-analysis of collective action research, yielding what van Zomeren and colleagues call the *social identity model of collective action* (SIMCA). Thomas, McGarty and Mavor (2009a) proposed an alternative complementary role for social identity in the *encapsulation model of social identity in collective action* (EMSICA).

This paper provides direct empirical tests of SIMCA and EMSICA with some new twists. Both models afford a central role to the function of social identities in promoting collective action. Thus, we sought to test the model with an identity that has been shown to be an excellent predictor of political and social action: *opinion-based group identities* (Bliuc, McGarty, Reynolds, & Muntele, 2007). Our focus was on exploring the role that social identity processes play in facilitating, and / or encapsulating, other action-relevant reactions (perceptions of injustice and group efficacy beliefs).

The Social Identity Model of Collective Action

SIMCA sought to integrate what van Zomeren et al. (2008) identified as three broad approaches to the socio-psychological underpinnings and motivators of

collective action. These are: the group efficacy approach; the injustice approach; and the identity-based approach (see van Zomeren et al., 2008, for a review of these three approaches). SIMCA suggests that each of the efficacy, injustice, and identity explanations contribute uniquely to the prediction of the collective action. Thus, people will take action when they experience strong affective reactions to injustice, believe that their groups' actions can be effective (group efficacy; Bandura, 1997, 2000) and belong to social groups that can mobilise action. SIMCA is depicted in Figure 1.

SIMCA also attempts to account for interconnections between the three approaches, and specifically addresses questions of causality in these relationships. In particular, SIMCA recognises the pivotal importance of social identity processes in the appraisal of group-based injustice, emotion and efficacy beliefs. In doing so it makes the novel proposition that identity will be both a direct predictor of social action, and an indirect predictor, working through the injustice and efficacy pathways. Thus, in addition to being a unique predictor, identity is understood to be the conceptual and psychological *bridge* (van Zomeren et al., 2008, p.511) between efficacy and injustice reactions to disadvantage, such that the social identity facilitates, or gives rise to, the subjective experiences of group-based injustice and efficacy. These authors argue that the model is a comprehensive and parsimonious account of collective action (see also van Zomeren, Spears, Fischer & Leach, 2004).

In drawing these conclusions these authors nevertheless recognise that there are also other plausible causal orderings between these variables, stating that: "it is quite likely that evidence can also be obtained for the reverse relationships, for example, with collective feelings of injustice increasing levels of identification" (van Zomeren et al., 2008, p. 525). Recently, Thomas, McGarty and Mavor (2009a)

considered these other causal orderings and put forward an alternative model that also affords a central role to social identity processes.

The Encapsulation Model of Social Identity in Collective Action

As can be seen from Figure 2, EMSICA suggests that social identification can mediate the effects of injustice and efficacy on commitment to action (Thomas et al., 2009a). To clarify the distinct contribution of EMSICA, consider a situation in which an individual's attention is caught by an instance of social injustice. That individual may experience strong affective reactions to the injustice (such as anger or outrage), and simultaneously believe that collective efforts amongst like-minded people can be successful in overcoming the injustice (see, for example, Doosje, Spears & Ellemers, 2002, who showed that an individual's belief in social change precipitates social identification). Such reactions could plausibly *precede and precipitate group formation* and social identity is thus formed on the basis of these shared reactions (as in Figure 2; see also Thomas, McGarty & Mavor, 2009b).

The theoretical rationale for EMSICA is more fully described elsewhere (see Thomas et al., 2009a) but it is worth briefly considering recent empirical developments in the collective action literature which provide support for these propositions. With regards to the emotion pathway, Stürmer and Simon (2009) developed arguments regarding the role of group-based anger in transforming identity. Consistent with EMSICA, these authors argued that anger causally precedes social identification (in this case with a social movement) and plays an important role in politicising the identity towards social action (see also Kessler & Hollbach, 2005; Livingstone, Spears, Manstead, Bruder & Shepherd, in press). Similarly, Thomas and McGarty (2009) experimentally manipulated injunctive norms for outrage (by suggesting that outrage was a desirable reaction to the circumstances facing the

group) *prior to* having participants engage in an identity formation exercise (the opinion-based group interaction method) and showed that the provision of this emotion norm bolstered subsequent identification with the group. These authors argued that the provision of the outrage norm acted to qualitatively shape the emerging group identity.

Evidence is also emerging of the causal relationship anticipated by EMSICA for the efficacy pathway. Van Zomeren, Leach and Spears (2010) argued, and experimentally demonstrated, that group efficacy causally precedes social identification because group efficacy puts individuals' identity into action and concluded that "correlation between group efficacy and group identification may be better explained by the former causing the latter, rather than vice versa" (p.1058). In line with this view then, EMSICA proposes that emotions and efficacy can themselves initiate a shared emergent understanding of "who we are" as group members, where the resultant group membership is premised in a shared understanding of emotional reactions about the inequality and belief that it can be overcome through collective efforts (see Thomas et al., 2009a, for further discussion of these points).

Thus both SIMCA and EMSICA models afford a central role to social identity processes, but in different ways. In SIMCA, the perceptions of injustice and group efficacy stem from a salient social identity; while in EMSICA, perceptions of injustice and group efficacy provide the basis for the emergence of social identity and become captured in the social identity. One way of understanding these different models and the role of social identity processes is to ask whether the group membership *facilitates*, or gives rise to, the experience of injustice and efficacy (as per SIMCA); or whether the group membership *encapsulates* it, in the sense that those

experiences of injustice and efficacy come to inform who "we" are (as per EMSICA). Further, the encapsulation model suggests that, to the extent that group membership is preceded by these reactions, the emergent group identity can come to *capture* (and mediate) those two reactions, rendering the direct paths less important in the model (and this is why they are represented as dotted lines in Figure 2).

How are we to resolve the ostensibly competing predictions of the two models? In this paper we take the position that *both* models may meaningfully capture aspects of the dynamic nature of social identity in collective action. Indeed, recent developments in the social identity formation literature suggests that to privilege one causal ordering over the other would be erroneous. Swaab, Postmes, van Beest and Spears (2007) explored the causal ordering of shared cognition (shared knowledge structures amongst people) and shared social identity. These authors found that a shared social identity led to the development of shared cognition (through group interaction; Study 2), but that shared cognition similarly led to the formation of social identity (Study 3). Swaab et al. concluded that "the induction of one may contribute to the development of the other" (p. 196) and that *social identity can be both a product of, and precursor to, shared knowledge structures amongst people*. Similarly here, we argue that social identities can be a precursor to (SIMCA), and a product of (EMSICA), reactions to injustice and group efficacy in the development and maintenance of commitment to collective action.

The Current Empirical Test

The current paper explores the predictive power of both SIMCA and the EMSICA model in a single measurement moment. Consistent with van Zomeren et al.'s (2008) broad focus on collective action across a variety of social contexts (including peace activism, organizational conflict and industrial action, affirmative

action amongst women, and the German gay movement, to name a few) and increasingly broad conceptualisations of collective action (Wright, 2009), we explore collective action in support of people in developing nations, and anti-poverty action more generally. The burgeoning anti-poverty movement (e.g. Make Poverty History) has attracted relatively little attention from social psychology, and is a novel domain for exploring collective action intentions.

The current test also explores the role of opinion-based group identities in SIMCA and EMSCIA. Opinion-based groups (Bliuc et al., 2007) are psychologically meaningful groups in the sense suggested by self-categorization theory (Turner et al., 1987). They represent a special case only in that they are groups defined by a shared opinion. The opinion-based group concept is premised on the idea that people can use *opinions* (for example, about social justice issues such as pro-life, pro-choice) as the basis of psychological self-definition, just as they could with any other psychologically meaningful group or social category (see McGarty, Bliuc, Thomas & Bongiorno, 2009). Drawing on these ideas, we would expect a group based around the shared anti-poverty opinion to be readily associated with positive actions and facilitative group emotions in the international development context (Thomas & McGarty, 2009).

van Zomeren and colleagues did not include opinion-based groups in their meta-analysis because at the time there was insufficient data on these groups. Given that recent evidence suggests that opinion-based groups also strongly predict collective action (Bliuc et al., 2007; O'Brien & McGarty, 2009), action-relevant constructs such as emotions (Musgrove & McGarty, 2008; see also Mackie, Devos & E.R. Smith, 2000) and are well-equipped to capture identity formation and transformation (McGarty et al., 2009), we were keen to investigate whether SIMCA

could be applied to these social identities. Our empirical test thus sought to explore SIMCA and EMSICA's propositions about the role of identity in the context of this identity alternative. Our application this type of identity (opinion-based groups) and in this context (anti-poverty groups) thus presents a secondary point of novelty in the current research.

Finally, our test of SIMCA and EMSICA explores the emotional reaction of group-based moral outrage in predicting collective action. Van Zomeren et al. included both cognitive and affective reactions (dissatisfaction, resentment or anger) to injustice in their development of SIMCA, and found that emotional reactions to injustice appear to be better predictors of action than cognitive reactions (see also Guimond & Dube-Simard, 1983). Given these consistent findings, our test of the model explores the emotional reaction of group-based moral outrage in predicting collective action.

Outrage, like anger, can be seen as an affective reaction to injustice. Outrage is conceptually similar to anger, but where the outrage is directed at a third party or system of inequality (Leach, Snider, & Iyer, 2002; Montada & Schneider, 1989; see Thomas et al., 2009b, for further discussion of the distinction between moral outrage and anger). While earlier research focused on outrage as a motivating pro-social emotion (e.g. Montada & Schneider, 1989), more recent work on social identity and collective action has tended to explore anger (e.g. Mackie et al., 2000; van Zomeren et al., 2004; see van Zomeren et al., 2008 for a review). Given that other recent research has demonstrated that outrage can plausibly be linked to anti-poverty action (Thomas & McGarty, 2009; see also Thomas, 2005), and that outrage is an under-explored emotion in the collective action literature, we focused on this emotion in our test of the models. We note that this is a third point of novelty of the current research.

Overall the goals in this paper are twofold. Firstly, to explore the underlying pattern of interconnections between (opinion-based) identity, outrage and efficacy as suggested by SIMCA, and the alternative, EMSICA, in the anti-poverty context. The second broader goal is to contribute to social psychological understandings of social identity in models of collective action by placing an emphasis on the *dynamic nature* of causality in these relationships (Swaab et al., 2007; Thomas et al., 2009a). Consistent with the theoretical arguments of Thomas et al., and recent empirical developments (Stürmer & Simon, 2009; van Zomeren et al., 2010) we argue that modelling these two approaches allows us to capture a "snapshot" of what is a dynamic and iterative system of inter-relations. A key contribution here is that the conceptual role of social identity processes can be understood as *facilitative* of other action-relevant constructs (as per SIMCA); and / or *encapsulating* of those (as per EMSICA).

Method

Strategy and Rationale

Taking data from three different populations (general community, university, and psychology students), we conducted a combined analysis using multi-group SEM. Multi-group SEM is a useful multivariate technique when the samples are from different populations and the researcher wishes to know whether an instrument, or model, is applicable across different samples (Yuan & Bentler, 2000). Although the three studies use slightly different sub-sets of measures of the key constructs, the scales were very similar and sampled from the same measurement approach to each construct. By combining the three samples we increase both the power to detect effects and the degrees of freedom, thus allowing for a test of a more complex model. Furthermore, multi-group SEM explicitly allows us to test whether the results from

the SIMCA and EMSICA models were broadly consistent across the three samples, or whether the models vary across populations. In other words, it is not problematic for multi-group SEM that there may be systematic differences in the populations, as it provides an effective tool to explore these differences (should they exist). Overall then, utilising multi-group SEM yields greater power, allows us to test a more complex model; and test for differences between the populations sampled.

Participants

There were 305 participants. Sample 1 comprised 100 people (46 female, 54 male), who were members of the public approached in an Australian city. They ranged in age from 18 to more than 66, with the median age category being 26 to 35. Sample 2 comprised 83 people (60 females, 23 males), who were third year psychology students participating as part of routine laboratory work. They ranged in age from 18 to 45 and the median age category was 18 to 25. Sample 3 comprised 122 people (57 females, 55 males, 10 did not indicate their gender), who were members of a university community. Participants ranged in age from 18 to 66 but the majority (97) of respondents were aged between 18 and 25.

Procedure

The procedure was similar across the three different samples. In the community sample adult members of the general public were approached at various locations including bus stations, the central train station and the airport; the psychology students completed the survey as part of a routine laboratory exercise; and the university community members were recruited at a table set up in the social/food hub of the university. Participants were asked if they would be willing to complete a short survey assessing attitudes towards support for people in developing nations. If they consented, participants were assured that the survey would be anonymous and

were issued a questionnaire. Upon completion participants were debriefed by means of an information sheet detailing the general aims of the study. Approximately 80% of people approached in the community were willing to participate.

Questionnaire

The questionnaire was entitled 'Attitudes towards support for people in developing nations'. In the studies reported here we use an opinion-based group relevant to support for international development by using a specific movement: the United Nations' 'Water for Life' movement (http://www.un.org/waterforlifedecade/). The problem of waterborne disease in developing nations and the 'Water for Life' campaign were briefly introduced as "an international call for action and cooperation … and is committed to halving, by 2015, the number of people without access to safe drinking water", and participants were then asked to tick a box (yes or no) in response to the question: "Do you support the aims of this movement?" This constituted a self-categorization induction into the opinion-based group. Mackie et al. (2000) found this was sufficient to elicit group-based emotions in their research with groups based on opinions about social issues.

Measures were then taken of social identification, moral outrage, group efficacy, collective action intention constructs (items measuring other emotions and distal predictors of collective action intentions are not described here)[1]. Below we detail the general measurement strategy to each construct, while Table 1 more specifically details the number of items used to measure each of the key constructs in the three samples, as well as reliability of the scales. Each of the scales was internally consistent.

Social identification. Identification with the pro-'Water for Life' group was measured using two validated scales of social identification. The first was Cameron's

(2004) three-factor measure of social identification. Each sample answered items adapted from each of the sub-scales (see Table 1). Examples of these measures are: 'Being a supporter of programs such as 'Water for Life' is an important reflection of who I am' (centrality); 'I have a lot in common with other supporters of programs such as 'Water for Life'' (ingroup ties); 'In general, I'm glad to be a supporter of programs such as 'Water for Life'' (ingroup affect). These were supplemented with a second scale, which was developed by Bliuc et al. (2007) specifically to measure identification with opinion-based groups. Bliuc et al. argued that these identity certainty items should capture the importance of the group membership to the overall self-construct, as well as reflecting the amount of time spent thinking about that group membership. Examples of this scale are: 'I am confident that being a supporter of the 'Water for Life' movement really reflects my values and beliefs'; and 'I define myself as someone who is in favour of the aims of the 'Water for Life' movement'.

Moral outrage. Adapted from Montada and Schneider (1989), this item read: 'Considering the situation of those in developing nations, I feel outraged.' Additional adjectives were included (angry, irritated and livid; see Table 1) to improve reliability. Note that, although we differentiate between outrage and anger at a conceptual level (Thomas et al., 2009b), it is common for researchers in this area to use outrage adjectives to measure anger (e.g. Iyer, Schmader & Lickel, 2007; Leach, Iyer & Pedersen, 2006) and vice versa (Thomas & McGarty, 2009) because it is assumed that participants do not strongly differentiate between the two emotion terms (a similar argument can be made about shame and guilt).

Group efficacy. Group efficacy was measured with items adapted from van Zomeren et al. (2004). An example is: 'I feel that together the 'Water for Life' program will be able to improve the water situation in developing nations';

Collective action intentions. Commitment to undertake action to reduce disadvantage was measured by a series of items designed to represent an escalating degree of commitment to the cause. Examples are: 'I would sign a petition in favour of government support for the 'Water for Life' program'; 'I intend to support the 'Water for Life' movement by attending a rally which calls for greater government support for the initiative.' Other items were similar but regarded actions of donating money or attending a 'Water for Life' event.

Results

Preliminary Analyses

Given that Sample 1 used items on a 9-point scale and the other samples used an 11-point scale, our first step was to transform the scales to a comparable 11-point scale. No other transformations were applied.

Means, standard deviations, and correlations between variables for each of the three samples can be found in Table 2. It can be seen that there were moderate and significant correlations between social identification, outrage, efficacy and collective action intentions. Mean levels for the three samples were all moderate and around the scale midpoint.

Testing SIMCA

Multi-group structural equation modelling (SEM) was conducted using Amos 16.0 software. Multi-group SEM allows the user to constrain various paths in the model (that is, force them be constant across data sets), or to vary paths of the model (allow them to be different across all data sets, or across some data sets but not others). Table 3 shows the fit statistics for the models tested.

To judge model fit we report several widely accepted goodness-of-fit indices. The chi-square statistic is the most commonly reported. Good fit is indicated by a

small, nonsignificant chi-square statistic, so if $p < .001$ then the model shows poor fit by this criterion. A second set of commonly reported indices include Bentler's (1990) comparative fit index (CFI), a nonnormed index which compares the given model with a null model. Good fit is shown for the CFI when the values are greater than .90 (Ullman, 2001). Third, the root mean square error of approximation (RMSEA) corrects for model complexity and shows adequate fit when it is .10 or less (Ullman, 2001). Finally, we also report the Akaike Information Criterion (AIC), which is useful when comparing models that are not nested; a smaller value represents a better fitting, parsimonious model (Ullman, 2001).

We first tested a full SIMCA model (Model 1), where all regression weights for all of the paths were constrained to be equal. This model assumes that the unstandardized path weights in the model are the same across all three samples. The model included outrage, social identification and efficacy as direct predictors of collective action. There were also direct links from identity to outrage; and from identity to efficacy. The obtained model, with standardised path (beta) weights, is shown in Figure 3.

As can be seen in Table 3, this model yielded good fit. The chi-square was significant, however the chi-squares are notoriously unreliable with tests involving larger sample sizes > 250 and we will thus place less importance on this index in estimating model fit (Marsh, Balla & McDonald, 1988). On the other hand, the RMSEA and CFI indices showed good fit, indicating that it is possible to treat the three studies as homogeneous and that SIMCA fits the overall data well.

Figure 3 depicts the SIMCA model with standardised path weights. All paths are significant at $p < .001$ except for the identification-efficacy path, which is significant at $p < .05$ in each of the three sub-samples. Effects are small to moderate

(Cohen, 1988). Following Preacher and Hayes (2008), the indirect effect of identity on collective action was computed from unstandardized regression weights with 1000 bootstrap resamples. Consistent with results from the multi-group SEM, these analyses revealed that the indirect effect of identity on collective action through outrage was significant (*IE*=.11, *SE*=0.03, *95% CI*=.05,.18), but not for efficacy (*IE*=.05, *SE*=0.03, *95% CI*=-.01,.11), showing that the effect of identity on collective action is not significantly mediated by efficacy. Nevertheless, we conclude that these data provide solid support for SIMCA.

Testing EMSICA

We also used multi-group SEM to test EMSICA. As per our analyses above, we first tested the EMSICA model with all paths constrained to be the same across the three samples (Model 2). Note that the full model with all paths (including dotted paths as in Figure 4) would constitute a just-identified model, for which fit statistics cannot be computed in SEM. We first tested the strongest version of EMSICA, in which social identity completely mediates (encapsulates) the effect of outrage and efficacy. We then allowed for modifications of the strongest model to add direct paths where necessary to improve fit. The model included outrage and efficacy as direct predictors of social identification, and social identification as the sole predictor of action.

As can be seen in Table 3, the strong version did not fit the data well. Accordingly, based on modification indices, we added a direct path from outrage to action in the EMSICA model (Model 3). This yielded better fit on the key RMSEA and CFI indices, and the AIC statistic reduced showing that this was a better fitting, more parsimonious model (the chi-square still showed mediocre fit but is a less important indicator of fit with large sample sizes). This shows that it is possible to treat the three studies as homogeneous and that the EMSICA model fits the overall

data. The AIC criterion is very similar for both the SIMCA and the EMSICA models suggesting that neither model is clearly superior in capturing the relationships in these data.

The final EMSICA model can be seen in Figure 4 (note that all the standardized regression weights will be similar because we have constrained the unstandardized weights to be the same; differences are due to differences in sample standard deviations). All paths are significant at $p < .001$ and effects are moderate (Cohen, 1988). We again tested the indirect effect of outrage on collective action, and efficacy on collective action using bootstrapping. Consistent with results from the multi-group SEM, these analyses revealed that the indirect effect of outrage on collective action through identity was significant (*IE*=.18, *SE*=0.03, *95% CI*=.13,.24), as was the indirect effect of efficacy on collective action through identity (*IE*=.29, *SE*=0.04, *95% CI*=.22,.38). These analyses provide solid support for the modified EMSICA model.

Discussion

The current paper provides a test of the social identity model of collective action using social identities that have been shown to be strongly associated with collective action intentions (identities defined by a shared opinion; Bliuc et al., 2007). Overall, these studies provide solid support for the SIMCA model but also suggest that an alternative model of interrelations, the encapsulated model of social identity in collective action, usefully describes the data. It is worth briefly reviewing the predictions of these two models towards illuminating the implications of the current research.

Social Identity Processes Facilitate and Encapsulate Action-Relevant Constructs

SIMCA proposes that affective reactions to injustice (operationalised here as moral outrage), group efficacy and social identification are all direct predictors of

collective action. Furthermore, van Zomeren and colleagues (2008) accord a privileged role for identity in their model, in making it a key predictor of not only action but also the other two action-relevant constructs of injustice and efficacy. In this way, social identification can be seen to motivate action directly, as well as "through" the experience of group-level injustice and feelings of efficacy. In the current research we find support for the idea that identifying with a relevant group actively facilitates the experience of other action-relevant constructs (affective reactions and efficacy beliefs) and together contribute towards heightened commitment to act.

However, the results of the EMSICA model suggest that the privileged role of identity can also be seen in another light. Specifically, we showed that a model where social identification mediates the effect of affective reactions to injustice and group efficacy on commitment to action also describes the data well. That is, where "what it means" to be a supporter of the cause came to embody feelings of outrage and efficacy beliefs, it was this combination of affect and agency, captured in the context of a relevant group membership that strongly predicted commitment to act.

Our findings here in support of both conceptualisations of social identity processes emphasises the importance of considering multiple interpretations of such data and points to the dynamic and multi-faceted ways that social identity processes are likely to operate in the field (see Swaab et al., 2007; Thomas et al., 2009a). In some contexts, it seems plausible that belonging to a particular social group would facilitate, or give rise to, reactions to injustice and collective beliefs (as in SIMCA); in other contexts, the affective and belief reactions may occur first and shape an emerging social identity (as in EMSICA).

One plausible way around these difficult questions of causality is to consider reactions to injustice (cognitive and affective) and group efficacy beliefs as group normative products (Thomas et al., 2009a). We have shown elsewhere (Thomas & McGarty, 2009) that invoking outrage as a group norm significantly strengthens identification with a pro-change group (see also Tarrant, Dazeley & Cottom, 2009, who explored the role of an empathy norm; and Leonard, Moons, Mackie & Smith, 2010, who considered anger self-stereotyping and collective action). In this way group norms can both facilitate and encapsulate identity meaning because they are *built into the identity*. Put another way, it is not just that the emotion and efficacy stem from, or causally precede, identity but rather that they *inform* the collective self. One further implication of such an approach is that the causal orderings are less important than the overall pattern of alignment of identity, emotion, and belief.

Group Emotion and Efficacy: Direct or Indirect Effects?

The findings here also have interesting implications for the recent points of divergence in the collective action literature regarding the direct versus indirect effect of emotion on commitment to action (see commentaries by van Zomeren & Iyer, 2009; Wright, 2009). We found evidence for both a direct (SIMCA) and indirect (EMSICA) effect on commitment to action; though these results differed slightly for the efficacy and emotion pathways.

As regards the efficacy pathway, the effects were significant but small (by the standards recommended by Cohen, 1988). On the other hand, the outrage path to action showed stronger effects in our tests of the SIMCA model and it was necessary to include this path to create reasonable fit in our test of the EMSICA model. Again, though, the effects remained small compared to the effects observed in the rest of the model.

Why do we find these smaller direct effects for efficacy and emotion in our tests of SIMCA? One plausible answer, which resonates with our arguments above, is that it depends on the extent to which the contextually meaningful identity captures elements of these. Van Zomeren et al. were conducting a meta-analysis of all the available collective action literature, and included social identification with a social category, as well as social identification with a social movement in their development of SIMCA. However, van Zomeren and colleagues point out that identification with a social category is not a strong predictor of action (see also Stürmer & Simon, 2004). Thus, it seems likely that the mix of identities used in van Zomeren et al.'s (2008) meta-analysis may have meant that social identification was not as strong a predictor of action as it might be, and as such did not "obscure" the role of the other variables as we observe here. On the other hand, opinion-based groups have been shown to be excellent predictors of action (Bliuc et al., 2007). It is possible that using an identity that is strongly associated with action rendered the direct outrage and efficacy paths to action less important.

Limitations and Concluding Comments

Of course, we make these arguments based on correlational data, with all the concomitant concerns that this raises. Indeed, such a method as we have employed here is inevitably accompanied by relative strengths and weaknesses. One strength of survey data is that it is possible to look at the statistical evidence from field settings captured within a single measurement moment. However, the arguments presented here regarding the facilitative and encapsulating effects of social identity also resonate with the *experimental* methods of Swaab et al. (2007), who concluded that social identities are both a product of, and precursor to, shared cognition amongst group members (see also Stürmer & Simon, 2009; van Zomeren, Leach & Spears, 2010).

A related implication of the method we utilised is that it may have favoured the causal relations anticipated by EMSICA (rather than SIMCA) because the identity we explored in this case was one that was spontaneously emerging. That is, even though Water for Life is a long-term initiative of the United Nations it is likely that many of our participants were encountering this particular instantiation for the first time. It is possible then that identities were being formed, or at least being modified (if, for example, participants had some prior identification with the UN), spontaneously. Under these conditions it is possible that we might have obtained a pattern that is consistent with simultaneous encapsulation and less consistent with a model that assumes that some variables are antecedents of others. While this argument has considerable merit as a logical argument it is important to remember that all measures were taken at the same time. Further, we note that in this data the support for both models was equally robust. In order to disambiguate simultaneous from staged effects it would be important for future research to measure antecedents and consequences in a design with lags in time of sufficient size for naturalistic or experimentally induced changes in antecedent variables to have effects. While it is inappropriate to draw concrete conclusions regarding causation from the correlational data here, the results from Swaab et al. suggest that unravelling the dynamic processes underpinning group formation will be best informed by a variety of methods (Thomas et al., 2009a).

A second concern regards the generalisability of the findings. Given that we have applied this model only to the anti-poverty context, it could be that the effects we have observed here apply only to this particular context. Any model of collective action should be able to account for action across a variety of contexts and domains. It

remains for future research to investigate SIMCA's, and the EMSICA's, applicability in other contexts.

A final limitation concerns the distinction between action and action intentions. Van Zomeren and colleagues discuss the difficulties in quantifying and measuring actual collective action and note that many researchers have instead measured either attitudes towards action, or behavioural intention (as per Ajzen & Fishbein's, 1977, theory of planned behaviour). The current research falls into the latter category, where we measure collective action intentions as a proxy for collective action. While results of van Zomeren et al.'s meta-analysis showed that the main conclusions regarding SIMCA were supported by both action intention and actual behaviour, we agree that there is a need for more research to incorporate measures of actual behaviour.

Understanding the processes underpinning collective action rests on an increasingly sophisticated application of social identity principles (McGarty et al., 2009). This paper argues for a dynamic, iterative and multi-faceted conceptualisation of social identity in action, where social identity can both enable motivating emotions and beliefs; and / or be shaped by those same emotions and beliefs. We argue that groups based on shared opinions may be well-placed to capture both processes, as part of a continuing process of incipient identity formation amongst likeminded others, their politicisation, and transformation.

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Footnotes

[1] Note that the scales were administered in different order for the three samples. In Sample 1 the order was: social identification, moral outrage, group efficacy, action intention. In Sample 2 the order was: moral outrage, group efficacy, action intention, social identification. In Sample 3 the order was group efficacy, moral outrage, action intention, social identification.

Table 1.

Number of items and reliability of scales across the three samples

	Sample 1 [1] (general community) $N = 100$	Sample 2 [2] (psychology students) $N = 83$	Sample 3 [2] (university community) $N = 122$
Social identification	3 items (one from each Cameron, 2004, sub-scale) $\alpha = .72$	8 items (2 from each Cameron, 2004, sub-scale; 2 from Bliuc et al., 2007) $\alpha = .79$	16 items (full scale. 12 from Cameron, 2004; 4 from Bliuc et al., 2007) $\alpha = .84$
Moral outrage	1 item	2 items (outrage, anger) $\alpha = .92$	4 items (outrage, anger, irritated, livid) $\alpha = .90$
Group efficacy	3 items $\alpha = .81$	2 items $\alpha = .87$	3 items $\alpha = .73$
Collective action intentions	4 items $\alpha = .81$	5 items $\alpha = .85$	8 items $\alpha = .92$

[1] Items measured on a nine-point Likert-type scale ranging from 1 ('Strongly disagree') to 9 ('Strongly agree').

[2] Items measured on an eleven-point Likert-type scale ranging from 1 ('Strongly disagree') to 11 ('Strongly agree').

Table 2.

Means, standard deviations and correlations between variables for three samples

		M	*SD*	Social Identification	Outrage	Group Efficacy	Action Intention
Social Identification	Sample 1	5.84	1.50	-			
	Sample 2	5.42	1.43	-			
	Sample 3	5.84	1.39	-			
Outrage	Sample 1	5.93	2.23	.48***	-		
	Sample 2	6.40	2.12	.40***	-		
	Sample 3	5.79	2.41	.40***	-		
Group efficacy	Sample 1	6.84	1.26	.60***	.43***	-	
	Sample 2	7.42	1.80	.35***	.16	-	
	Sample 3	7.27	1.77	.44***	.40***	-	
Action Intention	Sample 1	4.96	1.36	.54***	.37***	.36***	-
	Sample 2	5.52	1.91	.70***	.50***	.70***	-
	Sample 3	5.61	2.04	.73***	.52***	.43***	-

*** $p < .001$

Table 3.

Fit statistics of three multi-group structural equation models

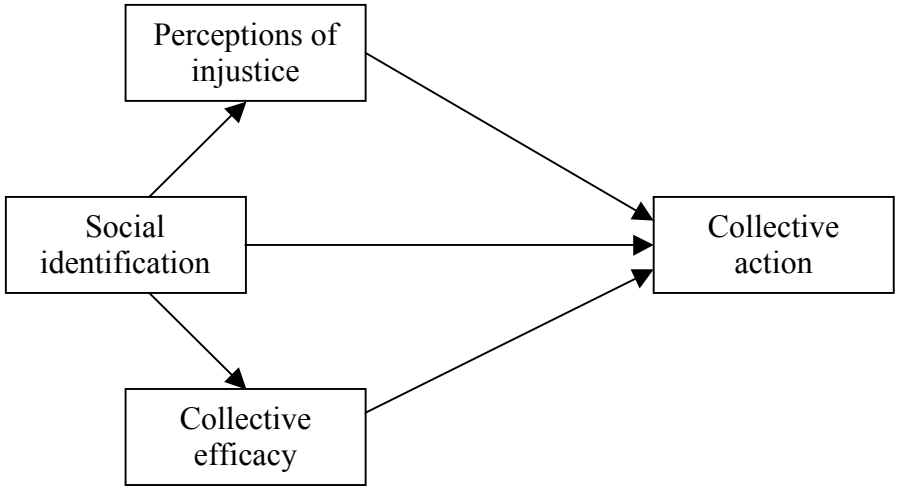
	Model Constraints	χ^2 (df)	CFI	RMSEA	AIC
SIMCA Model 1	All regression weights fixed to be equal	39.47 (13)***	.92	. 08	73.48
EMSICA Model 2	All regression weights fixed to be equal	65.76 (14)***	.85	.11	97.76
EMSICA Model 3	Added extra outrage path, all regression weights fixed to be equal	41.04 (11) ***	.91	.09	79.02

Figure 1. The social identity model of collective action (van Zomeren, Postmes & Spears, 2008).

Figure 2. The encapsulation model of social identity in collective action (Thomas, McGarty & Mavor, 2009).

Figure 3. The social identity model of collective action. The values for the model obtained for Sample 1 are to the left of the oblique, Sample 2 in the middle, and Sample 3 on the right. All paths are significant at $p < .001$ except where indicated with * which is $p < .05$.

Figure 4. The encapsulation model of social identity in collective action. The values for the model obtained for Sample 1 are to the left of the oblique, Sample 2 in the middle, and Sample 3 on the right. All paths are significant at $p < .001$.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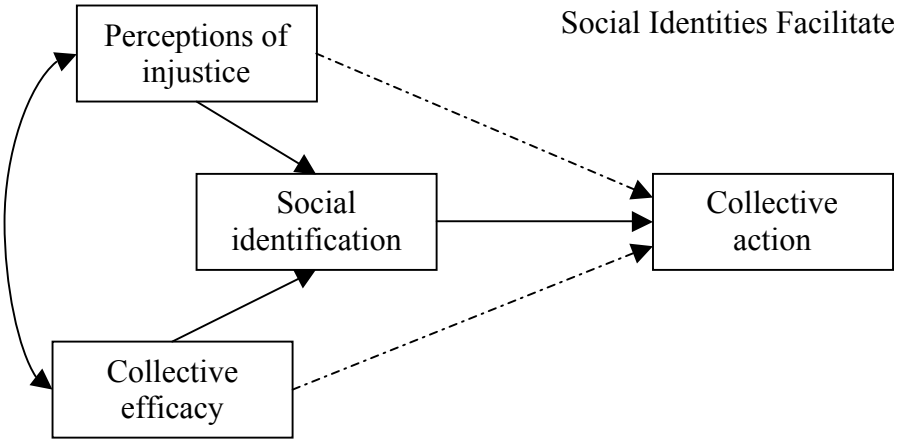
Social identification
Collective action
Collective efficacy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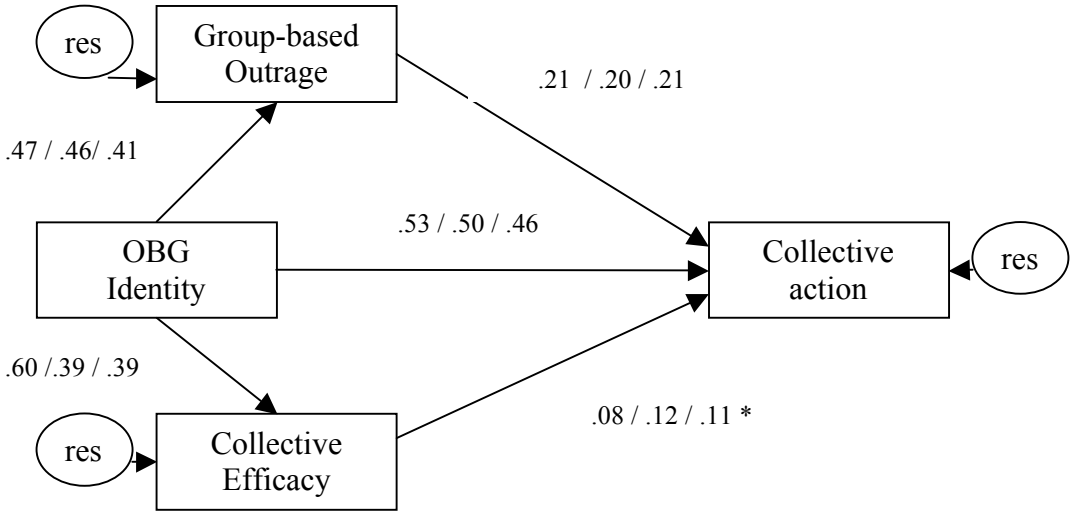
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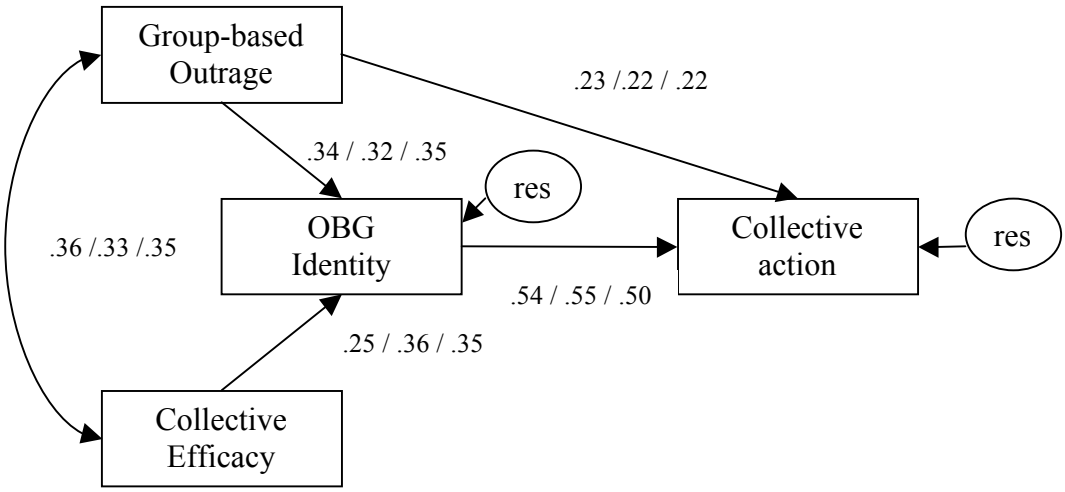
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