

International Journal of Conflict Management
Vol. 15, No. 2, pp. 110–143

COST-BENEFIT ANALYSES FOR YOUR GROUP AND YOURSELF: THE RATIONALITY OF DECISION-MAKING IN CONFLICT

Winnifred R. Louis
University of Queensland, Australia
Donald M. Taylor
Tyson Neil
McGill University, Canada

Two studies in the context of English–French relations in Québec suggest that individuals who strongly identify with a group derive the individual-level costs and benefits that drive expectancy-value processes (rational decision-making) from group-level costs and benefits. In Study 1, high identifiers linked group- and individual-level outcomes of conflict choices whereas low identifiers did not. Group-level expectancy-value processes, in Study 2, mediated the relationship between social identity and perceptions that collective action benefits the individual actor and between social identity and intentions to act. These findings suggest the rational underpinnings of identity-driven political behavior, a relationship sometimes obscured in intergroup theory that focuses on cognitive processes of self-stereotyping. But the results also challenge the view that individuals' cost–benefit analyses are independent of identity processes. The findings suggest the importance of modeling the relationship of group and individual levels of expectancy-value processes as both hierarchical and contingent on social identity processes.

Keywords: Identity & Conflict, Social Identity, Expectancy-Value Processes, Decision-Making

Note: The present research was supported in part by a doctoral fellowship from the Social Sciences and Humanities Research Council of Canada (SSHRC) to the first author. We thank Richard Lalonde, Deborah Terry, Matthew Hornsey, and Kelly Fielding for their comments on earlier drafts. Correspondence concerning this article should be addressed to Winnifred R. Louis, School of Psychology, University of Queensland, McElwain Building, St. Lucia, QLD, 4072, Australia. (wlouis@psy.uq.edu.au)

Intergroup relations since the end of the Cold War have been characterized by a resurgence of “hot” wars: not only conventional wars of national interests, but also of ethnic nationalism and religious fundamentalism. By contrast, in other nations manifest societal inequality continues to be met by its victims with puzzling inaction, with devastating social consequences of its own. Faced with social inequality or aggression, the individual chooses from a large array of potential responses, such as avoidance and passivity, protest and activism, mediation and negotiation, or revolutionary and terrorist militarism. The processes that shape choices among responses to conflict are thus of social as well as theoretical interest.

In the present paper, decision-making models for rational choices to benefit the self are integrated with intergroup theorizing which provides an understanding of social identity motives for pro-group action. Identification is argued to moderate two relationships that impact on decision-making: creating links between the perceived consequences of action for the group and the consequences for the individual actor, and links between the perceived consequences of action for the group and action intentions. When individuals psychologically identify with social groups, evaluations of the consequences for the individual of choosing a specific conflict behavior are derived from perceptions of the consequences for the group. Perceptions of group-level consequences may thus indirectly motivate behavior, by shaping perceptions of individual-level consequences. In addition, identification is argued to create a direct link between the perceived consequences of action for the group and action intentions. When individuals psychologically identify with social groups, then intentions to engage in a given conflict behavior are independently motivated by perceptions of the consequences for the group. Evaluation of the consequences of behavior for the group mediates the effects of identification on intentions to act. Thus, the effects of identity on choices among potential responses to conflict may be more rational than has hitherto been argued, in the sense that identity-behavior links for conflict choices are mediated by expectancy-value processes at the group level. Following on from this, however, the rationality of cost-benefit analyses for potential responses to conflict may be contingent on a group-level of analysis which deserves more attention in models of decision-making in conflict.

What is Social Rationality?

Applied decision-making research has historically been oriented towards conscious deliberation, emphasizing individual-level cost-benefit analyses (Feather, 1982), or rational choices. In rational choice models, individuals selecting among behavioral alternatives are proposed to weigh the costs for each option against the possible benefits along a dimension of subjective expected utility (Savage, 1954; von Neumann & Morgenstern, 1944). The evaluation is a multiplicative function of two variables: expectancy, or the subjective probability that a cost or benefit will occur if behavior is performed, and subjective utility, the extent to which an individual values each of the costs and benefits. The rank order of the various behavioral alternatives (i.e., from best to worst possible consequences) of a given decision may be determined quantitatively.

The International Journal of Conflict Management, Vol. 15, No. 2

In research domains concerning conflict and collective behavior, expectancy-value models have not fared well (e.g., in organisational decision-making: Halpern & Stern, 1998; in political science: Green & Shapiro, 1994; Ostrom, 1998). A wide variety of cognitive deviations from linear expectancy-value processes have been observed, such as the use of heuristics, insensitivity to Bayesian probability and base rate information, or asymmetric processing of costs and benefits (see e.g., Kahneman, 1994; Kahneman & Tversky, 1979; Simon, 1956). These cognitive constraints on rational choice continue to engage decision-making researchers (Dawes, 1998). But research on collective and conflict behavior draws particular attention to *social* deviations from the economic model, which understands rational choices as maximizing individuals' immediate material self-interest.

The narrow economic model substantially overpredicts anti-social behavior and underpredicts cooperation in social decision-making (e.g., Batson, 1999; Bazerman, Gibbons, Thompson, & Valley, 1998; Davis & Holt, 1993). In social contexts, rather than disregarding non-material outcomes, individuals are empirically observed to be motivated by the approval of significant others and by personal moral imperatives such as internalized societal norms for fairness and reciprocity (e.g., Manstead, 2000; Martin, 1986; McLean Parks et al., 1996). Key social abilities such as *trusting* allow individuals to overcome social dilemmas and achieve joint outcomes in excess of the economic model's predictions (e.g., Insko et al., 2001; Insko & Schopler, 1998; Linskold, 1978). Moreover, rather than seeking universally to maximise individual or personal self-interest, individuals are influenced by others' outcomes in relational and intergroup social contexts (McLean Parks & Smith, 1998; Messick & Mackie, 1989; Pruitt, 1981, 1983; Tajfel & Turner, 1979; Turner, Wetherell, & Hogg, 1989). Accumulated empirical and theoretical research thus suggests that the individuals' self-concept can expand to include interpersonal and group others, changing considerations of rational self-interest (Aron, Aron, Tudor, & Nelson, 1991; Tajfel & Turner, 1979; McLean Parks & Smith, 1998).

The decision-making processes triggered by identification to transform rational self-interest are not well understood, however. In the present paper, three socio-cognitive models of identity-based decision-making and their implications for conflict and dispute resolution are reviewed. As we elaborate below, *parallel models* imply that identity-based decision-making operates independently of rational decision-making via social influence by ingroup members and self-stereotyping (e.g., Simon & Klandermans, 2001). Dispute resolution techniques resting on outsiders' interventions, or appealing to rational interests, are irrelevant to group members' decisions unless a superordinate group identity can be activated to frame the conflict as within-group. *Mediational models* imply that group processes shape decision-making when they impact on rational consideration of individual-level outcomes (e.g., Fishbein & Ajzen, 1975). Dispute resolution is seen to be effective to the extent that individual-level material or social rewards for cooperation can be generated for group members. The present paper advances a *hierarchical model* of group-level rationality. In the hierarchical model, group-level consequences of conflict choices are associated with action and with individual-level consequences as a function of identification. Evaluation of these group-level consequences is

The International Journal of Conflict Management, Vol. 15, No. 2

proposed to mediate the identity-behavior relationship. The model provides a socio-cognitive understanding of the empirically observable phenomenon that dispute resolution success does not rest on the provision of individual-level rewards for cooperation, nor rely only on social influence via self-stereotyping.

Figure 1a
Mediated Model (e.g., Theory of Planned Behavior: Ajzen, 1985)
Individual Level Variables Mediate Effects of Context (group level)

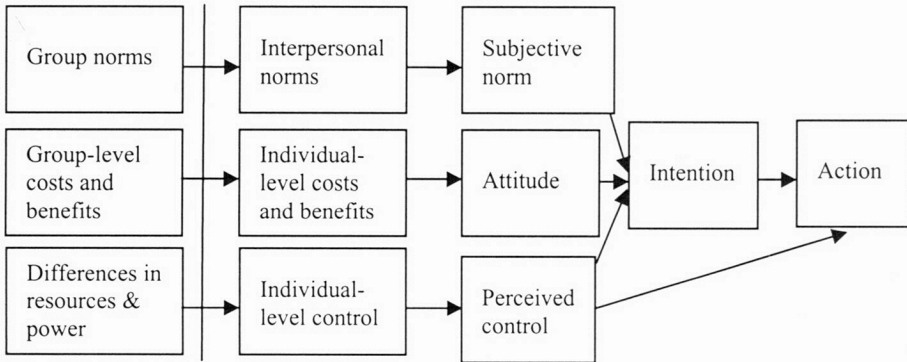


Figure 1b
Parallel Model (e.g., Simon et al., 1998) Group and Individual
Levels of Analysis Independently Influence Behavior
Effect of Identification is Non-Rational

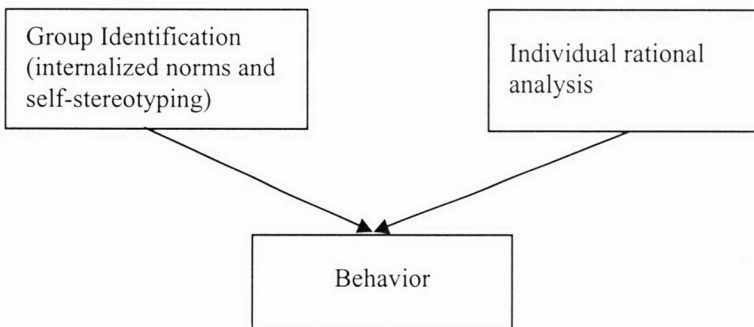
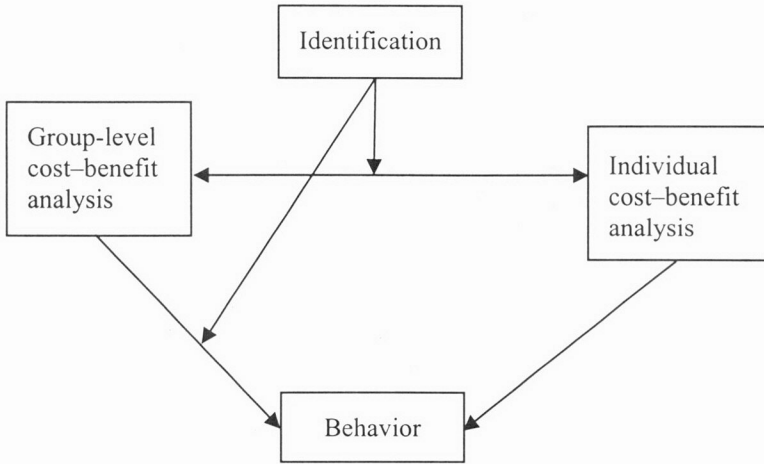


Figure 1c
Hierarchical Model
Identification Moderates Link Between Group- and Individual-Level Cost-Benefit Analysis, and Between Group-Level Analysis and Behavior
Effect of Identification on Behavior is Mediated by Group-Level Cost-Benefit Analysis



Models of Group-level Rationality

Parallel Models

Within intergroup research, a strong argument has been made that identity processes operate in parallel to individualistic rational choices, which are overridden when identification is engaged. Social identity theory (Tajfel & Turner, 1979) proposes that a qualitative change in behavior, attitudes, and perception occurs when individuals shift from self-construal as an individual (personal identity) to self-construal as a group member (social identity). According to social identity theorists (see also Hogg & Turner, 1987; Turner et al., 1989), when individuals perceive themselves as unique individuals, different from their peers, then individual-level variables drive behavior. By contrast, when individuals perceive themselves as group members, similar to other members of the ingroup but different from relevant outgroups, then group-level variables drive decision-making. Social identity theory proposes that self-categorization as a group member and identification with the group are necessary and sufficient preconditions for pro-group action. Identification reflects both chronic factors such as the learned relevance of particular group memberships to particular contexts, and situational factors such as the cognitive accessibility of the identity as a function of priming (Turner & Oakes, 1997). As individuals' self-categorization shifts along a dimension from personal to social identity motivation is increasingly derived from the group level and pro-group action is increasingly likely.

The International Journal of Conflict Management, Vol. 15, No. 2

More specifically, in group contexts, behavior, interpersonal norms, and attitudes are thought to be derived from ingroup norms (Terry & Hogg, 1996; Terry, Hogg, & White, 1999). When aspects of the social structure or situation make a group identity salient, ingroup norms become salient along with the identity. The individual internalizes these ingroup norms as “normative attitudes” (i.e., attitudes congruent with the norm), which serve as a basis for action via a cognitive process of self-stereotyping that need not involve rational cost–benefit analysis.

A great deal of evidence supports the contention that ingroup norms can short-circuit analyses about costs and benefits and cue behavior “unthinkingly” (e.g., Fleming & Petty, 2000; Mackie, Gastardo-Conaco, & Skelly, 1992; Mackie & Quellar, 2000; Mackie, Worth, and Asuncion, 1990). And while identification is associated with higher levels of collective, pro-ingroup action (Brewer & Brown, 1998; Ellemers, 1993), the tendency of strongly identified individuals to engage in pro-ingroup behaviors can be *independent* of individual-level cost–benefit analyses for the behavior (e.g., Kelly, 1993; Kelly & Breinlinger, 1995; Simon & Klandermans, 2001). Identity processes are argued to operate quite separately from rational choice concerns: “If I know who I am, then I also know what to do, *no matter what the consequences are*” [Simon et al., 1998, p. 656 (*italics added*); see also Simon & Klandermans, 2001]. Social identity theory evolved in part in opposition to rational models such as realistic conflict theory (Sherif, 1966) and thus has traditionally made quite a strong determinist argument that the link between identity, norms, and pro-group actions is independent of rational choice concerns: In social contexts, people act out internalized group norms determining appropriate behaviors, whereas the rational analysis of costs and benefits is what occurs in contexts that do not activate a group identity.

Mediated

By contrast, in applied decision-making models, group-level factors such as social category memberships are thought to influence behavior only when they imply consequences for individual actors (Fishbein & Ajzen, 1975), or change actors’ control contingencies (Ajzen, 1985). The theories of planned behavior (Ajzen, 1985, 1991) and reasoned action (Fishbein & Ajzen, 1975) derive intentions to engage in particular behaviors from expectancy-value processing. In the reasoned action model, *behavior* is predicted from *intentions*, which are predicted independently by *attitudes* (the summary of instrumental expectancy-value calculation) and *norms* (the summary of social expectancy-value calculation). One’s evaluation of a behavior as good or bad, the attitude, is an internalized summary of the probability (expectancy) and importance (value) of material costs and benefits associated with particular behaviors. Similarly, social outcomes associated with particular behaviors are internalised as the subjective norm, which varies as a function of significant others’ expected reactions (interpersonal norms), weighted by actors’ motivations to comply with each interpersonal source.

In these models, whereas material costs and benefits are external outcomes, social costs and benefits are psychological outcomes created by violating or fulfilling the expectations of significant others with whom one is motivated to comply. Individuals perceive the behavior as antinormative if the significant others

The International Journal of Conflict Management, Vol. 15, No. 2

would disapprove; if so, individuals are inhibited regardless of whether the significant others are able to monitor the behavior (see also Batson, 1999; Halpern, 1997). When individual, cultural, and contextual differences make salient social factors, internalized norms become more motivating (Ajzen, 1991; see also Trafimow & Finlay, 2001).

As in strong economic models, these mediated models see the individual level of analysis as primary, with behavior driven by rational evaluation of personally-valued and likely outcomes. Unlike economic models, however, applied decision-making models allow social costs and benefits to influence decision-making independently, and position internalized representations of the outcomes as proximal determinants of action.

The planned behavior model (Ajzen, 1985, 1991) also adds to the reasoned action model (Fishbein & Ajzen, 1975), a third predictor of intentions, *perceived control*. If individuals believe that if the behavior is attempted it will be achieved, intentions will be higher. Perceived control is also proposed to moderate the intention-behavior link, such that the relationship will be stronger when the behavior is under the individuals' control. Thus, where behaviors vary within contexts as a function of social category memberships such as gender (e.g., Halpern & McLean Parks, 1996) or culture (e.g., Tjosvold & Sun, 2001; Trafimow & Finlay, 2001; Tyler, Lind, Ohbuchi, Sugawara, & Huo, 1998), individual differences in rational behavioral beliefs are thought to mediate the effects of group membership. For example, men and women might rationally differ in violent behavior in interpersonal conflicts as a function of different social expectations for violent women and men; if women compared to men differentially evaluate the likelihood or deterrent value of material outcomes such as jail terms; or if women are differentially able to access weapons and therefore differ from men in perceived and actual control to act out violent intentions.

The distal role of group-level variables in shaping the individual level of analysis has rarely been studied empirically within planned behavior research, however. Rather, the model rests on a logical foundation (e.g., Hardin, 1968; Olson, 1968). In applied decision-making research, the independence versus interdependence of material and social expectancy-value processing has been challenged both at a theoretical level (e.g., Liska, 1984; cf. Trafimow & Finlay, 2001) and empirically (e.g., Vallerand, Deshaies, Cuerrier, Pelletier, & Mongeau, 1992). However, applied decision-making models provide both a theoretical rationale and empirical evidence for the contention that internalized social expectations impact on rational utility at the individual level. Dozens of empirical studies testify to the predictive value of the models (see e.g., Ajzen, 1991). Successful public policy programmes and interventions have been based on attempts to identify and change beliefs regarding the probability and value of social and material outcomes (e.g., for HIV prevention/condom use, see Albarracín, Johnson, Fishbein, & Muellerleile, 2001). Yet in studies of choices among potential responses to conflict individual level rational calculations have been observed to be a poor predictor (e.g., Bazerman et al., 1998; Kelly, 1993; Simon et al., 1998). Even the subjective norm, as a measure of internalized social expectations, does not capture the effects of

identity processes in decision-making (Terry & Hogg, 1996; Manstead, 2000; Sparks, 2000).

Hierarchical

We argue in the present paper that identity-based decision-making in conflict need not involve irrational self-stereotyping and conformity to group norms, and need not be mediated through the individual level of expectancy-value processing. These arguments are conceptually independent: both may be wrong. First, although identification may often trigger self-stereotyping (Terry & Hogg, 1996), in group-relevant social decision-making identification increases attention to and consideration of persuasive arguments (Fleming & Petty, 2000; Mackie et al., 1990, 1992; Mackie & Quellar, 2000). Indeed, the social identity model states that as a function of identification individuals base their decisions on group-level variables, allowing implicitly for a group-level rationality (Hogg & Turner, 1987; Turner et al., 1989). In group-relevant contexts, then, perhaps identification influences behavior because behaviors vary in their consequences for groups as well as individuals, and these consequences are differentially motivating as a function of identification (see also Brewer & Silver, 2000). Identification moderates the effects of group-level consequences on individual-level consequences, and on intentions to act, creating an indirect relationship in contexts of salient group identification. Group-level consequences are also proposed to exert direct effects, however, and to mediate the identity-behavior link.

A cognitive rationale for a hierarchical relationship between group-level expectancy-value processes and action contingent on identification may also be inferred from research on attitude-behavior consistency. Identification is associated with motivational processes that reinforce attitude-behavior consistency: learning to consider the group-level of analysis relevant to decisions (Boninger, Krosnick, & Berent, 1995; Conover, 1988), and vesting the group level with motivational force (see Sivacek & Crano, 1982). That is, high identifiers may have learned to value certain group-level consequences over others, or to perceive some group-level consequences of action or inaction as more probable than those who weakly identify. Group-level costs and benefits could be considered relevant and motivating to identified group members, without implying personal costs and benefits (cf. Turner & Reynolds, 2001). Second, social identity might lead individuals to place more weight on group-level consequences in choosing certain actions over others, not just as a function of conscious learned relevance, but also as a function of attitude accessibility derived from high identifiers' historical engagement with the pro-group action. In attitude behavior research, prior experience in the decision-making context (Regan & Fazio, 1977), past behavior (Bentler & Speckart, 1979; Triandis, 1977), and prior knowledge (Kallgren & Wood, 1986) have been found to moderate attitude-behavior consistency. Effects of these variables are observed in political contexts, such that experience (Wilson, Kraft, & Dunn, 1989) and prior knowledge (Krosnick, 1990) have been associated with political attitude-behavior consistency, and past behavior has been found to predict voting over and above the effects of expectancy-value processes (Echabe, Rovira, & Garate, 1988). If high identifiers are likely to have a greater history of prior experience in the decision-

The International Journal of Conflict Management, Vol. 15, No. 2

making context, to have engaged in pro-group behavior in the past, and to have acquired knowledge of the conflict, then high identifiers' group-level cognitions may also be more accessible psychologically and thus more likely to drive behavior than low identifiers', independent of differences in individual-level perceptions.

The present paper, therefore, proposes to examine the relationship between social identity and cost-benefit perceptions in intergroup conflict. Conflict behaviors are seen to vary in the extent to which they generate benefits or avoid costs for the group as well as the actor. A strong mediational model (Figure 1A) suggests that group-level consequences will be motivating if they are associated with individual-level cost-benefit perceptions: the individual level will predict behavior directly and mediate all group effects. A strong parallel model (Figure 1B) attributes the identity-behavior link found in previous research to internalized norms and self-stereotyping processes, independent of rational analysis of consequences. The model suggests that group- and individual-level cost-benefit perceptions can be independent and that the identity-behavior link need not be mediated by either level of cost-benefit analysis. By contrast, we propose in the present paper a hierarchical model of group-level rationality, wherein group-level consequences will be associated with action as well as evaluations of the individual-level consequences of conflict choices as a function of identification. Identification moderates the effects of group-level consequences on intentions to act as well as evaluations of individual-level consequences. Evaluations of group-level consequences are proposed to mediate the identity-behavior relationship.

Study 1

Study 1 assessed the degree to which political identification was associated with expectancy-value processes for the individual actor and for the actor's political group for electoral behaviors in Québec. The province of Québec is largely Francophone, and coexists uneasily in federation with predominantly Anglophone Canada. Since the 1960s, a politically-organized sovereigntist movement has promoted Francophone rights and championed the political independence of the province, drawing its support from Francophone Québécois (see Linteau, Durocher, Robert, & Ricard, 1991). A federalist movement, opposing secession, is supported by a majority of Anglophone Québécois and a minority of Francophones.

The present study was conducted in the month leading up to a provincial election. Participants varying in identification with federalist and sovereigntist political groups generated and evaluated lists of costs and benefits for an array of potential responses to conflict. Participants listed consequences both for themselves as individual actors and for their political group if individualistic actions (e.g., abstaining from voting) versus pro-group actions (e.g., volunteering) were performed. Participants then completed subjective expectancy and value ratings for these costs and benefits. In past research social identification has empirically been observed to predict pro-group actions, whereas low identification predicts individualistic actions (see e.g., Ellemers, 1993; Messick & Mackie, 1989). The question is whether this identity-behavior link is independent of cost-benefit analyses

(parallel model), a function of individual-level analyses (mediational model), or associated with group *and* individual level analyses (hierarchical model).

In the present study, we measure high and low identifiers' expectancy-value processes for self and group (level of analysis) and for individualistic versus pro-group behaviors (type of action). In accordance with the hierarchical model (Figure 1c), a three-way interaction is predicted (Hypothesis 1). Specifically, it is hypothesized that participants who identify strongly with their group will derive individual-level costs and benefits from the group level, while those who do not identify with the group will dissociate the individual and group levels of analysis. High identifiers will perceive that the individualistic behavior will harm their group and themselves (Hypothesis 2), while low identifiers will perceive that individualistic action will harm the group but benefit themselves (Hypothesis 3). High identifiers will perceive that the pro-group behavior will benefit their group and themselves (Hypothesis 4), while low identifiers will perceive that pro-group action will benefit the group but harm themselves (Hypothesis 5).

Method

Participants

Eighty-four students from a large English-language university in Québec were recruited to participate in the present study. Participants were required to be at least 18 years old and to have lived in the province for at least ten years to be included in the study. A minority of students at the university are visitors from out of province or from the United States, and the procedure was designed to screen out participants who were uninvolved in Québec politics or ineligible to vote.

Procedure

Participants were approached in English in the central student building of an English-language university in Québec. If they met the screening criteria, participants were invited to complete a survey dealing with behaviors involving the upcoming provincial election. After completing the survey, participants were thanked, verbally debriefed, and given contact information for the experimenter.

Materials

Social Identity. Participants self-identified as federalists (i.e., opposed to the political separation of Québec), sovereigntists (in favor of the political separation of Québec), or neutral/undecided, and evaluated the extent to which their political identity was important in their everyday lives on a ratings scale ranging from 0 (not at all important) to 10 (extremely important). Four neutral/undecided participants were excluded from the analyses below.

Action Evaluations. Respondents evaluated behaviors selected from a list of twenty individualistic and pro-group election-related actions: For example, individualistic behaviors included, "Taking the four hours off work that employers have to give on election day but not voting". Pro-group behaviors included actions such as "Doing volunteer work for the party that supports your group's political cause." Each of the actions was listed on a separate page above a table divided into

four quadrants labelled, "Benefits for you," "Benefits for your group," "Costs to you," and "Costs to your group." Participants could write any consequences of the behaviors that came to mind, listing costs or benefits that they perceived for themselves or for their group in the appropriate quadrant. In addition, for each consequence that they generated, participants evaluated the subjective value, on a scale from 0 (unimportant) to 10 (very important), and subjective probability, on a scale from 0 (impossible) to 100% (guaranteed).

Two *expectancy-value scores* were then calculated for each behavior, for the individual actor and for the group as a whole, by multiplying the subjective value of each consequence by the subjective probability, summing for all the benefits listed, and subtracting all the costs. The variables were rescaled so that they could range from -25 (only guaranteed, important costs perceived) to +25 (only guaranteed, important benefits perceived).

Results

Participants were divided into High (> 7 , $n = 36$) and Low (≤ 7 , $n = 44$) identifiers on the basis of a median split on their level of political social identity, in order to simplify the analysis and presentation of the hypothesized three-way interaction. A mixed model Analysis of Variance (ANOVA) was conducted with Social Identity (High/Low) as a between-subject variable, Type of Behavior (Pro-group/Individualistic) and Level of Analysis (Individual Actor/Group) as within-subject variables, and the expectancy-value scores as dependent measures. Table 1 presents the means and intercorrelations for these variables.

Table 1
Means, Standard Deviations, and Intercorrelation Among Variables (Study 1)

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Benefits to self of individualistic	.16	5.32					
2. Benefits to group of individualistic	-1.63	5.05	.50*				
3. Benefits to self of pro-group	.07	4.98	.12	.18 ⁺			
4. Benefits to group of pro-group	2.45	4.14	.07	.16	.47*		
5. Social Identity	.45	.50	-.21 ⁺	-.01	.19 ⁺	.11	

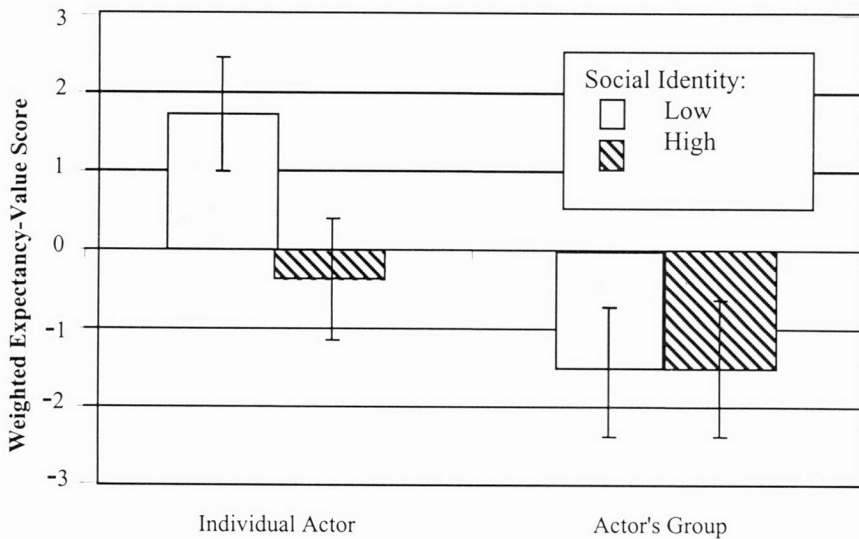
⁺ $p < .10$. * $p < .05$.

In general, pro-group behavior was considered more beneficial than individualistic behavior, $F(1, 78) = 11.80$, $p < .01$, $\eta^2 = .13$, but this main effect of type of behavior was qualified by two-way interactions with level of analysis, $F(1, 78) = 32.65$, $p < .001$, $\eta^2 = .30$, and with social identity, $F(1, 78) = 4.50$, $p < .05$, $\eta^2 = .06$, and (confirming hypothesis 1) by a three-way interaction of identity, level of analysis, and type of behavior, $F(1, 73) = 5.26$, $p < .05$, $\eta^2 = .07$. High and low identifiers' evaluations of the consequences of individualistic versus pro-group

The International Journal of Conflict Management, Vol. 15, No. 2

action for the actor and group were compared using simple effect tests. Individualistic action (Figure 2A) was perceived to harm the actor's group by both high identifiers ($M = -1.52$) and low identifiers ($M = -1.56$), $F(1, 73) < 1$, *ns*. However, while high identifiers perceived that individualistic action would harm them ($M = -.37$), low identifiers perceived individualistic behaviors would benefit them ($M = 1.72$), $F(1, 73) = 8.71$, $p < .01$. Thus, high identifiers associated harm to the group and to themselves (hypothesis 2), while low identifiers dissociated the two (Hypothesis 3). In contrast, pro-group action (Figure 2B) was perceived to benefit the group by both high identifiers ($M = 3.11$) and low identifiers ($M = 1.49$). High identifiers did consider the benefits of collective action to the group to be more important than low identifiers did, $F(1, 73) = 5.36$, $p < .05$. But in addition, high identifiers perceived pro-group action would benefit them personally ($M = 1.35$), whereas low identifiers perceived pro-group action as personally harmful ($M = -1.42$), $F(1, 73) = 15.22$, $p < .001$. Thus, high identifiers associated benefits to the group and to themselves (Hypothesis 4), while low identifiers dissociated the two (Hypothesis 5).

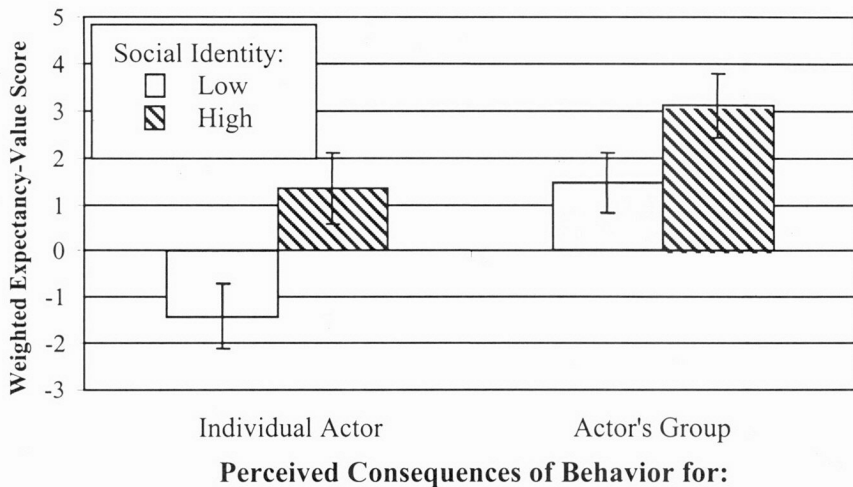
Figure 2a
Perceived Consequences of Individualistic Action for the Actor and the Actor's Group as a Function of Social Identity



Perceived Consequences of Behavior for:



Figure 2b
Perceived Consequences of Pro-group Action



Discussion

Participants' social identity influenced expectancy-value calculations, in the present study. Perceptions of the consequences of potential responses to conflict differed systematically between high and low identifiers, in a pattern consistent with the large body of past intergroup research which shows that high identifiers are more likely to engage in pro-group action and less likely to engage in individualistic actions (see e.g., Brewer & Brown, 1998). Whereas some research and theory suggests that social identity and rational cost-benefit analyses provide independent motivations to engage in collective action, the present study suggests that the distinction between identity- and rationality-based decisions may be blurred, in conflict choices for high identifiers. For those who identify as part of a group, individual-level rational choices are associated with group-level outcomes, while for those who do not identify, the levels of analysis remain independent.

Two methodological issues in Study 1 qualify the confidence with which the results can be generalized. First: commitment to political group was associated with cost-benefit analyses for political behaviors in Study 1; can the presence of identity effects on cost-benefit analyses be demonstrated with other social category identities? Second, a single-item measure of identification was employed in Study 1. Significant effects were observed, suggesting that the power of the study was not compromised, but a multi-item measure would increase reliability and confidence in the stability of the findings.

More broadly, Study 1 did not directly assess intentions, nor the role of expectancy-value analyses in *mediating* the relationship between social identity

and behavior. Past social identity research has observed a “direct link” between identity and intentions, and studies which have examined intergroup expectancy-value processes have concluded that identity and rational decision-making are two separate, independent paths to collective action (Kelly, 1993; Simon et al., 1998). By contrast, a very large literature in applied decision-making suggests that effects of distal group-level variables on decision-making will be fully mediated by individual-level variables (Ajzen, 1991; Fishbein & Ajzen, 1975). Thus, the influence of group-level expectancy-value processes on evaluations of individual-level costs and benefits, and on the relationship between identity and intentions, is of considerable theoretical interest.

Study 2

These concerns were addressed in a follow-up study. To assess the generalizability of the results beyond the political arena, the relationship of ethnolinguistic identification with pro-group behavior was assessed. A multi-item measure of identification was employed to increase confidence in the reliability of the construct and the stability of the results. More broadly, Study 2 attempted to replicate the association between higher levels of social identity and favourable expectancy-value analyses of pro-group action in intergroup conflict; and to test the role of expectancy-value analyses in the relationship between identity and action by including measures of behavioral intentions. In addition, in Study 2 an individualistic rational choice model (planned behavior: Ajzen, 1991) was explicitly measured, in order to model the mediational relationship of attitudes and group- and individual-level cost-benefit analyses. Finally, a context manipulation was included, evaluating the decision-making behaviors of Anglophone Québécois in individual and intergroup contexts. Since the same variables are measured in each context, it is possible to test the moderating role of identification in an intergroup context on the relationship between group- and individual-level cost-benefit analyses and intentions.

In Study 2 then, identity, perceptions of group- and individual-level costs and benefits, and attitudes, norms, control, and intentions were measured for individual behavior (exercising) and intergroup behavior (attending a rally), and decision-making models were compared for the two behaviors.¹ In Study 1, expectancy-value evaluations of pro-group actions were contrasted with those of individualistic actions that would benefit the individual at the group's expense, and an effect of social identity was observed for both types of behaviors. However, Study 2 contrasted the effects of group- and individual-level expectancy-value processes on behaviors that would benefit the group (intergroup context) versus those that would

¹Of course, in addition to differing in the variables measured here (personal costs, social norms, perceived control, group costs, and relationship with identification), exercise and rallying differ in *frequency* and *routinization*. Most participants may have exercised more often than rallied, and exercising may be more likely to be habitual or routine. However, unless there were an interaction of exercise history and identification as an Anglophone, these effects of routinization would not qualify the results here. In fact there is a null relationship between identification and exercise intentions, as described below.

be unrelated to the group (individual context). The individual behavior, exercising, was chosen as a behavior prototypic of individualistic decision-making within planned behavior research, and pilot testing confirmed the intuition that Anglophones would perceive exercising as unrelated to their social identity as Anglophones. It was expected that identity as an Anglophone would not influence behavior in the individual context, providing discriminant validity and a baseline to which effects of identity in the intergroup context might be compared.

Whereas in a parallel model (Figure 1B), identification may be independent of cost-benefit analyses, the hierarchical model (Figure 1C) embraced in the present paper leads to the hypothesis that identification should predict expectancy value processes (Hypothesis 1) as well as intentions (Hypothesis 2) for conflict behavior. Whereas the identity behavior link is "direct" in parallel models, in the present model group-level expectancy-value processes are proposed to predict intentions (Hypothesis 3), and to mediate between identity and intentions (Hypothesis 4). For individualistic rational choice models (Figure 1A), however, the predictive effects of identity in the intergroup context are irrelevant. If the effects of group-level variables on intentions are mediated by individual-level variables (such as individual cost-benefit analyses and attitudes), then analyses of the group level are of explanatory value but add nothing to prediction. By contrast, a hierarchical approach suggests that for high identifiers in an intergroup context, group-level variables may be motivating even when the individual level of analysis is controlled (Hypothesis 5).

Method

Participants

One hundred and forty-three students at a large English-language university in Québec participated in the present study. They were required to self-identify as Anglophone Québécois, and to be born in Québec or have lived in the province for at least ten years to be included.²

Procedure

Participants were approached in English in a central student building and asked whether they met the screening criteria. If so, they were invited to complete a questionnaire lasting approximately twenty-five minutes, and compensated with tickets for two \$50 lotteries.

Materials

Social Identity. Participants were first asked "Do you consider yourself primarily: Anglophone, Francophone, other;" participants who did not check "Anglophone" were excluded from further analyses. To measure level of identification with being Anglophone, a three-item measure of social identity was included based

²Anglophones were the largest ethnolinguistic social group at the university and thus provided a convenience sample, but similar results should hold for other social category identities, such as Francophones.

on that validated by Porter (1995), who integrated pre-existing measures of social identity (Brown, Condor, Mathews, Wade, & Williams, 1986; Garza & Herring, 1987; Jackson, 1981) to assess "the extent to which an individual feels connected with his or her social group, the importance that the individual places on his or her social identity, and the extent to which an individual expresses his or her social identity" (Porter, 1995, p. 18). Three items were selected from the measure: "How important is this identity to you in your everyday life?" "How committed are you to expressing this identity in your everyday life?" and "How much do you feel a part of a larger Anglophone group/community?" Eleven-point scales ranging from 0 (not at all) to 10 (very much) were employed, and the items were combined to form a single index measuring stronger identification as an Anglophone, $\alpha = .86$.

Intergroup Versus Interpersonal Context. Participants completed a questionnaire either evaluating decisions with respect to the intergroup behavior, "attending an Anglophone rights rally," or with respect to the individual behavior, "exercising three times per week."³

Subjective Norm. Participants' evaluation of the norm regarding the behavior was established with three items (e.g., "In general, how would the people who are important in your life view your doing this action?") adapted from Ajzen (1991). Eleven-point scales ranging from -5 (very negatively) to +5 (very positively) were employed, and the items were averaged to form an index of normative support for the action, $\alpha = .83$.

Attitude. Participants completed a five-item measure of attitude towards the behavior adapted from Ajzen (1991), with scales ranging from -3 to +3 respectively labelled Bad/Good; Unpleasant/Pleasant; Foolish/Wise; Boring/Interesting; and Harmful/Beneficial. The measures were averaged to create a composite score measuring favourable attitudes, $\alpha = .85$.

Perceived Control. Participants completed a four-item measure of perceived control adapted from Ajzen (1991), with two positively-scored items (e.g., "How much control do you have over whether you do this behavior at some point in Fall 2000?") combined with two reverse-scored items (e.g., "For me to do this action will be: 0 (very easy) -10 (very difficult)"). The items were combined to form a single index of perceived control, $\alpha = .71$.

Expectancy-Value Measures. Two items assessed expectancy-value processes at the group and individual (self) levels: "What is the effect of your attending a rally (exercising) on Anglophones as a group?" and ". . . on you as the individual actor?", on scales ranging from -5 (Very negative: costs overwhelmingly outweigh benefits) to 0 (No effect) to +5 (Very positive: benefits overwhelmingly outweigh costs).

Behavioral Measures. Two items assessed behavioral intentions, namely "How likely is it that you would attend a rally calling for increased protection for

³To increase the salience of the group identity (e.g., Hogg, Cooper-Shaw, & Holzworth, 1993; Hogg & Hains, 1996), half of the participants first listed traits that they had in common with other Anglophones, versus half that listed traits that made them unique as individuals. However, this manipulation failed to influence identification and is not discussed further.

Anglophone rights in Québec? (would exercise three times per week)” and “How committed would you be to attending a rally calling for increased protection for Anglophone rights in Québec? (exercising)”. The items were measured on 11-point scales, from 0 (not at all) to 10 (very much), and were averaged to create an index of intentions to engage in the behavior, $\alpha = .92$.

Results

Hypothesis 1: Social identity and context predict expectancy-value processes.

Table 2 presents the means and intercorrelations for the variables in Study 2. A three-way Social Identity (High/Low) by Context (Individual/Intergroup) by Level of Analysis (Individual Actor/Group) mixed-model ANOVA was performed on participants' expectancy-value measures for the individual actor and the group, with Level of Analysis as a repeated measures variable. To replicate the effects of Study 1, participants were divided into high (> 6 , $n = 67$) and low (≤ 6 , $n = 76$) identifiers on the basis of a median split on their level of ethnolinguistic social identity. An interaction was observed of level of analysis by context, $F(1, 136) = 63.25$, $p < .001$, $\eta^2 = .32$: for the group, rallying ($M = 1.70$) was considered more beneficial than exercising ($M = 1.01$), $p < .05$, while for the actor, exercising ($M = 3.43$) was considered more beneficial than rallying ($M = 1.56$), $p < .001$. Of more theoretical importance, however: the predicted interaction of Context by Social Identity was observed, $F(1, 136) = 3.24$, $p = .07$, $\eta^2 = .02$, and was not qualified by level of analysis, $F(1, 136) < 1$, *ns*, $\eta^2 = .00$. Although the interaction is only marginally reliable, simple effect tests revealed that the interaction was of the predicted form. That is, low ($M = 2.27$) and high identifiers ($M = 2.17$) considered exercise equally beneficial, *ns*, but low identifiers ($M = 1.26$) considered rallying less beneficial than high identifiers ($M = 2.00$), $p < .01$. Social identity was not associated with cost-benefit analyses in an individual context, but high identifiers evaluated pro-group action in a context of intergroup conflict more favourably than low identifiers did (Hypothesis 1).

Hypotheses 2–5: Prediction of Intentions

A hierarchical regression analysis predicting behavioral intentions was used to assess Hypotheses 2–5. Table 3 summarizes the results. In Block 1, social identity, decision-making context, and the interaction of social identity and context predicted intentions. In Block 2, group-level expectancy-value processes were added to the predictive equation. In Block 3, the interactions of social identity, context, and social identity by context with group-level cost-benefit analyses were included. In Block 4, individual-level processes were incorporated in the model. Finally, in Block 5, the entire planned behavior model was included.

Hypothesis 2: Social identity predicts intentions in the intergroup context.

In Block 1, dichotomous social identity (low/high) and decision-making context (exercise/rally) variables were entered as categorical predictors using unweighted effects codes, along with their interaction (Aiken & West, 1991). These variables predicted a significant portion of the variance in intentions, $F(3,$

The International Journal of Conflict Management, Vol. 15, No. 2

Table 2
Means, Standard Deviations, and Intercorrelation Among Variables (Study 2)

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Social identity	-.07	1.00												
2. Group context (A)	.08	1.00	.01											
3. Identity x A	.01	1.00	.08	-.07										
4. Group-level EVP (B)	1.37	1.67	.16*	.19*	.14 ⁺									
5. Individual EVP	2.41	1.99	.03	-.48*	.12 ⁺	.23*								
6. Identity x B	.25	1.61	-.01	.13 ⁺	.19*	-.04	-.07							
7. Context x B	.31	1.60	.16*	-.03	.16*	.10	.20*	.13 ⁺						
8. Identity x A x B	.23	1.61	.20*	.15*	-.02	.16*	-.08	.08	-.07					
9. Attitude	1.61	1.05	.18*	-.37*	.32*	.27*	.61*	-.01	.38*	.00				
10. Control Perceptions	6.05	1.94	-.05	.06	.12 ⁺	.08	.13 ⁺	.17*	.09	-.09	.28*			
11. Subjective Norm	1.68	1.69	.11	-.23*	.13 ⁺	.24*	.45*	-.07	.21*	.04	.43*	.07		
12. Behavioral Intention	5.72	2.73	.16*	-.26*	.19*	.34*	.47*	.04	.22*	-.13 ⁺	.57*	.40*	.38*	

Note: Social identity and context are unweighted effect codes +1 = high social identity, rally context; -1 = low social identity, exercise context). Group and individual-level expectancy-value processes and subjective norm could range from -5 to +5. Attitude ranges from +3 to -3. Perceived control and behavioral intentions range from 0 to 10.

⁺ $p < .10$. * $p < .05$.

137) = 6.03, $p < .01$, adj. $R^2 = .10$, as may be seen in Table 3. In particular, the coefficient for the interaction between social identity and context is significantly positive, $\beta = .45$, $p < .05$. The simple effect of social identity on behavioral intentions was assessed for both contexts. Consistent with Hypothesis 2, high identifiers had stronger intentions to attend the rally than low identifiers, $F(1, 76) = 8.36$, $p < .01$, adj. $R^2 = .10$; in the individual exercise context, no effect was observed, $F(1, 62) < 1$, adj. $R^2 = .00$.

Table 3
Prediction of Behavioral Intentions as a Function of Social Identity, Decision-Making Context, and Individual- and Group-Level Expectancy-Value Processes (EVP)

Block	1	2	3	4	5
Predictor	Unstandardized Coefficients/(SE)				
Social identity (A)	.38 ⁺ (.22)	.22 (.21)	.26 (.21)	.28 (.20)	.27 (.18)
Context (B)	-.69** (.22)	-.89*** (.21)	-.86*** (.24)	.43 ⁺ (.21)	-.37 ⁺ (.22)
A x B	.45* (.22)	.28 (.21)	.18 (.21)	.17 (.20)	-.03 (.19)
Group EVP (C)		.62*** (.13)	.65*** (.13)	.49*** (.14)	.39** (.12)
A x C			.13 (.13)	.14 (.13)	.09 (.12)
B x C			.19 (.13)	.11 (.13)	-0.03 (.12)
A x B x C			-.29* (.13)	-.26* (.13)	-.25* (.11)
Individual EVP				.42** (.12)	.15 (.12)
Attitudes					.67** (.25)
Social norm					.20 ⁺ (.12)
Perceived control					.39*** (.10)
Adj. R^2	.10**	.22***	.25***	.30***	.45***
ΔR^2	.11**	.12***	.05*	.06**	.15***

Note: Behavioral intentions could range from 0 to 10. Social identity and context were dichotomous variables with weighted effects coding: +1 signified high identifiers or intergroup (rally) context. Continuous variables were centred.

⁺ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Hypotheses 3–4: Effects of group-level expectancy-value scores.

In Block 2, centred group-level expectancy-value scores were included as a predictor. As predicted by Hypothesis 3, group-level expectancy-value analyses contributed significantly to the prediction of intentions, $F(1, 136) = 21.65, p < .001, \Delta R^2 = .12$. Moreover, when expectancy-value analyses at the group level were entered, the relationship of social identity to behavioral intentions was fully mediated, $\beta = .28, ns$. Since social identity interacts with context both to predict expectancy-value processes (as seen in the analyses for Hypothesis 1), and to predict intentions when cost–benefit analyses are not controlled, the decreased effect of the interaction of social identity and context on intentions (i.e., from $\beta = .44$ in Block 1 to $\beta = .28$ in Block 2, $z = 1.83, p = .07$) supports Hypothesis 4, that group-level cost–benefit analyses mediate the identity–behavior relationship observed in intergroup contexts.

More specifically: If additional analyses are conducted to decompose the interaction, simple effects for social identity in the exercise context suggests identity is associated with neither group-level cost–benefit perceptions ($\beta = -.01, ns$) nor intentions ($\beta = -.07, ns$): there is no effect of identity to be mediated. However, in the intergroup context identification (considered alone) predicts group-level cost–benefit perceptions for attending a rally ($\beta = .50, p < .01$) and intentions ($\beta = .78, p < .01$). If cost–benefit calculations for the group are controlled along with identity, the identity–behavior relationship is fully mediated ($\beta = .36, ns$), and the Sobel test confirms that the drop in the effects of identity on behavior, from $\beta = .78$ to $\beta = .36$ when cost–benefit calculations for the group are controlled, is significant ($z = 2.58, p < .01$).

In Block 3, the interactions of social identity and context with group-level expectancy-value analyses were included in the equation, $F(3, 133) = 2.79, p < .05, \Delta R^2 = .05$. Consistent with a hierarchical model, the coefficient for the interaction of social identity by context by group-level expectancy-value analyses was significant, $\beta = -.29, p < .05$. The effects of group-level analyses varied as a function of the interaction between identity and context.

Accordingly, the simple regression lines for group-level expectancy-value analyses were again compared, with follow up analyses of the simple slopes for high and low identifiers in each context. In the individual exercise context, low identifiers were not influenced by group-level expectancy-value analyses ($\beta = -.05, ns$), whereas participants high in social identity were positively influenced ($\beta = .87, p < .01$). In the intergroup context, however, low identifiers ($\beta = 1.00, p < .01$) and high identifiers ($\beta = .68, p < .01$) were both influenced by group-level expectancy-value analyses, and the effect did not differ significantly as a function of social identity. Thus, in line with a hierarchical model, group-level expectancy-value analyses were consistently related to decision-making for those who were chronically identified with the group. Moreover, when the intergroup context made the group level salient, consequences for the group were situationally related to decision-making for all respondents.

Hypothesis 5: Effects of individual-level expectancy-value analyses.

The International Journal of Conflict Management, Vol. 15, No. 2

In Block 4, individual-level expectancy-value scores were entered as predictors. As may be seen in Table 3, the increase in R^2 was significant, $F(1, 132) = 12.18, p < .01, \Delta R^2 = .06$. A positive effect of individual-level expectancy-value analyses was observed, such that participants had stronger intentions for behaviors perceived as beneficial to the individual, $\beta = .42, p < .01$. The positive effect of individual-level expectancy-value analyses did partially mediate the relationship of group-level expectancy-value analyses to intentions: an indirect effect of group-level costs and benefits via the individual level was significant, $z = 2.10, p < .05$. However, the effects of group-level expectancy-value analyses remained significant even after individual-level expectancy-analyses were controlled, both directly ($\beta = .45, p < .001$) and via the three-way interaction of social identity, context, and group-level expectancy-value analyses ($\beta = -.26, p < .05$). These results are therefore inconsistent with the hypothesis that individual level cost-benefit analyses mediate the influence of group-level variables.

The Planned Behavior Model. In Block 5, the theory of planned behavior (Ajzen, 1985) predictors were centred and entered in the analysis, where they accounted for an additional 15% of the variance in intentions, $F(3, 129) = 12.37, p < .001$. Moreover, as may be seen in Table 3, each of the three predictors (attitudes, subjective norm, and perceived control) was positively related to behavioral intentions, as predicted by the model: attitudes, $\beta = .67, p < .01$, subjective norm, $\beta = .20, p = .10$, and perceived control, $\beta = .39, p < .001$. Although it is not a focus of this study, support was also obtained for the process proposed by Fishbein and Ajzen (1975) and Ajzen (1985, 1991), that attitude mediates the relationship of individual-level expectancy-value processes to behavioral intentions. Once the theory of planned behavior was controlled, individual-level expectancy-value analyses predicted no unique variance, $\beta = .15, ns$, whereas a significant indirect effect of individual-level cost-benefit analyses via attitude was observed, $z = 2.56, p < .01$. These findings support the structure and heuristic value of the theory of Planned Behavior for intergroup as well as individual applied contexts.

Group-level expectancy-value analyses predicted intentions, however, even after controlling for the planned behavior model as well as the effects of social identity, context, and individual-level expectancy-value processes. A significant indirect effect of group-level expectancy-value processes via attitudes also was observed, $z = 2.06, p < .05$. But the direct effect of group-level expectancy-value analyses was significant even when attitudes were controlled, $\beta = .39, p < .01$. In addition, the interaction of social identity by context continued to moderate the relationship between group-level expectancy-value analyses and behavioral intentions, $\beta = -.25, p < .05$. Finally, if a sixth block is run in the analysis in which cost-benefit analyses for the group and its interactions are removed from the analyses, model fit worsens significantly, $\Delta R^2 = -.05, F(4, 125) = 3.30, p < .05$. That is, even when a wide range of individual-level variables have been included—attitudes, norms, perceived control, and individual-level cost-benefit analyses—group-level expectancy-value processes contribute uniquely to the prediction of intentions.

Discussion

The present results replicate the effect demonstrated in Study 1, that rational choices in an intergroup context vary as a function of social identity. The findings support the contention that group-level expectancy-value processes play a role in decision-making, predicting intentions to engage in pro-group action. High identifiers' greater willingness to attend a rally for Anglophone rights was mediated by their perceptions that attending the rally would benefit the group, suggesting that group-level expectancy-value processes may be useful in modeling identity-behavior relationships in conflict. The individualistic theory of planned behavior was supported, along with the proposed mediational path of individual-level expectancy-value processes through attitudes to behavior. However, the group level of analysis contributed uniquely for high identifiers and for all participants in the intergroup context. These analyses provide support for the value of examining group-level rational decision-making.

Identity Effects and Group-Level Rationality

Persuasion research suggests that individuals use group norms as heuristic cues to short-cut deliberative processes (Fleming & Petty, 2000; Mackie et al., 1992; Mackie & Quellar, 2000). If higher identification is associated with past engagement with pro-group action, habit (Triandis, 1977), past behavior (Bentler & Speckart, 1979), or personal experience (Regan & Fazio, 1977), these variables may reduce deliberative processing of costs and benefits for high identifiers. Experienced high identifiers may act from a perception of the situation formed by their past experience (see also Fazio, 1990). Thus identification might come to encapsulate intentionality over and above cost-benefit calculations. Consistent with this line of reasoning, past behavior and habit strength have been found to moderate the relationship between role "self-identities" and behavior (e.g., Sparks, 2000; but see Ajzen, 2002; Terry et al., 1999). In conflict, findings concerning "direct" effects of identification by Kelly (1993) and Simon et al. (1998) suggest identification may operate in parallel to rational choice in some contexts.

Nevertheless, the present results draw attention to the extent to which a highly identified Anglophone in the present study uses expectancy-value processes at the group level to evaluate potential responses to conflict. "Direct" influences of social identity on intentions to engage in confrontational collective action may be less likely outside activist populations, or when different forms of pro-group actions are considered. For many people, much of the time, the impact of social identity on intentions may be more rational than the focus on cognitive processes of self-stereotyping of recent intergroup research and theory would suggest.

Partial, Not Full, Mediation of Group-Level Rationality

Indeed, the rational individual-level theory of planned behavior model (Ajzen, 1985, 1991) accounted for significant additional variance, even when the effects of social identity, context, and group- and individual-level expectancy-value processes had been previously accounted for. Attitudes, subjective norm, and perceived control were positively related to intentions. Moreover, attitudes mediated

the relationship of individual-level expectancy-value processes to intentions. The finding that social variables influence individual-level expectancy-value processes, which drive intentions via attitudes, is consistent with the individualistic approach of current applied decision-making models.

However in the present study independent effects of group-level expectancy-value analyses on intentions were consistently observed. These results suggest that the effects of group-level variables are not reducible to, or necessarily mediated by, effects at the individual level. Group-level expectancy-value analyses exerted a direct influence on intentions for individuals who strongly identified with their group, or whose decision-making was in an intergroup context, even when individual-level costs and benefits and attitudes were controlled.

Limitations

It should be noted that the identity-intention links demonstrated in the present study, and the role of group-level cost-benefit analyses in predicting intergroup decision-making, remain to be replicated in future research with a broader range of samples, and with concrete measures of behavior. The relative inexperience of the student sample with conflict behavior may have constrained the effects of identity, while with concrete conflict choices, differences between high and low identifiers are likely to be magnified. Moreover, a broader range of conflict contexts would allow moderating variables such as outgroup power or justice perceptions to be assessed. If decision-making models were measured in multiple conflict contexts for the same group, along with power and justice perceptions for the contending parties, the between-context variance in moderating effects for identity-behavior relationships would be a powerful test of model stability.

General Discussion

Taken together, the present studies suggest that there is a group-level rationality that plays a role in decision-making in conflict. In two studies using different conflict behaviors (election-rated vs. protest) and social identities (political vs. ethnolinguistic), identification in the intergroup context was associated with more favourable expectancy-value perceptions of pro-group actions. In addition, participants higher in social identity were more likely to associate individual and group levels of analysis. In Study 1, high identifiers perceived that group-level costs and benefits had implications for the self, whereas low identifiers did not. In Study 2, high identifiers were responsive to group-level costs and benefits across contexts, and weakly identified participants were responsive when the intergroup context was salient.

Modelling Conflict Decisions

At a theoretical level, the results suggest that researchers interested in predicting decision-making in intergroup contexts would be wrong to assume either that considering the individual level of analysis is sufficient or that the group-level effects of identity are independent of rational choice processes. Evolutionary models that point to our mammalian pack animal heritage provide one theoretical basis

The International Journal of Conflict Management, Vol. 15, No. 2

for including social calculations in rational decision-making (e.g., Cosmides & Tooby, 1994; cf. Turner & Oakes, 1997): internally uncooperative groups of ancestors died out in disasters and were killed off by more cohesive groups in war. Even in the absence of immediate material benefits of cooperation for the *individual*, therefore, group-level contingencies derived from this evolutionary heritage select biologically and culturally for intra-group cooperation. However, the socio-cognitive processes through which action to help others is defined as personally beneficial versus harmful remain to be identified, and the present research aimed to contribute to that process. In Study 1, 'self-interested' behavior in the intergroup context was *not* perceived as beneficial to individuals who identified strongly with their political group. Similarly, for those who were weakly identified, behavior that benefited their own group was *not* seen as beneficial to the self.

The present research is consistent with the observation that models which do not allow benefits to others to be psychologically motivating underpredict cooperation and altruism (e.g., Batson, 1999; Bazerman et al., 1998; Davis & Holt, 1993).⁴ Rational choices in intergroup contexts vary as a function of identification: the socio-cognitive process of including others in the self-concept results in the inclusion of other's outcomes in personal cost-benefit calculations (Aron et al., 1991; Tajfel & Turner, 1979; see also Halpern, 1998; McLean Parks & Smith, 1998).

It is true that when perceptions of consequences for the group drive perceptions of individual-level consequences, cost-benefit calculations at the individual level may mediate some of the effects of group-level variables (Ajzen, 1991; cf. Olson, 1968). This process was observed in the present findings, and the implication is that group-level rationality may motivate behavior via individual incentives that are materially or psychologically associated with group level benefits and costs (Fishbein & Ajzen, 1975; Ajzen, 1985). But the mediation of the individual level is only partial: In the present results, an analysis of the perceived group-level costs and benefits improved the prediction of intentions even when individual-level variables were controlled (see also Brewer & Silver, 2000; Kelly, 1993; Simon et al., 2001). Understanding this unmediated effect of group-level rationality may allow the study of "identity-behavior" relationships that appear to be independent of individual-level rationality.

The question of how identities become behavioral imperatives is at present unresolved. In decision-making research, it has been observed in several contexts that identity may predict intentions in parallel to the effects of individual-level expectancy-value processes (e.g., Kelly, 1993; Sparks, 2000; Simon et al., 1998). One suggestion is that the process by which identities are linked to behaviors may be understood as the internalization of group norms and the activation of self-stereotyping (Hogg & Turner, 1987; Terry & Hogg, 1996; Turner et al., 1989). By definition, activists are politically active, and blood donors give blood: It may be the case that once individuals have achieved a threshold of identification and

⁴Models that do not allow perceived contingencies of outcomes for self and other will also underpredict retributive justice and revenge (Alicke, 1992; McLean Parks, 1997; Reed & Aquino, 2003): contingencies linking harm to other with benefit to self.

experience, group norms are internalized, expectancy-value processes with respect to behavior stop, and the normative behaviors are enacted "routinely" (see also Abrams, 1994). In these circumstances, dispute resolution aimed at changing conflict behavior by altering perceptions of *either* benefits to the group or individual would be ineffective. Conflict behaviors would change only if the group norms changed; in the determinist social identity model, norm changes result only from socio-structural changes to the relationship between groups (Tajfel & Turner, 1979; Turner & Reynolds, 2001; cf. Louis & Taylor, 2002; Louis, Terry, & Mavor, 2003). However, interruptions to routinization and thoughtful analysis of the consequences of behavior are triggered by factors commonly associated with conflict, such as negative moods (Ito & Cacioppo, 2001) and uncertainty (Abrams, 1994; Fleming & Petty, 2000; Mackie & Quellar, 2000). Thus, routinization of conflict behavior may be relatively rare: vigilance and deliberation will occur if the conflict is either escalating or waning (provoking uncertainty) or if the disputants are losing (provoking negative affect). This is an empirical question to be resolved with further research, however.

Exploiting and Manipulating Group-level Rationality

In current organizational research, the existence of social rationality is often inferred from behavior that deviates from a materialist model (Halpern, 1997, 1998; McLean Parks & Smith, 1998; McLean Parks et al., 1996) without measuring socio-cognitive processes directly (but see e.g., Conlon & Hunt, 2002). Yet the implications of the parallel, mediated, and hierarchical models for conflict choices and dispute resolution may be quite different. A mediated model is analogous to a strong economic model in its focus on the individual level of analysis. However, mediated models in applied decision-making allow internalized social norms to contribute to rational decisions along with consideration of material outcomes, because individuals are motivated to comply with significant others' expectations (Fishbein & Ajzen, 1975; Ajzen, 1985). Whereas economic models imply that behavior should always be narrowly self-interested, except where individuals are vulnerable to surveillance and coercion, applied decision-making reflects the empirical findings and theory of social rationality, in arguing that satisfying others' expectations contributes to individuals' utility functions. Factors that increase the salience of significant others' expectations, such as cultural predispositions (Trafimow & Finlay, 2001), role relationships (Halpern, 1997, 1998; McLean Parks et al., 1998), individual differences (Ajzen, 1991; analogously Rahim, 1983), or situational factors that make salient ideological and intergroup values (Rothman, 1997; Terry & Hogg, 1996; Louis & Taylor, 1999, 2002) are found to increase norms' motivational force. Thus, dispute resolution using planned behavior or reasoned action modelling might involve identifying and changing beliefs about the consequences of actions, or altering the salience of material versus social predictors by drawing attention to unconsidered costs or benefits, or by invoking relevant norms.

By contrast, parallel models imply that dispute resolution attempts addressed to these individual outcomes and interpersonal expectations may have no effect whatsoever when group identity processes are engaged. In past research, strongly identified individuals were observed to engage in pro-group behaviors *independent*

The International Journal of Conflict Management, Vol. 15, No. 2

of their rational analyses of the individual-level outcomes of behavior and their interpersonal expectations (Kelly, 1993; Kelly & Breinlinger, 1995; Simon et al., 1998). It is argued that through identification and self-stereotyping people conform automatically to learned group norms, perpetuating past conflict behavior (in a determinist model) until there is a change in the intergroup relationship (Tajfel & Turner, 1979). Negotiators who were from the partisan group would be psychologically constrained by perceptions of their group's status position. Third parties would have little access to or influence over this decision-making process short of joining as allies or enemies to change perceptions of the intergroup relationship (cf. Simon & Klandermans, 2001).

Finally, a hierarchical model of group differences in rational evaluation of conflict choices provides a socio-cognitive foundation for "win-win" solutions in negotiation and mediation. If there were no systematic group differences in the evaluation of particular outcomes, it would be impossible to trade off a concession on one dimension in exchange for the outgroup's reciprocation on another dimension more valued by the ingroup. Similarly, a psychological model of contingencies of group- and individual-level cost-benefit evaluations underpins decisions to sacrifice in the interests of a public good (e.g., Batson, 1999; Staub, 2001), on behalf of friends (Halpern, 1997, 1998), or in relational or custodial contexts more broadly (McLean Parks & Smith, 1998).

The social identity tradition draws attention to the critical importance of superordinate group identities. The same individuals who are led cognitively to enact group norms when a conflict is perceived as between-group (salient subgroup identities – e.g., departments, nations) may engage in deliberative decision-making if the conflict can be framed as within-group (within a salient superordinate identity – e.g., organizations, regional groups). Increasing the salience of superordinate or relational identities provides one strategy for the management of conflict, promoting pro-social behavior and cooperation as many studies have shown (e.g., Sherif, 1966; Pruitt, 1981, 1983). Presumably, one might also undermine opponents' identification by drawing attention to internally conflicting goals and increasing the salience of subgroup identities (cf. Hornsey & Hogg, 2000). Hierarchical models draw attention to the possibility of engaging with group-level outcomes as more than distal predictors of individual-level objective analyses: individuals will psychologically establish links with action and with individual-level utility even where no objective contingency exists, as a function of chronic or situational identification. Because the motivating effects of group-level consequences are a function of identification, dispute resolution techniques may draw on (or be obstructed by) identity processes. Failure to obtain pareto-optimal integrative solutions, for example, is rational if negotiators have low identification with the superordinate organization or group, eliminating the motivating effect of benefits to both parties. In intergroup situations, individuals may prefer (and thus 'rationally' decide) to maximize the relative difference between groups rather than to maximize absolute ingroup profit (minimal group research: see e.g., Tajfel & Turner, 1979). Rational decisions change as a function of group identification, because salient identities change preferences and expectancy value processing.

The International Journal of Conflict Management, Vol. 15, No. 2

Moreover, it should be noted that identity processes as they are understood in intergroup psychology are not limited to groups competing horizontally, defined along dimensions such as gender and nationality (e.g., men vs. women, Americans vs. Iraqis). Group conflict may occur between subgroups and a superordinate authority (e.g., a department with its faculty); or as subgroups within a salient superordinate identity (two departments within a faculty). Psychological groups may also exist in the absence of formal organization, when individuals are conscious of contenting factions or cliques that divide them (e.g., Sani & Todman, 2002) or dimensions of cross-categorization that unite them (e.g., race and gender groups within organizations; see e.g., Marcus-Newhall, Miller, Holtz, & Brewer, 1993). Even when individuals are objectively alone in a conflict, a psychological perception of suffering or fighting on behalf of others may be invoked and identity processes may be triggered. Cognitively, the perception of similarity to some individuals and differences from others is sufficient to create psychological group membership and trigger identity processes, even in the absence of objective interdependence (Turner et al., 1989). Given this broad applicability, consideration of socio-cognitive processes of identification may be relevant to most conflict situations.

General Limitations

In the absence of successful experimental manipulations of identification, the direction of causality in the present research can only be inferred. Research on interdependence in decision-making suggests that increasing external contingencies of group and individual outcomes—for example allocating resources at the group level—increases identification with the group (Tajfel & Turner, 1979; Insko et al., 2001). However, people who identify are also observed to see themselves as more affected by, and more influential with respect to, group-level outcomes (cf. Klandermans, 1984, 1997), potentially creating a feedback loop between identification and psychological contingencies of group and individual cost-benefit analysis. Laboratory studies confirm that manipulated identification will increase pro-group behavior (Brewer & Brown, 1998; Ellemers, 1993; Messick & Mackie, 1989), and longitudinal field research shows effects of changing identification on collective action (e.g., Kelly, 1993; Simon et al., 1998). In the intergroup literature, then, the identity-behavior links are well established, but questions remain as to whether the effects of identification on action are usefully modelled with expectancy-value processes, and are mediated at the individual level. These are the questions answered in the present studies—yes and no, respectively.

An additional variable unaddressed in the present studies concerns the time horizon within which the decision-maker is operating. In Study 1, decision-makers considered behavior in the one month lead up to an election; in Study 2, respondents were directed to consider the likelihood of exercising or rallying “in the next three months”. In ongoing conflict, identification has been observed to have quite stable effects: in one study, group identification startlingly predicted engaging in pro-group protest two years subsequently, even when cost-benefit perceptions for the behavior at Time 2 were controlled (De Weerd & Klandermans, 1999). However, as a general rule, the intention-behavior relationship varies in stability as a

The International Journal of Conflict Management, Vol. 15, No. 2

function of experience, such that intentions are more predictive of behavior for more experienced decision-makers, and more unstable for novices (e.g., Wilson et al., 1989). In addition, factors such as media coverage that change attitudinal salience between the time of intention formation and the time for action would lower intention-behavior consistency (Fazio, 1990; Regan & Fazio, 1977; Duck, Terry, & Hogg, 1998).

Conclusions

Two studies in the context of English–French relations in Québec suggest that individuals who strongly identify with a group derive the individual-level costs and benefits that drive expectancy-value processes (rational decision-making) from group-level costs and benefits. Moreover, group-level expectancy-value processes, in Study 2, mediated the relationship between social identity and collective action intentions. These findings suggest the rational underpinnings of identity-driven political behavior, a relationship sometimes obscured in intergroup theory that focuses on cognitive processes of self-stereotyping. But the results also challenge the view that individuals' cost–benefit analyses are independent of identity processes. The study suggests the importance of modelling the relationship of group and individual levels of expectancy-value processes as both hierarchical and contingent on social identity processes.

At a theoretical level, explicitly analyzing group-level expectancy-value processes contributes to the prediction of intentions and allow researchers to model mediating processes in identity-behavior relationships. But in addition, the analysis may allow a better understanding of processes by which group-level rationality judgements are already commonly exploited or manipulated in conflict. Exploring the theoretical and practical ramifications of these contingency judgements is quite likely, then, to be a fruitful area of future research.

References

- Abrams, D. (1994). Social self-regulation. *Personality and Social Psychology Bulletin*, 20, 473–483.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. London: Sage.
- Ajzen, I. (2002). Residual effects of past on later behavior: Habituation and reasoned action perspectives. *Personality and Social Psychology Review*, 6, 107–122.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 11–39). New York: Springer-Verlag.
- Albarracín, D., Johnson, B. T., Fishbein, M. & Muellerleile, P. A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin*, 127, 142–161.

- Alicke, M. D. (1992). Culpable causation. *Journal of Personality and Social Psychology*, 63, 368–378.
- Aron, A., Aron, E., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, 60, 241–253.
- Batson, C. D. (1994). Why act for the public good? Four answers. *Personality and Social Psychology Bulletin*, 20, 603–610.
- Batson, C. D. (1999). Empathy-induced altruism in a prisoner's dilemma. *European Journal of Social Psychology*, 29, 909–924.
- Bazerman, M. H., Gibbons, R., Thompson, L., & Valley, K. L. (1998). Can negotiators outperform game theory? In J. Halpern & R. N. Stern (Eds.), *Debating rationality; Nonrational aspects of organizational decision making* (pp. 79–99). Ithaca, NY: Cornell University Press.
- Bentler, P. M., & Speckart, G. (1979). Models of attitude-behavior relations. *Psychological Review*, 86, 452–464.
- Boninger, D. S., Krosnick, J. A., & Berent, M. K. (1995). Origins of attitude importance: Self-interest, social identity, and value relevance. *Journal of Personality and Social Psychology*, 68, 61–80.
- Brewer, M. B., & Brown, R. J. (1998). Intergroup relations. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 2, 4th ed., pp. 554–594). New York: Oxford University Press.
- Brewer, M. B., & Silver, M. D. (2000). Group distinctiveness, social identification, and collective mobilization. In S. Stryker, T. J. Owens, & R. W. White (Eds.), *Self, identity, and social movements* (pp. 153–171). Minneapolis: University of Minnesota Press.
- Brown, R., Condor, S., Matthews, A., Wade, G., & Williams, J. (1986). Explaining intergroup differentiation in an industrial organization. *Journal of Occupational Psychology*, 59, 273–286.
- Conlon, D. E., & Hunt, C. S. (2002). Dealing with feeling: The influence of outcome representations on negotiation. *International Journal of Conflict Management*, 13, 38–58.
- Conover, P. J. (1988). The role of social groups in political thinking. *British Journal of Political Science*, 18, 51–76.
- Cosmides, L., & Tooby, J. (1994). Better than rational: Evolutionary psychology and the invisible hand. *American Economic Review*, 84, 327–332.
- Davis, D. D., & Holt, C. A. (1993). *Experimental economics*. Princeton, NJ: Princeton University Press.
- Dawes, R. M. (1998). Behavioral decision making and judgement. In D. T. Gilbert, S. T. Fiske, and G. Lindzey (Eds.) *The handbook of social psychology* (Vol. 2, 4th ed., pp. 497–548). New York: Oxford University 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.
- Duck, J. M., Terry, D. J., & Hogg, M. A. (1998). Perceptions of a media campaign: The role of social identity and the changing intergroup context. *Personality and Social Psychology Bulletin*, 24, 3–16.

The International Journal of Conflict Management, Vol. 15, No. 2

- Echabe, A. E., Rovira, D. P., & Garate, J. F. V. (1988). Testing Ajzen and Fishbein's attitudes model: The prediction of voting. *European Journal of Social Psychology*, *18*, 181-189.
- Ellemers, N. (1993). The influence of socio-structural variables on identity management strategies. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 4, pp. 27-57). New York: Wiley.
- Fazio, R. H. (1990). Multiple processes by which attitudes guide behavior: The MODE model as an integrative framework. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 75-109). San Diego, CA: Academic Press.
- Feather, N. T. (Ed.). (1982). *Expectations and actions: Expectancy-value models in psychology*. Hillsdale, NJ: Erlbaum.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fleming, M. A., & Petty, R. E. (2000). Identity and persuasion: An elaboration likelihood approach. In D. J. Terry & M. A. Hogg (Eds.) *Attitudes, behavior, and social context* (pp. 171-199). London: Erlbaum.
- Garza, R. T., & Herringer, L. G. (1987). Social identity: A multidimensional approach. *Journal of Social Psychology*, *127*, 299-308.
- Green, D. P., & Shapiro, I. (1994). *Pathologies of rational choice theory: A critique of applications in political science*. New Haven: Yale University Press.
- Halpern, J. J. (1997). Elements of a script for friendship in transactions. *Journal of Conflict Resolution*, *41*, 835-868.
- Halpern, J. J. (1998). Bonded rationality: The rationality of everyday decision making in a social context. In J. Halpern & R. N. Stern (Eds.), *Debating rationality; Nonrational aspects of organizational decision making* (pp. 219-238). Ithaca: Cornell University Press.
- Halpern, J. J., & McLean Parks, J. (1996). Vive la différence: Differences between males and females in process and outcomes in a low-conflict negotiation. *International Journal of Conflict Management*, *7*, 45-70.
- Halpern, J., & Stern, R. N. (Eds.). (1998). *Debating rationality; Nonrational aspects of organizational decision making*. Ithaca: Cornell University Press.
- Hardin, G. (1968). The tragedy of the commons. *Science*, *162*, 1243-1248.
- Hogg, M. A., Cooper-Shaw, L., & Holzworth, D. W. (1993). Group prototypicality and depersonalized attraction in small interactive groups. *Personality and Social Psychology Bulletin*, *19*, 452-465.
- Hogg, M. A., & Hains, S. C. (1996). Intergroup relations and group solidarity: Effects of group identification and social beliefs on depersonalized attraction. *Journal of Personality and Social Psychology*, *70*, 295-309.
- Hogg, M. A., & Turner, J. C. (1987). Social identity and conformity: A theory of referent informational influence. In W. Doise & S. Moscovici (Eds.), *Current issues in European social psychology* (Vol. 2, pp. 139-182). Cambridge, England: Cambridge University Press.
- Hornsey, M. J., & Hogg, M. A. (2000). Subgroup relations: A comparison of mutual intergroup differentiation and common identity models of prejudice reduction. *Personality and Social Psychology Bulletin*, *26*, 242-256.

- Insko, C. A., & Schopler, J. (1998). Differential distrust of groups and individuals. In C. Sedikides, J. Schopler, & C. A. Insko (Eds.), *Intergroup cognition and intergroup behavior* (pp. 75–107). London: Erlbaum.
- Insko, C. A., Schopler, J., Gartner, L., Wildschut, T., Kozar, R., Pinter, B., Finkel, E. J., Brazil, D. M., Cecil, C. L., & Montoya, M. R. (2001). Interindividual–intergroup discontinuity reduction through the anticipation of future interaction. *Journal of Personality and Social Psychology, 80*, 95–111.
- Ito, T. A. & Cacioppo, J. T. (2001). Affect and attitudes: A social neuroscience approach. In J. Forgas (Ed.), *Handbook of affect and social cognition* (pp. 50–74). Mahwah, NJ: Erlbaum.
- Jackson, S. E. (1981). Measurement of commitment to role identities. *Journal of Personality and Social Psychology, 40*, 138–146.
- Kahneman, D. (1994). New challenges to the rationality of assumptions. *Journal of International and Theoretical Economics, 150*, 18–36.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*, 263–291.
- Kallgren, C. A., & Wood, W. (1986). Access to attitude-relevant information in memory as a determinant of attitude-behavior consistency. *Journal of Experimental Social Psychology, 22*, 328–338.
- Kelly, C. (1993). Group identification, intergroup perceptions and collective action. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 4, pp. 59–83). New York: Wiley.
- Kelly, C., & Breinlinger, S. (1995). Attitudes, intentions and behavior: A study of women's participation in collective action. *Journal of Applied Social Psychology, 25*, 1431–1446.
- Klandermans, B. (1997). *The social psychology of protest*. Oxford, England: Blackwell.
- Klandermans, B. (1984). Mobilization and participation: Social-psychological expansions of resource mobilization theory. *American Sociological Review, 49*, 583–600.
- Krosnick, J. A. (1990). Government policy and citizen passion: A study of issue publics in contemporary America. *Political Behavior, 12*, 59–92.
- Linskold, S. (1978). Trust development, the GRIT proposal, and the effects of conciliatory acts on conflict and cooperation. *Psychological Bulletin, 85*, 772–793.
- Linteau, P.-A., Durocher, R., Robert, J.-C., & Ricard, F. (1991). *Quebec since 1930* (R. Chodos & E. Garmaise, trans.). Toronto: James Lorimer & Company (original published 1986).
- Liska, A. (1984). A critical examination of the causal structure of the Fishbein and Ajzen attitude-behavior model. *Social Psychology Quarterly, 47*, 61–74.
- Louis, W. R., & Taylor, D. M. (2002). Understanding the September 11th terrorist attack on America: The role of intergroup theories of normative influence. *Analyses of Social Issues and Public Policy, 2*, 87–100.
- Louis, W. R., & Taylor, D. M. (1999). From passive acceptance to social disruption: Towards an understanding of behavioral responses to discrimination. *Canadian Journal of Behavioural Science, 31*, 19–28.

- Louis, W. R., Mavor, K. I., & Terry, D. J. (2003). Reflections on the statistical analysis of personality and norms in war, peace, and prejudice: Are deviant minorities the problem? *Analyses of Social Issues and Public Policy*, 3 (1), 189–198.
- Mackie, D. M., Gastardo-Conaco, M. C., & Skelly, J. J. (1992). Knowledge of the advocated position and the processing of in-group and out-group persuasive messages. *Personality and Social Psychology Bulletin*, 18, 145–151.
- Mackie, D. M., & Queller, S. (2000). The impact of group membership on persuasion: Revisiting “Who says What to Whom with What Effect”? In D. J. Terry & M. A. Hogg (Eds.), *Attitudes, behavior, and social context: The role of norms and group membership* (pp. 135–155). London: Erlbaum.
- Mackie, D. M., Worth, L. T., & Asuncion, A. G. (1990). Processing of persuasive in-group messages. *Journal of Personality and Social Psychology*, 58, 812–822.
- Manstead, A. S. R. (2000). The role of moral norm in the attitude-behavior relation. In D. J. Terry & M. A. Hogg (Eds.), *Attitudes, behavior, and social context: The role of norms and group membership* (pp. 11–30). London: Erlbaum.
- Marcus-Newhall, A., Miller, N., Holtz, R., & Brewer, M. B. (1993). Cross-cutting category membership with role assignment: A means of reducing intergroup bias. *British Journal of Social Psychology*, 32, 125–146.
- Martin, J. (1986). The tolerance of injustice. In J. M. Olson, C. P. Herman, M. P. Zanna (Eds.), *Relative deprivation and social comparison* (Vol. 4, pp. 217–242). Hillsdale, NJ: Erlbaum.
- McLean Parks, J. (1997). The fourth arm of justice: The art and science of revenge. In R. J. Lewicki, R. J. Bies, & B. H. Sheppard (Eds.), *Research on negotiation in organizations* (Vol. 6, pp. 113–144). Greenwich, CT: JAI.
- McLean Parks, J., Boles, T. L., Conlon, D. E., Desouza, E., Gatewood, W., Gibson, K., Halpern, J., Locke, D., Straub, P., Wilson, G., & Murnighan, J. K. (1996). Distributing adventitious outcomes: Social norms, egocentric martyrs, and the effects on future relationships. *Organizational Behavior and Human Decision Processes*, 67, 181–200.
- McLean Parks, J., & Smith, F. L. (1998). Organizational contracting: A “rational” exchange? In J. Halpern & R. N. Stern (Eds.), *Debating rationality: Nonrational aspects of organizational decision making* (pp. 125–154). Ithaca, NY: Cornell University Press.
- Messick, D. M., & Mackie, D. M. (1989). Intergroup relations. *Annual review of psychology*, 40, 45–81.
- Olson, M. (1968). *The logic of collective action*. New York: Schocken Books.
- Ostrom, E. (1998). A behavioral approach to the rational choice theory of collective action. [Presidential address, American Political Science Association 1997]. *American Political Science Review*, 92, 1–22.
- Porter, L. A. (1995). *Managing intergroup conflict in interpersonal relationships: How women maintain intimate relationships with men*. Unpublished doctoral dissertation, McGill University, Montreal, Canada.
- Pruitt, D. G. (1981). *Negotiation behavior*. New York: Academic Press.

- Pruitt, D. G. (1983). Strategic choices in negotiation. *American Behavioral Scientist*, 27, 167–194.
- Rahim, A. (1983). A measure of styles of handling interpersonal conflict. *Academy of Management Journal*, 26, 368–376.
- Reed, A., & Aquino, K. F. (2003). Moral identity and the expanding circle of moral regard toward out-groups. *Journal of Personality and Social Psychology*, 84, 1270–1286.
- Regan, D. T., & Fazio, R. H. (1977). On the consistency between attitudes and behavior: Look to the method of attitude formation. *Journal of Experimental Social Psychology*, 13, 28–45.
- Rothman, J. (1997). *Resolving identity based conflict in nations, organizations, and communities*. San Francisco: Jossey-Bass.
- Sani, F., & Todman, J. (2002). Should we stay or should we go? A social psychological model of schisms in groups. *Personality and Social Psychology Bulletin*, 28, 1647–1655.
- Savage, L. J. (1954). *The foundations of statistics*. New York: Wiley.
- Sherif, M. (1966). *Group conflict and co-operation: Their social psychology*. London: Routledge.
- Simon, H. A. (1956). Rational choice and the structure of the environment. *Psychological Review*, 63, 129–138.
- Simon, B., & Klandermans, B. (2001). Politicized collective identity: A social psychological analysis. *American Psychologist*, 56, 319–331.
- Simon, B., Loewy, M., Sturmer, S., Weber, U., Freytag, P., Habig, C., Kampmeier, C., & Spahlinger, P. (1998). Collective identification and social movement participation. *Journal of Personality and Social Psychology*, 74, 646–658.
- Sivacek, J., & Crano, W. D. (1982). Vested interest as a moderator of attitude-behavior consistency. *Journal of Personality and Social Psychology*, 43, 210–221.
- Sparks, P. (2000). Subjective expected utility-based attitude-behavior models: The utility of self-identity. In D. J. Terry & M. A. Hogg (Eds.) *Attitudes, behavior, and social context: The role of norms and group membership* (pp. 31–46). London: Erlbaum.
- Staub, E. (2001). Genocide and prevention: Their roots and prevention. In D. J. Christie, R. V. Wagner, & D. D. N. Winter (Eds.), *Peace, conflict, and violence* (pp. 76–86). Upper Saddle River, NJ: Prentice Hall.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Taylor, D. M., & McKirnan, D. J. (1984). Theoretical contributions: A five-stage model of intergroup relations. *British Journal of Social Psychology*, 23, 291–300.
- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22, 776–793.

- Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behavior: Self-identity, social identity and group norms. *British Journal of Social Psychology, 38*, 225–244.
- Tjosvold, D., & Sun, H. F. (2001). Effects of influence tactics and social contexts in conflict: An experiment on relationships in China. *International Journal of Conflict Management, 12*, 239–258.
- Trafimow, D., & Finlay, K. A. (2001). The importance of traits and group membership. *European Journal of Social Psychology, 31*, 37–43.
- Triandis, H. C. (1977). *Interpersonal behavior*. Monterey, CA: Brooks/Cole.
- Turner, J. C., & Oakes, P. J. (1997). The socially structured mind. In C. McGarty & S. A. Haslam (Eds.), *The message of social psychology* (pp. 355–373). Oxford: Blackwell.
- Turner, J. C., & Reynolds, K. J. (2001). The Social Identity perspective in intergroup relations: Theories, themes, and controversies. In R. Brown & S. L. Gaertner (Eds.), *Handbook of social psychology* (pp. 133–152). Oxford: Blackwell.
- Turner, J. C., Wetherell, M. S., & Hogg, M. A. (1989). Referent informational influence and group polarization. *British Journal of Social Psychology, 28*, 135–147.
- Tyler, T. R., Lind, E. A., Ohbuchi, K.-I., Sugawara, I., & Huo, Y. J. (1998). Conflict with outsiders: Disputing within and across cultural boundaries. *Personality and Social Psychology Bulletin, 24*, 137–148.
- Vallerand, R. J., Deshaies, P., Cuerrier, J.-P., Pelletier, L. G., & Mongeau, C. (1992). Ajzen and Fishbein's theory of reasoned action as applied to moral behavior: A confirmatory analysis. *Journal of Personality and Social Psychology, 62*, 98–109.
- von Neumann, J., & Morgenstern, O. (1944). *Theory of games and economic behavior*. New York: Wiley.
- Wilson, T. D., Kraft, D., & Dunn, D. S. (1989). The disruptive effects of explaining attitudes: The moderating effects of knowledge about the attitude object. *Journal of Experimental Social Psychology, 25*, 379–400.

Received: September 15, 2003

Accepted after one revision: June 26, 2004



Police Institute. Her research focuses on stress and conflict management in relation to criminal youth, intercultural interactions, and organized crime. (nicolien.kop@lsop.nl)

Winnifred R. Louis (Ph.D., McGill University) is a post-doctoral research fellow in the School of Psychology at the University of Queensland. Her research interests include decision-making in conflict, social influence and group norms, and collective action. (wlouis@psy.uq.edu.au)

M. Ben Mollov received his Ph.D. in Political Science from Bar-Ilan University, Israel, and earlier an M.A. from Columbia University in International Affairs. He is currently a lecturer in Political Science in the Interdisciplinary Department of Social Sciences at Bar-Ilan University, and teaches in the graduate program of the Program for Conflict Management at the University. His research interests include culture and conflict resolution and is the co-author of "Culture, Dialogue, and Perception Change in the Israeli-Palestinian Conflict" which appeared in *The International Journal of Conflict Management*. (mollob@mail.biu.ac.il)

Tyson Neil (B.A., L.L.B., B.C.L., McGill University) completed an honours arts degree in social psychology. He now applies this knowledge working in a law firm in Montréal, Canada. (tysonneil@hotmail.com)

Ken-ichi Ohbuchi is a professor of psychology at the Graduate School of Arts and Letters, Tohoku University in Sendai, Japan. He received his Ph.D. from Tohoku University. His research interests include cognitive, motivational, personality, and cultural factors of anger, aggression, and conflict management. He is currently engaged in research projects concerning justice and fairness in Japan. (ohbuchi@sal.tohoku.ac.jp)

Lakshmi Ramarajan is pursuing her Ph.D. in Management at the University of Pennsylvania. Her research interests include international conflict management, the role of international organizations in post-conflict reconstruction and turnover in human service organizations. She worked on conflict resolution programs for West Africa before joining the doctoral program. (ramaraja@wharton.upenn.edu)

Bas van Rossum studied organizational psychology at the University of Groningen, the Netherlands. His master thesis on conflict behavior in Japanese firms was prepared during a study visit to Tohoku University as part of a one-year stay in Japan. After holding a research position at the University of Groningen, he is presently employed with Asia House, guiding and preparing Dutch companies for doing business in Japan. (bas.vanrossum@asiahouse.nl)

Gerald M. Steinberg teaches Political Studies at Bar-Ilan University, and directs the Program on Conflict Management and Negotiation. His doctorate (Cornell University) examined the link between politics and technology in arms control verification, and current research includes Middle East diplomatic and security issues, CBMs, and critical analysis of models of dispute resolution. He is a consultant to the Israeli government, and participates in track-two processes. Recent articles include "Begin at Camp David: The Dynamics of Leadership Transformation", and "The Centrality of Confidence Building Measures: Lessons from the Middle East." (steing@mail.biu.ac.il)

The International Journal of Conflict Management, Vol. 15, No. 2

Donald M. Taylor (Ph.D., University of Western Ontario) is a Professor in the Department of Psychology at McGill University, Canada. He has conducted research in diverse settings involving issues of intergroup conflict and minority language development. (dmtaylor@hebb.psych.mcgill.ca)

Evert Van de Vliert, a professor of organizational and applied social psychology at the University of Groningen, the Netherlands, is past president of the IACM. His key book publication is *Complex interpersonal conflict behavior: Theoretical frontiers* (Psychology Press, 1997), and his current research interests focus on the impact of atmospheric thermoclimate on management, including conflict management. (e.van.de.vliert@ppsw.rug.nl)

Gerben Van der Vegt received his PhD in social and organizational psychology from the University of Groningen, the Netherlands. Currently, he is associate professor at the Department of Management and Organization at the same university. His research interests focus on the effects of interdependence, skill diversity, and socialization on effectiveness at different levels of analysis in work teams and organizations. (g.s.van.der.vegt@rug.nl)

