

Running Head: ACTION EFFICACY AND AGGRESSIVE COLLECTIVE ACTION

Predicting Aggressive Collective Action based on the Efficacy of Peaceful and Aggressive Actions

Citation: Saab, R., Spears, R. & Tausch, N., & Sasse, J. (in press). Predicting Aggressive Collective Action based on the Efficacy of Peaceful and Aggressive Actions. *European Journal of Social Psychology*.

Word count: 9,952 (excluding references, tables and figures).

Abstract

We examine whether aggressive forms of collective action are predicted by their perceived efficacy and the perceived efficacy of peaceful collective action, and whether the two predictors interact. We present data from surveys examining support for and tendencies toward aggressive collective action among university students opposed to increases in tuition fees in Britain (Study 1), and support for suicide bombings against Israeli civilians among Palestinians during the second Intifada (Study 2). Our results reveal an interaction between the efficacy of peaceful and aggressive collective actions: the more efficacious aggression is perceived to be, the greater its appeal and the less it is assuaged by the efficacy of peaceful action. This implies that 1) people may consider aggressive action whenever it works, even if peaceful action is efficacious, and 2) people may consider aggressive action even when it seems unpromising, if peaceful action is not efficacious, in an apparent nothing-to-lose strategy.

Keywords: Efficacy, collective action, political violence, aggression, nonviolence

Collective action is typically defined as action undertaken by an individual on behalf of a group with the aim of improving the status, power or influence of that group (Wright, Taylor, & Moghaddam, 1990b; van Zomeren & Iyer, 2009). It can take many forms, which can be divided into peaceful (e.g. demonstrations, sit-ins) or aggressive actions (e.g. riots, physical attacks, terrorist attacks). We define aggressive collective action in the present research as action that involves the use of physical force with the intention to physically hurt other *people* or damage *property*, which peaceful collective action does not entail. We define violent collective action as a subset of aggressive collective action and as an extreme form of aggression against *people*, intended to inflict severe physical harm (e.g. serious injury or death) (see Allen & Anderson, 2016).¹ Despite the societal attention that aggressive collective action generally attracts, empirical studies in this area remain scarce compared to those on peaceful actions (Wright, 2009). The present research focuses on how efficacy considerations, previously shown to be important predictors of peaceful collective action (van Zomeren, Postmes, & Spears, 2008), predict aggressive forms of collective action. Recent research has identified low group efficacy – a sense that one’s group is incapable of resolving its grievances – as a predictor of aggressive collective action (Tausch, Becker, Spears et al., 2011). However, to date there has been no systematic empirical investigation of how aggressive forms of collective action are uniquely influenced by their own perceived efficacy as well as the efficacy of peaceful collective actions, nor, importantly, the potential interaction between the two. The objective of our research is to address this gap.

The Role of Efficacy in Collective Action

In the context of group-based action, efficacy refers to the perceived likelihood that collective action will achieve a desired social change. Different social-psychological approaches to collective action such as Relative Deprivation Theory (Folger, 1986; Mummendey, Kessler,

Klink, & Mielke, 1999; Smith & Kessler, 2004), Resource Mobilization Theory (Klandermans, 1984), and Social Identity Theory (SIT: Tajfel & Turner, 1979) have long stressed the influence of pragmatic considerations on collective action, using notions similar to that of efficacy. SIT, for example, focuses on the concept of (in)stability of intergroup relations (Tajfel & Turner, 1979), whereby a *stable* social system is unresponsive to attempts by group members to improve the position of their group, whereas an unstable social system is (see Wright, 2001, for a distinction between efficacy and stability). Classical SIT suggests that group members who view their group's position as illegitimately disadvantaged are more likely to challenge the status quo collectively if they view their disadvantage as unstable (Ellemers, 1993; Tajfel & Turner, 1979). Other lines of research emphasize the concept of *group efficacy* (Smith, Cronin, & Kessler, 2008; Thomas, McGarty, & Mavor, 2009; van Zomeren, Spears, Fischer, & Leach, 2004), which refers to group members' belief that they can effectively resolve a problem facing their group through collective effort (Bandura, 1995, 1997; Mummendey et al., 1999).

Despite differences across these theories, all of them have traditionally stressed that, in order to participate in collective action, members of a disadvantaged group must believe that they can improve the conditions of their group and resolve their grievances through collective action. Research has generally found support for this idea (Hornsey et al., 2006; Kelly & Breinlinger, 1995; van Zomeren et al., 2004; see van Zomeren et al., 2008, for meta-analytic evidence).

However, a critical look at the quantitative evidence on the link between efficacy and collective action shows a rather exclusive focus on the prediction of *peaceful* forms of collective action (Hornsey et al., 2006; van Zomeren et al., 2008), despite the obvious social and practical implications of research on aggressive forms of action (Wright, 2009). Importantly, some research seems to suggest that, unlike peaceful collective action, aggressive forms of collective action may be motivated by the *low* perceived likelihood that a desired social change will be

achieved. For example, Tausch et al. (2011) found that group efficacy was positively related to peaceful actions but *negatively* related to aggressive action tendencies (Study 1). Similarly, van Zomeren, Saguy and Schellhaas (2013) found group efficacy to be negatively predictive of aggressive collective action tendencies (Study 2). Tausch et al. (2011) argued that resorting to aggression in a situation offering little hope can be highly strategic and functional, as it could help garner support for the cause (e.g., Hornsey et al., 2006), for example by provoking the opponent into extreme counter-action (see Sedgwick, 2004). By destabilizing the status quo, aggression may thus facilitate the conditions that could lead to social change in the long run (see also Louis & Taylor, 2002; Spears, Scheepers, van Zomeren, Tausch & Gooch, 2015).

The findings of Tausch et al. (2011) and van Zomeren et al. (2012) concur with earlier research suggesting that difficulty in improving a disadvantaged group's position is linked to more aggressive collective action, rather than inaction. Ransford (1968) found that aggressive action tendencies in the context of the Watts Riots were positively correlated with feelings of powerlessness and lack of control. Similarly, Wright and colleagues (1990b) found that participants assigned to a disadvantaged group were more likely to opt for disruptive (non-normative) forms of collective action when they were denied opportunities to move to an advantaged group. They also found that lack of hope for an improvement of their position best distinguished participants who chose disruptive forms of collective action from those who chose other forms of action (Wright, Taylor, & Moghaddam, 1990a; see also Kamans, Spears, Otten, Gordijn, & Livingstone, 2012).

More recently, a series of experimental studies by Scheepers, Spears, Doosje and Manstead (2006; see also Spears et al., 2015) found that, contrary to classical predictions of SIT, groups with *stable* low status were more likely to support a relatively aggressive strategy of derogating the outgroup in rewards and ratings, compared to groups with *unstable* low status, especially when this discrimination was visible to the outgroup audience. Scheepers et al. (2006)

and Spears et al. (2015) referred to this as a “nothing to lose” strategy. They proposed that this strategy stems from the belief that doing nothing is unlikely to change the situation whereas using a confrontational strategy, in comparison, has the potential to improve or at least unsettle the situation.

Importantly, the research just reviewed on the influence of pragmatic considerations on aggressive forms of group action has thus far focused primarily on the perceived *general* possibility of achieving a desirable social change rather than the efficacy of different collective action types. This lack of specificity might explain some inconsistencies in the link between efficacy considerations and aggressive collective action (e.g. the link was not significant in Studies 2 and 3 in Tausch et al., 2011). As pointed out by both Tausch et al. (2011) and van Zomeren et al. (2012), it is not clear how aggressive forms of action are predicted by perceptions of their efficacy, as well as by the perceived efficacy of other, peaceful forms of collective action. The aim of the present research is therefore to address this issue.

The Present Research

Our research examines how aggressive action efficacy and peaceful action efficacy predict aggressive forms of collective action. Although peaceful forms of action are equally important they fall outside the scope of the current paper. We now review existing research on how efficacy considerations relate specifically to aggressive forms of collective action and outline our predictions.

According to the expectancy-value theory of behavior, the perceived expectancy that some behavior will result in a valued outcome should positively predict the intention to engage in that behavior (Fishbein & Ajzen, 1975). In line with this idea, there is considerable empirical evidence that the perceived efficacy of peaceful actions at achieving desired group ends is a positive predictor of peaceful collective action (e.g. Hornsey et al., 2006; van Zomeren et al., 2008). However, research on the relation between the perceived efficacy of aggressive collective

action and its endorsement/pursuit is comparatively scarce. Most of the evidence comes from qualitative accounts of crowd events that involved conflict with the police. For example, following a qualitative investigation of “the battle of Westminster”, a conflict between student demonstrators and the police in Britain, Reicher (1996) suggested that an essential precondition for such conflicts to erupt is for crowd members to perceive clashes with the police to be effective at achieving desired ends. Subsequent accounts of conflictual crowd events led to the development of the Elaborated Social Identity Model of collective action, which highlights the importance of crowd members feeling empowered through their unity before confronting an oppositional police force (e.g. Drury & Reicher, 1999; Stott & Drury, 2000; Reicher & Stott, 2011, see also Drury, Evripidou, & van Zomeren, 2015 for a review). To our knowledge, only Ginges and Atran (2011) have quantitatively examined the link between aggressive collective action and its perceived efficacy. In a study on Israeli settlers (Study 1), they found no link between willingness to take part in acts of political violence in the event of settlement dismantlement and the perceived efficacy of such acts. However, their study was scenario-based, and they examined the perceived efficacy of politically violent acts in Israeli society in general rather than in the specific context of the study, which might explain their null results. If aggressive collective action is at least partially rationally motivated, it should be positively predicted by its perceived efficacy at achieving desired group aims (see van Zomeren et al., 2013, for a similar prediction). Hence, people should be more likely to pursue aggressive collective action the more efficacious they perceive it to be for resolving their grievances.

The perceived efficacy of peaceful collective action, however, is also likely to play a role in predicting aggressive collective action. Researchers have long theorized that people are more likely to resort to political violence when peaceful alternatives are seen as ineffective at addressing grievances (Bloom, 2004; Crenshaw, 1990; Louis, 2009; Pruitt & Gahagan, 1974), given that aggressive/violent collective action is typically riskier than peaceful collective action

(e.g. see Stephan & Chenoweth, 2008; Wright, 2009). Accordingly, increasing the perceived efficacy of peaceful forms of action is thought to help reduce or prevent political violence.

Surprisingly, until recently evidence in support of the hypothesized negative relation between peaceful action efficacy and aggressive collective action was based solely on qualitative studies, such as case studies of political conflicts (Pruitt & Gahagan, 1974) and interviews with militants involved in acts of political violence (Masters, 2004; Post, Sprinzak, & Denny, 2003; Soibelman, 2004). However, Zaal, van Laar, Ståhl and Ellemers (2012) recently reported correlational and experimental evidence that the perceived efficacy of mild peaceful collective action (e.g. demonstrations) overall negatively predicts support for more aggressive forms of collective action (e.g. occupying buildings, vandalism, sabotage). More relevantly, a survey of protesters by Louis, Paasonen, Hornsey et al. (2015) found that the perceived efficacy of peaceful demonstrations at influencing policy-makers overall negatively predicted support for violence during protests.

Accordingly, we would expect that overall, aggressive collective action would relate positively to its perceived efficacy, and negatively to the perceived efficacy of peaceful collective action. Importantly, however, previous research has not considered the possibility that aggressive collective action may result from an interaction between the perceived efficacy of peaceful and aggressive collective action. Yet, it is conceivable that the perceived inefficacy of peaceful actions leads to aggressive acts depending on whether such acts are efficacious or not. The present research therefore aims to test this possibility.

The Influence of Aggressive Action Efficacy on the Link between Peaceful Action Efficacy and Aggressive Collective Action

We consider three competing hypotheses for how the link between the perceived efficacy of peaceful action and the endorsement/pursuit of aggressive collective action strategies may be affected by the perceived efficacy of aggressive collective action. For ease of interpretation,

these hypotheses are illustrated in Figure 1. According to one moderation hypothesis, individuals resort to aggression only when peaceful action has low efficacy, and especially if aggression is efficacious (panel 1, Figure 1). This assumes that people do not resort to aggression whenever it is effective. Instead, they resort to aggression only after they have exhausted peaceful options (e.g. Pruitt & Gahagan, 1974), at which point they resort to aggression to the extent that it is effective. Given that this hypothesis assumes that people give primacy to peaceful means of social change before using violence, we term this interaction the “primacy of peaceful means” hypothesis.

A competing hypothesis, however, is that the more efficacious aggressive collective action is perceived to be, the less it would be affected by the perceived efficacy of peaceful means (panel 2, Figure 1). This is based on the idea that people who view aggressive collective action to be efficacious may decide to pursue it regardless of the efficacy of peaceful action. Importantly, this does not necessarily mean they will only consider aggressive strategies. Instead, they may pursue both aggressive and peaceful strategies in parallel if both have high efficacy, in order to maximize the chances of achieving the desired social change or to reach it more efficiently. Given that this hypothesis assumes that peaceful and aggressive collective actions are complementary rather than mutually exclusive strategies, we term it “the gun and the olive branch” hypothesis. Consistent with this idea, Stephan and Chenoweth (2008) noted the simultaneous use of both aggressive/violent and peaceful resistance methods in various campaigns in recent history (see also Dudouet, 2008), such as the South African struggle for liberation (Schock, 2005).

While both moderation hypotheses are conceivable as they reflect differences in existing guiding principles concerning the use of aggression, a third conceivable hypothesis is that peaceful action efficacy and aggressive action efficacy have additive, independent effects on

aggressive collective action. We term this the “independent effects” hypothesis (panel 3, Figure 1).

The “Nothing to Lose” Hypothesis

Regardless which of these competing hypotheses is supported, we believe it is of special theoretical importance to determine if aggressive forms of collective action could gain appeal in response to the perceived inefficacy of peaceful actions, even if aggression itself is perceived to have low efficacy. That is, would peaceful action efficacy have a negative *simple effect* on aggressive action (even) when aggression has *low* efficacy? Obviously, this negative simple effect is automatically implied by both “the gun and the olive branch” moderation hypothesis as well as the “independent effects” hypothesis (see panels 2 and 3, Figure 1). Conversely, the “primacy of peaceful means” moderation hypothesis (see panel 1, Figure 1) suggests that the inefficacy of peaceful means may lead to *no* escalation in aggression if such aggression is perceived to have low efficacy. We argue, however, that the efficacy of peaceful actions negatively predicts aggressive collective action when aggression has low efficacy. We therefore advance a specific hypothesis regarding this simple effect, which we term the “nothing to lose” hypothesis.

This prediction might at first seem counterintuitive in light of the expectancy-value theory of behaviour (Fishbein & Ajzen, 1975) and the classical view in the literature suggesting that people should have little motivation to pursue collective action in circumstances offering little scope for change (Bandura, 1997; Smith & Kessler, 2004; Tajfel & Turner, 1979; van Zomeren, Postmes, & Spears, 2008; Wright, 2001).

Importantly, however, as mentioned previously, some recent work has argued that aggressive collective action strategies may sometimes be used in order to unsettle a stable social system and bring about the conditions that would facilitate social change in the long run (Louis & Taylor, 2002; Scheepers et al., 2006; Sedgwick, 2004; Spears et al., 2015; Tausch et al.,

2011). For example, both Scheepers et al. (2006) and Spears et al. (2015) suggested that disadvantaged group members adopt more extreme forms of group action when the possibility of improving their conditions is low, as they have “nothing to lose”. That is, there may be more to gain by using an aggressive strategy than by doing nothing.

The “nothing to lose” argument echoes an argument made by Masters (2004), who suggested that when group members face an ongoing injustice, and believe that inaction or peaceful means offer no chance of improving the status quo, while violent rebellion offers a chance, however slim, to improve the situation, they will tend to support violence even if it involves considerable risks. He based his argument on the assumption of loss aversion from prospect theory (Kahneman & Tversky, 1979), which predicts that when faced with one choice involving a guaranteed loss, and another choice involving a *likely* loss of equal or greater value, people tend to prefer the risky option, because it offers at least the possibility, however small, to escape losses altogether. Masters (2004) found support for his argument in interviews with militants from Northern Ireland and Palestine. Accordingly, our “nothing to lose” hypothesis postulates that peaceful action efficacy will negatively predict aggressive collective action when such aggression is seen to have low efficacy. Importantly, this does *not* imply that in desperate circumstances, aggression will necessarily be *favored* over peaceful action. Rather, there will be greater aggression in *absolute terms* when neither peaceful nor aggressive actions are promising strategies, compared to when only peaceful action is promising.

Overview of Studies

We present two studies testing our hypotheses in different contexts. Study 1 examines support for aggressive collective action and aggressive action tendencies among British university students in response to proposed increases in university tuition fees. Study 2 examines support for suicide bombings among Palestinians in the West Bank and Gaza during the Second

Intifada, and attempts to disentangle the influence of efficacy perceptions from desire for revenge, and the perceived counter-productivity of aggression.

Study 1

This study was conducted online in the context of the British student protest movement against increases in university tuition fees and budget cuts to higher education, proposed by the coalition government (the Conservative party and the Liberal Democrats) in the fall of 2010. Students took a number of peaceful actions, but some also engaged in aggressive actions, in what came to be known as the Millbank riot. This involved breaking into the headquarters of the Conservative party in London (the Millbank tower), including breaking windows and vandalism, and clashes with the police (throwing missiles and physical confrontations; The Guardian, 2010). The present study was conducted in December 2010, days before the parliamentary vote session on the proposed rise in tuition fees.

Method

Participants and procedure. The study was advertised through a British rewards-based online shopping network and targeted British university students, offering them an opportunity to enter into a prize draw. There were 308 respondents (184 women, 121 men, three unknown), with a mean age of 22.76 ($SD = 5.17$). Most were British nationals ($N = 278$). The rest were European Union nationals ($N = 16$) or nationals from elsewhere.

Measures.

Perceived injustice. Since some political figures framed the proposed educational reforms as being beneficial to some students (e.g. Coughlan, 2010), we expected some students to support the proposal and thus to have no motive for taking collective action against it, regardless of its efficacy. As our aim was to examine how efficacy concerns influence collective action among those who perceive a situation as unjust and who thus belong to the mobilization potential (Klandermans, 1984), we measured the perceived injustice of the proposed education

cuts and increase in tuition fees prior to administering our measures of interest, with a view to exclude from our analyses those who perceive these as fair. Participants responded using 7-point scales (1 = *strongly disagree*, 7 = *strongly agree*) to four items stating that education cuts and fees are “justified” (reverse-coded); “unfair”; “immoral”; and “legitimate” (reverse-coded). The items were averaged to yield a composite score of perceived injustice ($\alpha = .78$).

Perceived efficacy of aggressive and peaceful collective action. Participants rated how effective they thought a list of three aggressive and three peaceful actions would be at preventing a vote on December 9th in favour of the planned education cuts and fees, using a ten-point scale (0=*not effective at all*, 9=*extremely effective*). Aggressive collective action was operationalized as breaking forcefully into offices of political parties supporting education cuts and fees (e.g. like the occupation of the Millbank Tower), attacking offices of political parties or politicians supporting education cuts and fees, and throwing eggs or rotten fruit at politicians supporting education cuts and fees. Peaceful collective action was operationalized as signing petitions, peaceful demonstrations and classroom walkouts (strikes). All of these actions, except for throwing eggs or rotten fruit at politicians, had already occurred as part of the student protest activities at the time of the survey. The items were averaged to yield composites of the perceived efficacy of aggressive collective action ($\alpha = .95$) and the perceived efficacy of peaceful collective action ($\alpha = .89$).

Support for aggressive collective action. Participants rated the extent to which they supported or opposed the use of aggressive actions (same as above) against education cuts and fees before the vote on December 9th, on an 11-point scale (-5=*strongly oppose*, 0=*neither support nor oppose*, 5=*strongly support*). The items were averaged to yield a composite score of support for aggressive collective action ($\alpha = .95$).

Aggressive collective action tendencies. Participants rated the likelihood that they would participate in aggressive actions (same as above) against education cuts and fees before the vote

on December 9th, using a ten-point scale (0 = not likely at all, 9 = extremely likely). The items were averaged to yield a composite score of aggressive collective action tendencies ($\alpha = .98$)².

Results and Discussion

A missing value analysis revealed that all variables had less than 1% missing values. Two participants failed to complete entire scales and were therefore deleted from our dataset. The rest of the missing values were imputed using the Expectation Maximization method (EM) (Tabachnick & Fidell, 2007). Out of range values were adjusted to the nearest acceptable score. Analyses revealed that 20.6% of the sample ($n = 62$) scored lower than the mid-point of the Likert scale (<4) on the measure of perceived injustice of the proposed education cuts and raise in tuition fees, indicating they perceived these to be fair. We thus excluded them from subsequent analyses. The final sample consisted of 243 students (147 female, 95 male, 1 unknown; mean age = 22.69, $SD = 4.88$). Details of all variables of interest and a correlation matrix are reported in Table 1.

Analytic strategy. We conducted two multiple regression analyses using Ordinary Least Squares (OLS) multiple regression, with support for aggressive collective action and aggressive collective action tendencies as outcome variables. Our predictors consisted of the efficacy of peaceful and aggressive collective action and their interaction. All continuous predictors were centred prior to our analyses, following recommendations by Aiken and West (1991). We report unstandardized regression coefficients. Significant interactions were followed with simple slope tests, where we standardized our predictors and outcome variables, and examined the impact of the efficacy of peaceful action at one standard deviation above and below the efficacy of aggressive action. The same analytic strategy was used across both studies.

Support for aggressive collective action. The regression model explained 68.7% of the variance (adjusted R-Square), $F(3, 239) = 178.27, p < .001$. As expected, aggressive action efficacy emerged as a significant positive predictor, $b = .92, SE = .05, t(239) = 20.18, p < .001$.

Peaceful action efficacy, on the other hand, was not a significant predictor, $b = -.03$, $SE = .06$, $t(239) = -.58$, $p = .57$, *ns*. However, we found a significant interaction effect, $b = .04$, $SE = .02$, $t(239) = 2.39$, $p = .018$, which is plotted in Figure 2. Follow-up simple slope tests showed that in line with “the gun and the olive branch” interaction, peaceful action efficacy negatively predicted support for aggression when aggression had low efficacy, $\beta = -.10$, $SE = .05$, $t(239) = -2.14$, $p = .033$, but not when aggression had high efficacy, $\beta = .05$, $SE = .05$, $t(239) = 0.99$, $p = .32$, *ns*. Moreover, the results support the “nothing to lose” hypothesis, given that peaceful action efficacy negatively predicted support for aggressive action when such aggression had low efficacy.

Aggressive collective action tendencies. The regression model explained 54.3% of the variance (adjusted R-Square), $F(3, 239) = 97.02$, $p < .001$. As expected, aggressive action efficacy emerged as a significant positive predictor, $b = .73$, $SE = .05$, $t(239) = 14.68$, $p < .001$. Peaceful action efficacy, on the other hand, was not a significant predictor, $b = -.02$, $SE = .06$, $t(239) = -.33$, $p = .74$, *ns*. However, a significant interaction effect emerged, $b = .04$, $SE = .02$, $t(239) = 2.23$, $p = .027$. We probed this interaction further and plotted it in Figure 3.

Follow-up simple slope tests showed that, in line with “the gun and the olive branch” interaction, peaceful action efficacy negatively (though not significantly) predicted aggressive action tendencies when aggression had low efficacy, $\beta = -.10$, $SE = .06$, $t(239) = -1.83$, $p = .07$, *ns*, but not when aggression had high efficacy, $\beta = .07$, $SE = .07$, $t(239) = 1.07$, $p = .28$, *ns*. Moreover, the results support the “nothing to lose” hypothesis, given that peaceful action efficacy negatively predicted aggressive action tendencies when such aggression had low efficacy³.

To summarize, Study 1 provided initial evidence of an interaction effect between perceptions of peaceful and aggressive action efficacy in predicting inclinations toward aggressive collective action among British University students, in the campaign against

increased tuition fees. Support for and tendencies to engage in aggressive collective action were overall positively predicted by the perceived efficacy of aggressive acts, but showed no overall relation with peaceful action efficacy. Importantly, however, an interaction effect emerged between peaceful and aggressive action efficacy in predicting support for aggressive action and aggressive action tendencies. The pattern of this interaction was consistent with “the gun and the olive branch” hypothesis, such that the more efficacious aggression was perceived to be, the less the efficacy of peaceful action mattered for deciding whether or not to support aggressive actions or engage in them. Importantly, the results also supported the “nothing to lose hypothesis”, since when aggression had low efficacy, the efficacy of peaceful actions negatively predicted support for aggression and aggressive action tendencies, although the link did not achieve conventional levels of significance for the latter.

This study, however, tested our hypotheses by focusing on aggressive collective actions which are not violent per se, as they do not involve the intention to physically harm people. In the next study, we examine a violent and more extreme form of aggressive collective action, namely suicide bombings, in the context of the Palestinian struggle for independence from Israeli occupation. Importantly, we test whether perceptions of aggressive and peaceful action efficacy predict support for aggression over and above other potentially powerful predictors of aggression, namely desire for revenge and the perceived counter-productivity of aggression.

Study 2

This study examined support for suicide bombings against Israeli civilians, using data from a public opinion poll with a randomly selected sample of Palestinians in Gaza and the West Bank during the Second Intifada (uprising between 2000-2005). This period witnessed the use of both nonviolent collective actions and over a hundred suicide bombing attacks targeting Israeli soldiers and/or civilians (Brym & Araj, 2006). The poll, commissioned to the Program on International Policy Attitudes of the University of Maryland, aimed to investigate the potential

for a completely nonviolent uprising. The survey was conducted in Arabic during August 12-19, 2002, by a Palestinian polling organization using face-to-face interviews and had a margin of error of $\pm 4\%$ (Kull, Ramsay, Warf, & Wolford, 2002).

It has previously been argued that the primary motive of suicide bombings is national liberation (Pape, 2005), while other work has advanced revenge as the main motive (Brym & Araj, 2006). Araj (2012) recently analyzed pre-attack statements of a randomly selected sample of Palestinian suicide bombers ($N = 42$), and interviewed their relatives and friends. He found that taking revenge for Israeli attacks against Palestinians constituted a primary motivation for the majority, while liberating Palestine constituted a secondary or tertiary motivation for about half of them. This suggests that both the perceived efficacy of aggression and desire for revenge may uniquely predict aggressive collective action. Araj's (2012) research is the first to examine the separate contributions of national liberation and revenge motives to the explanation of suicide bombings. However, his findings are based on a content analysis of self-reported motives for suicide bombings and retrospective explanations by family members, which may not accurately reflect suicide bombers' real motives. In the present study, we examine whether perceptions of aggressive and peaceful action efficacy can uniquely predict *support* for suicide bombings, over and above desire for revenge. Although support is different from actual engagement in such attacks, it is likely to be a proximal predictor of engagement (e.g. Mascini, 2006) and is important to study in its own right. In line with Araj's (2012) findings, we expect desire for revenge to positively predict support for suicide bombings.

Another important factor that might influence the decision to endorse aggressive collective action, is its (perceived) potential counter-productivity. During the second Palestinian Intifada, it was frequently argued that suicide bombing attacks targeting Israeli civilians *decrease* international support for the Palestinian cause (Amayreh, 2002) and are therefore counterproductive. Research on peaceful collective action has shown it be to be positively and

uniquely predicted by both the perceived efficacy of peaceful action at increasing public opinion support and at influencing policy-makers and thus redressing a perceived injustice (Hornsey, Blackwood, Louis et al., 2006). The present research extends this argument to examine whether efficacy perceptions of peaceful and aggressive actions can uniquely predict support for aggressive collective action, over and above the perceived counter-productivity of aggressive actions in influencing public opinion. We expect the anticipated counter-productivity of aggressive collective action, namely in reducing public support for the ingroup's cause, to negatively predict support for aggression.

Method

Participants. The interview was completed by 600 respondents. All variables of interest had less than 5% missing data. We excluded 67 participants who had missing data on one or more of our three key variables as these were single-item measures. The final sample consisted of 533 participants (272 men, 259 women, 2 unknown) of various ages (18-29 years, $n = 181$; 30-39 years, $n = 205$; 40-49 years, $n = 83$; 50 years or more, $n = 54$; 10 unknown) and levels of education (9 years of education or less, $n = 138$; 10-13 years of education, $n = 176$; college degree holders, $n = 106$; college graduates, $n = 108$; 5 unknown). They also supported various political parties (Fatah, $n = 113$, Hamas or Islamic Jihad, $n = 157$; independent or unaffiliated, $n = 160$, other or unknown, $n = 103$).

Measures.

Perceived efficacy of aggressive and peaceful collective action. We measured aggressive action efficacy using participants' ratings of their degree of conviction with the following statement: "Using violence against Israeli civilians increases the likelihood that Israel will make compromises". We measured peaceful action efficacy using participants' ratings of their degree of conviction with the following statement: "Mass nonviolent action puts pressure on Israel while also undermining its excuse that it cannot negotiate as long as there is violence."

Both statements were rated using a 4-point verbally-labelled scale (*very convincing* coded as 1, *somewhat convincing* (2), *somewhat unconvincing* (3), *very unconvincing* (4)). We reverse scored both items so that higher scores reflect greater perceived efficacy ⁴.

Desire for revenge. Participants rated their degree of conviction with the following statement: “Since Palestinians suffer at the hands of Israelis, then Israeli civilians should suffer at the hands of Palestinians”, using a 4-point scale (*very convincing* coded as 1, *somewhat convincing* (2), *somewhat unconvincing* (3), *very unconvincing* (4)). We reverse scored this item so that higher scores reflect a greater desire for revenge.

Perceived counterproductivity of aggression. Participants rated their degree of conviction with the following statement: “When Palestinians use violence against civilians this undermines support for the Palestinian cause”, using a 4-point scale (*very convincing* coded as 1, *somewhat convincing* (2), *somewhat unconvincing* (3), *very unconvincing* (4)). We reverse scored this item so that higher scores reflect greater perceived counter-productivity.

Support for aggressive collective action. Participants rated the extent to which they thought suicide bombings of Israeli civilians were a good idea as a method of resisting the Israeli occupation, on an 11-point scale (0 = it is not a good idea, 5 = neutral, 10 = it is a good idea) ⁵.

Results and Discussion

Details of all variables of interest and a correlation matrix are reported in Table 2. We regressed support for aggressive collective action on peaceful action efficacy, aggressive action efficacy, and their interaction, as well as desire for revenge and the perceived counter-productivity of aggression. We used the same analytic strategy as in Study 1. However, given that our data violated some assumptions of multiple linear regression (e.g. normality of errors, homoscedasticity), we used the bootstrapping procedure to estimate our model parameters as recommended by Field (2013), based on 1000 bootstrap samples. We report bootstrapped regression coefficients adjusting for bias,

using bootstrap standard errors (SE), p-values, and bias-corrected accelerated (BCa) 95% confidence intervals (CI).

Our regression model explained 17.5% of the variance in support for aggression (adjusted R-Square), $F(5, 527) = 23.58, p < .001$. Desire for vengeance emerged as a significant positive predictor, $b = .86$, Bias = -.005, $SE = .20$, 95% BCa 95% CI [0.47, 1.24], $p = .001$, while the perceived counter-productivity of aggression emerged as a significant negative predictor, $b = -.69$, Bias = -.001, $SE = .15$, 95% BCa 95% CI [-0.99, -0.41], $p = .001$. Aggressive action efficacy emerged as an overall significant positive predictor, $b = .37$, Bias = -.001, $SE = .13$, 95% BCa 95% CI [0.11, 0.64], $p = .004$, while peaceful action efficacy emerged as an overall negative but not reliably significant predictor, $b = -.25$, Bias = -.003, $SE = .15$, 95% BCa 95% CI [-0.53, 0.05], $p = .08$. However, the interaction between peaceful and aggressive action efficacy was also significant, $b = .28$, Bias = .002, $SE = .12$, 95% BCa 95% CI [0.05, 0.50], $p = .021$. The pattern of this interaction is plotted in Figure 4. Follow-up simple slope tests showed that, in line with “the gun and the olive branch” hypothesis, support for aggressive collective action was negatively predicted by peaceful action efficacy when aggression had low efficacy, $\beta = -.17$, Bias = -.001, $SE = .06$, 95% BCa 95% CI [-.29, -.06], $p = .005$, but not when aggression had high efficacy, $\beta = .01$, Bias < .001, $SE = .06$, 95% BCa 95% CI [-0.10, 0.12], $p = .87$. Moreover, the results support the “nothing to lose” hypothesis, given that peaceful action efficacy negatively predicted aggression when aggression had low efficacy⁶.

In sum, Study 2 provided further evidence of an interaction effect between peaceful and aggressive action efficacy in predicting support for a lethal form of aggressive collective action. Support for suicide bombings against Israeli civilians as a method of resisting the Israeli occupation was overall positively predicted by the efficacy of violence against civilians at

pushing Israel to compromise and negatively predicted by the efficacy of peaceful actions at pushing Israel to negotiate. However, these effects were qualified by a significant interaction which was consistent with “the gun and the olive branch” hypothesis, such that the greater the perceived efficacy of aggression was, the less the efficacy of peaceful actions mattered for deciding whether or not to endorse suicide bombings. Importantly, the “nothing to lose hypothesis” was also supported, since when violence against civilians was thought to have low efficacy at pushing Israel to compromise, support for suicide bombings was predicted by the perceived inefficacy of peaceful collective action at pushing Israel to negotiate. Interestingly, this study also showed that aggressive action efficacy, peaceful action efficacy and their interaction contribute uniquely to the prediction of support for aggression, over and above desire for vengeance and the perceived counter-productivity of aggression. As expected, support for suicide bombings was positively predicted by desire for revenge and negatively predicted by the perceived counter-productivity of aggression.

General Discussion

The main objective of the present research was to examine how aggressive forms of collective action are predicted by their perceived efficacy and by the perceived efficacy of peaceful collective action. A key question of our research was whether aggressive and peaceful action efficacy interact in predicting aggressive collective action. We considered three competing hypotheses: “the primacy of peaceful means”, “the gun and the olive branch” and “the independent effects” hypotheses. We presented the results of two studies that examined our hypotheses in different contexts. We now assess our findings in relation to our predictions and suggest directions for future research. After discussing some limitations in our research, we turn to the theoretical contributions and practical implications of our findings.

Aggressive Collective Action as a Function of the Efficacy of Aggressive and Peaceful Actions, and their Interaction

In line with our predictions, the perceived efficacy of aggressive collective action at redressing perceived injustices overall positively predicted aggression support and aggressive action tendencies among British university students opposed to increases in tuition fees (Study 1), as well as support for suicide bombings against Israeli civilians among Palestinians during the second Intifada (Study 2). These results are broadly consistent with the expectancy-value theory of behavior (Fishbein & Ajzen, 1975) and extend previous research that has demonstrated the importance of efficacy considerations to the prediction of *peaceful* forms of collective action (Klandermans, 1984; Hornsey et al., 2006; van Zomeren et al., 2008).

Conversely, the perceived efficacy of peaceful action at redressing perceived injustice did not, overall, reliably predict support for and tendencies toward aggressive collective action among British university students opposed to increases in tuition fees (Study 1) or Palestinian support for suicide bombing attacks against Israelis civilians (Study 2). Importantly, these effects were qualified by a significant interaction between peaceful and aggressive action efficacy, which showed a similar pattern in both studies. Consistent with “the gun and the olive branch” hypothesis, the more efficacious aggressive collective action was perceived to be, the more appealing it became and the *less* it was assuaged by the perceived efficacy of peaceful collective action. Hence, when aggression was seen to be an efficacious way of redressing a perceived injustice, people reported support for aggressive collective action and willingness to engage in it with relatively little regard to whether peaceful action was efficacious. Moreover, Study 2 found that “the gun and the olive branch” interaction holds independently from other motives and considerations, namely desire for revenge and the perceived counter-productivity of aggression.

Given that *ordinal* interactions can result from a statistical artefact (Mitchell & Jolley, 2006), it is worth considering whether “the gun and the olive branch” interaction falls in this category. In particular, the negative relation between peaceful action efficacy and aggression may appear to be weaker when aggression has high efficacy due to a ceiling effect. As illustrated

in the graphs of our studies, however, this is clearly not the case, as in neither study did support for aggression or aggressive action tendencies reach their maximal level when aggression had high efficacy.

Hence, “the gun and the olive branch” interaction we found points to the need to qualify the claim that people resort to aggressive collective action *only* when peaceful means of change are perceived as ineffective (e.g. Bloom, 2004; Crenshaw, 1990; Louis, 2009; Pruitt & Gahagan, 1974). Our results suggest that in contexts where both peaceful and aggressive actions are in use, people resort to aggressive collective action as long as it seems efficacious, even if peaceful action also seems efficacious. Note that this does not necessarily mean that people *only* consider aggressive action. Instead, people could regard aggressive and peaceful actions as complementary strategies to be used alongside each other, as a way to maximize the chances of achieving the desired social change goal or to achieve it more efficiently⁷.

The “Nothing to Lose” Hypothesis

The emergence of “the gun and the olive branch” interaction pattern in both studies also means that the “nothing to lose” hypothesis was supported. In both studies, we found that when the perceived efficacy of aggression was low, support for aggressive collective action was negatively predicted by the perceived efficacy of peaceful collective action. There is some indication that this result extends to aggressive action tendencies (Study 1), although this effect did not reach conventional levels of significance. However, one would expect the effect on action tendencies to be weaker than that on action support since classic attitude-behavior models in psychology (e.g. Ajzen, 1977; Fishbein & Ajzen, 1974) consider intentions as more proximal predictors of action than attitudes because they take more account of practical constraints. In line with this, van Zomeren et al.’s (2008) meta-analysis found efficacy perceptions to predict attitudes toward (peaceful) collective action more strongly than action tendencies.

The evidence we found in support of the “nothing to lose” hypothesis is important as it seems to contradict the traditional view in the literature that collective action would be least likely to occur when the scope for change is most restricted (Bandura, 1997; Smith & Kessler, 2004; Tajfel & Turner, 1979; van Zomeren, et al., 2008). If this view holds true, aggressive collective action should be least appealing among those who believe that both aggressive and peaceful strategies have low efficacy. However, our results show that aggressive inclinations are *not* at their lowest here, but are at their lowest among those who believe aggression has low efficacy and peaceful action has high efficacy. Our findings are thus consistent with an emerging body of research that suggests greater aggressive group action in situations characterized by restricted scope for change (Scheepers et al., 2006; Spears, et al., 2015; Tausch, et al., 2011; van Zomeren et al., 2013). However, unlike this other research, which has only examined variations in aggressive action as a function of the perceived *general* potential to change the status quo, the present work is the first to test variations in aggressive action as a function of the perceived efficacy of both aggressive and peaceful actions.

The “nothing to lose” effect raises questions regarding the motives behind the increased endorsement of aggression in response to the inefficacy of peaceful action, despite the low efficacy of aggression itself. Preliminary analyses in Study 2 indicate that this effect is distinct from desire for revenge or the perceived counter-productivity of aggression. Building on Scheepers et al. (2006) and Spears et al.’s (2015) “nothing to lose” argument, as well as Masters’ (2004) line of reasoning, we have argued that aggression in conditions offering little hope and scope for change may be motivated by a desire to redress a perceived injustice (see also Tausch et al., 2011), because although it has low efficacy people may still consider it to be more promising than inaction, which would only preserve the status quo. There are various reasons why people may think aggression action would help, such as attracting attention and support from the wider public and building a movement (e.g., Hornsey et al., 2006; Klein, Spears &

Reicher, 2007; Saab, Tausch, Spears, & Cheung, 2014) perhaps by provoking an extreme counter-action by the opponent (see Sedgwick, 2004). Aggressive action might thus unsettle the status quo and facilitate the conditions that could lead to the desired social change in the long run (see also Louis & Taylor, 2002; Spears et al., 2015).

However, there may be alternative explanations for this effect. Ginges and Atran (2011) have recently argued that people endorse/pursue violent strategies not necessarily (only) for collective material gains but because violence seems like the right/moral thing to do. In their survey among Israeli settlers (Study 1), the perceived righteousness of violence emerged as a predictor of violence support and violent action tendencies while the general efficacy of violent actions did not. Most notably, Haslam and Reicher (2012) have argued that in desperate circumstances such as Jewish people facing inevitable death in Nazi concentration camps, revolts occurred to preserve honor and pride rather than to secure survival. The goal behind resistance can thus change under overwhelming oppression and with it the definition of success (see Drury & Reicher, 2009; Drury et al., 2015). Hence, it may be that aggression comes to be seen as a moral response particularly when group members feel overwhelmed by the power of the adversary.

Given the growing evidence documented in the present research and previous work showing that situations offering little scope for social change are linked with more aggressive intergroup behavioral tendencies (Scheepers et al., 2006; Tausch et al., 2011), future research should investigate the motives underlying this phenomenon (see Spears et al., 2015, for initial evidence).

Desire for Revenge and the Counter-productivity of Aggression

In addition to the findings mentioned above, the present research helps to disentangle the influences of various factors on the endorsement of aggressive collective action, namely efficacy

perceptions of peaceful and aggressive actions, desire for revenge and the perceived counter-productivity of aggression.

While previous research has disputed the relative importance of territorial liberation motives and desire for revenge as immediate explanations of suicide bombing attacks in national liberation struggles (Brym & Araj 2006; Pape, 2005), our results contribute to this debate by showing that at the level of public *support* for suicide bombings against civilians, both desire for revenge and the perceived efficacy of aggression at obtaining concessions from the occupying power are linked with increases in support for aggression. These findings are consistent with Araj's (2012) recent content analysis of suicide bombing justifications by attackers and their families, who invoke both types of explanations. Interestingly, our analysis also found a positive correlation between the efficacy of aggression at obtaining concessions and desire for revenge. Future research should therefore investigate if these two factors may feed into each other.

The present research also shows that when deciding to endorse/pursue aggressive collective action, people not only take into account the perceived efficacy of peaceful and aggressive collective action at redressing a perceived injustice, they also seem to give consideration to the potential for aggression to *demobilize* support for the ingroup's cause. In Study 2 we indeed found that the perceived counter-productivity of aggression in terms of undermining support for the ingroup's cause is linked to lower support for suicide bombing attacks. In line with previous research showing that *peaceful* collective action is positively predicted by its perceived efficacy at *increasing* public support for a cause (Hornsey et al., 2006), the present work similarly shows that the perceived potential of collective action at *demobilizing* public support is linked to lower support for *aggressive* collective action.

Limitations

Our results were based on correlational data, which prevents us from inferring causality between our predictors and dependent variables, or ruling out alternative explanations for our

results, such as the influence of third variables that were not controlled for. This, however, is a widespread issue in field research on collective action (e.g. Mummendey et al., 1999), where experimentation is not always easily achievable. Nevertheless, our analyses build on previous research, which has demonstrated a causal link between general efficacy considerations (e.g. group efficacy in van Zomeren et al., 2004) and collective action tendencies. Furthermore, Zaal et al. (2012) provided experimental evidence that the efficacy of peaceful actions increases support for more aggressive actions. That being said, we cannot rule out that aggression support and aggressive action tendencies may be justified by referring to their perceived efficacy. Hence, future research should use longitudinal and experimental methods to corroborate our results.

We relied on single-item measures in Study 2 and our measure of peaceful action efficacy was a double-barrelled item implying the exclusive use of nonviolence. This is a limitation of secondary data analyses, but is offset by the benefits of a large representative sample from a hot conflict zone. Nevertheless, it is telling that we obtained similar results as in Study 1. Future studies should, however, further test our hypotheses using better efficacy measures. Like most past research, we also measured collective action using non-behavioral measures of collective action. While it is important to assess actual participation in collective action, behavioral measures are rare in the literature given the difficulty of obtaining them (see van Zomeren et al., 2008), particularly when it comes to aggressive actions. In Study 1, however, we used both support for and tendencies toward aggressive collective action as our outcome measures. Collective action tendencies have been found to be good predictors of actual participation in collective action (e.g., De Weerd & Klandermans, 1999; Moskalenko & McCauley, 2009). Nevertheless, it would be best if future studies test our hypotheses using more behavioral measures of aggressive collective action where possible. In Study 2, we focused on *support for* suicide bombings because behavioral data would have obviously been difficult if not impossible to get. Support for such forms of violence, however, is important to study as it is a

necessary first step towards participation in violence: becoming a supporter means becoming part of the mobilization potential (Klandermans, 1997; Stürmer & Simon, 2004; see Mascini, 2006). Nevertheless, it is obvious that ultimately, only very few of those who support actions such as suicide bombings will participate in it. That being said, attitudinal support for violent collective action such as suicide bombings can translate into material support for groups that use violent strategies, which can help sustain these groups and their activities (Crenshaw, 1995; Gurr, 1998; Kruglanski et al., 2008; Post, 2007; Victoroff, 2005). As such, it is essential to study factors underlying *support for* violent collective action if we are to understand what helps perpetuate political violence.

It is also important to point out that our studies were all based on contexts where both aggressive and peaceful collective action had already been initiated. Hence, our studies help explain the perpetuation of aggressive collective action rather than its initiation. While our research shows that those who perceive both aggressive and peaceful actions to be efficacious are reluctant to abandon aggression in contexts where it is already in use alongside peaceful means, they may be unlikely to *initiate* aggression in contexts where its use has been absent. Future research should extend the present findings by testing their replicability in different contexts where no resistance has yet occurred, or where peaceful means alone have been used. Using longitudinal studies to map out the development of aggression at various stages of a conflict would be particularly useful for this purpose.

It should be noted that our research has examined only specific forms of aggressive action, namely destruction of property and aggression directed at politicians in the context of student protests and suicide bombings in the context of a national liberation struggle. Nevertheless, it is notable that we found a consistent pattern of results across different cultural contexts (in Britain and Palestine), different issues (anti-austerity protests and independence struggle), and different forms of aggression. However, to further examine the generalizability of

our results, future research should explore other forms of aggressive action in different contexts, such as riots or other forms of violence perpetuated by non-state actors (e.g. guerrillas).

Contributions and Implications of the Present Research

Despite the limitations of the present research we believe it extends the literature on efficacy and collective action in several important ways. By investigating the role of efficacy in predicting *aggressive* collective action, which is the subject of much theoretical and societal interest, our research helps the field move beyond the predominant focus on predictors of peaceful collective action (Wright, 2009). To our knowledge, the present work is the first quantitative research to shed light on how support for and tendencies toward aggressive collective action are influenced by the perceived efficacy of both peaceful and aggressive tactics. Our research goes beyond existing data (e.g. Ginges & Atran, 2011; Louis, et al., 2015; Zaal et al., 2012) by testing the interaction between the efficacy of both peaceful and aggressive tactics, alongside other motives and deterrents of aggression, namely desire for revenge and the perceived counter-productivity of aggression.

The idea that aggression is only used a last resort implies that increasing the perceived efficacy of peaceful action should minimize aggression (e.g. Louis et al., 2015; Tausch et al., 2011). Our research suggests, however, that at least in contexts where both aggressive and peaceful action are in use, increasing the perceived efficacy of peaceful collective action may have little effect in reducing the appeal of aggressive strategies, as long as people believe that aggressive action will contribute to redressing a perceived injustice. In circumstances where both aggressive and peaceful actions are perceived to work, people seem relatively reluctant to abandon aggressive strategies, perhaps favoring the use of “the gun and the olive branch” strategy, whereby aggressive and peaceful means are endorsed/pursued in parallel. Conflicts in which both armed and peaceful resistance are used in parallel, such as in Burma, Chile, the Philippines and Nepal (Dudouet, 2008), South Africa and Palestine, may reflect underlying

beliefs in the efficacy of both strategies. Interestingly, such beliefs also seem to underlie the “ArmaLite and ballot box” strategy used by the Irish Republican Army (see Hayes & McAllister, 2005), exemplified by a Sinn Fein organiser saying at the party’s conference in 1981: “Who here really believes we can win the war through the ballot box? But will anyone here object if, with a ballot paper in this hand and an ArmaLite in the other, we take power in Ireland?” (as cited in English, 2003; pp 224-225).

That being said, our research suggests that where both peaceful and aggressive collective actions are used, influencing the perceived efficacy of peaceful forms of collective action does have an assuaging effect on aggression when aggression is seen to have *low* efficacy. In sum, our results suggest that people will consider aggressive collective action as long as they do not have high hopes that peaceful strategies can help resolve an ongoing perceived social injustice *or* as long as they believe that aggressive action is efficacious. Aggressive forms of collective action seem thus least likely to occur when peaceful action is perceived to be efficacious *and* aggressive action is perceived to be inefficacious.

Conclusion

The present research is the first to explore how the endorsement/pursuit of aggressive collective action in various contexts is predicted by individual perceptions of the efficacy of both aggressive and peaceful tactics. Results from two studies suggest that support for and tendencies toward aggressive collective action are a function of an interaction between perceptions of peaceful and aggressive collective action: the more efficacious aggressive collective action is perceived to be, the greater its appeal and the less it seems influenced by the efficacy of peaceful means. Hence, greater efficacy of peaceful means is not always sufficient to assuage aggressive inclinations. The compelling but sobering message of our research is that it shows that when aggressive collective action is perceived to work, it may be appealing even if peaceful action is

also efficacious, and when aggressive collective action is perceived to be inefficacious, it may be appealing as long as peaceful action is not efficacious.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Allen, J.J., & Anderson, C. (in press). Aggression and violence: Definitions and distinctions. In Sturmey, P. (Ed). *The Wiley Handbook of Violence and Aggression*.
- Araj, B. (2012). The motivations of Palestinian suicide bombers in the Second Intifada (2000 to 2005). *Canadian Review of Sociology*, 49 (3), 211-232.
- Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 1-45). New York: Cambridge University Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Bloom, M. M. (2004). Palestinian suicide bombing: public support, market share, and outbidding. *Political Science Quarterly*, 119(1), 61-88.
- Brym, R., & Araj, B. (2006). Suicide bombing as strategy and interaction: The case of the Second Intifada. *Social Forces*, 84 (4), 1965–82.
- Coughlan, S. (2010, November 3). Students face tuition fees rising to £9,000. *BBC*, Retrieved from <http://www.bbc.co.uk/news/education-11677862>
- Crenshaw, M. (1990). The logic of terrorism: Terrorist behavior as a product of strategic choice. In W. Reich (Ed.), *Origins of terrorism*. Washington, D.C.: Woodrow Wilson Center Press.
- Crenshaw, M. (1995). Thoughts on relating terrorism to historical contexts. In M. Crenshaw (Ed.), *Terrorism in context* (pp. 3–24). University Park, PA: The Pennsylvania State University Press.

- De Weerd, M., & Klandermans, B. (1999). Group identification and political protest: Farmers' protests in the Netherlands. *European Journal of Social Psychology, 29*, 1073-1095.
- Drury, J., Evripidou, A., & van Zomeren, M. (in press). Empowerment: The intersection of identity and power in collective action. In Sindic, D., Barreto, M., & Costa Lopes, R., *The intersection between power and identity*, New York: Psychology Press
- Drury, J., & Reicher, S. (1999). The intergroup dynamics of collective empowerment: Substantiating the social identity model. *Group Processes and Intergroup Relations, 2*, 381-402.
- Drury, J., & Reicher, S. (2009). Collective psychological empowerment as a model of social change: Researching crowds and power. *Journal of Social Issues, 65*, 707-725.
- Dudouet, V. (2008). Peaceful Resistance and Conflict Transformation in Power Asymmetries. In Fischer, M., Gießmann, H., & Schmelzle, B. (Eds.), *Berghof Handbook for Conflict Transformation* (pp. 1-27). Berlin: Berghof Research Center for Constructive Conflict Management.
- Ellemers, N. (1993). The influence of socio-structural variables on identity management strategies. *European Review of Social Psychology, 4*, 25-57.
- Fishbein, M., & Ajzen, I. (1974). Attitudes toward objects as predictors of single and multiple behavioral criteria. *Psychological Review, 81*, 59-74.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

- Folger, R. (1986). A referent cognitions theory of relative deprivation. In J. M. Olson, C. P. Herman & M. P. Zanna (Eds.), *Relative deprivation and social comparison: the Ontario symposium* (Vol. 4, pp. 217-242). Hillsdale, NJ: Lawrence Erlbaum.
- Ginges, J., & Atran, S. (2011). War as a moral imperative (not just practical politics by other means). *Proceedings of the Royal Society*, 278, 2930-2938.
- Gurr, T. D. (1998). Early warning of ethnopolitical rebellion. In Davies, J.L., & Gurr, T.D. (Eds). *Preventive measures* (pp. 35-47). Lanham, MD: Rowman & Littlefield.
- Hayes, B. C., & McAllister, I. (2005). Public support for political violence and paramilitarism in Northern Ireland and the Republic of Ireland. *Terrorism and Political Violence*, 17, 599-617.
- Hornsey, M., Blackwood, L., Louis, W., Fielding, K., Mavor, K., Morton, T., et al. (2006). Why do people engage in collective action? Revisiting the role of perceived effectiveness. *Journal of Applied Social Psychology*, 36(7), 1701-1722.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: an analysis of decisions under risk. *Econometrica*, 47, 313-327.
- Kamans, E., Spears, R., Otten, S., Gordijn, E. H., & Livingstone, A.G. (2012). *Desperate measures: A 'nothing to lose'-strategy in groups with low power and status*. Manuscript submitted for publication.
- Kelly, C., & Breinlinger, S. (1995). Attitudes, intentions, and behavior: A study of women's participation in collective action. *Journal of Applied Social Psychology*, 25(16), 1430-1445.
- Klandermans, B. (1984). Mobilization and participation: Social-psychological expansions of resource mobilization theory. *American Sociological Review*, 49(5), 583-600.
- Klandermans, B. (1997). *The social psychology of protest*. Oxford, England: Blackwell.

- Klein, O., Spears, R., & Reicher, S. (2007). Social identity performance: Extending the strategic side of the SIDE model. *Personality and Social Psychology Review, 11*, 28-45.
- Kruglanski, A. W., Crenshaw, M., Post, J. M., & Victoroff, J. (2008). What should this fight be called? Metaphors of counter-terrorism and their implications. *Psychological Science in the Public Interest, 8*, 97–133.
- Kull, S., Ramsay, C., Warf, P., & Wolford, M. (2002). *The potential for a peaceful Intifada*. Retrieved from http://www.pipa.org/OnlineReports/IsPal_Conflict/Intifada1_Aug02/Intifada1_Aug02_rpt.pdf
- Louis, W. R. (2009). Terrorism, identity, and conflict management. *Social and Personality Psychology Compass, 3*(4), 433-446.
- Louis, W. R., Paasonen, K. E., Hornsey, M., Mavor, K., White, K. M., Smith, J. R., et al. (2015). *If all else fails? Support for political violence as a function of perceptions of the ineffectiveness of democratic protest*. Unpublished manuscript.
- Louis, W. R. & Taylor, D. M. (2002). Understanding the September 11 terrorist attack on America: The role of intergroup theories of normative influence. *Analyses of Social Issues and Public Policy, 2*, 87-100.
- Mascini, P. (2006). Can the violent jihad do without sympathizers? *Studies in Conflict and Terrorism, 29*, 343-357.
- Masters, D. (2004). Support and nonsupport for nationalist rebellion: A prospect theory approach. *Political Psychology, 25*(5), 703-726.
- Mitchell, M. L. & Jolley, J. M. (2006). *Research design explained* (6th ed.). Belmont, CA: Wadsworth.
- Moskalenko, S., & McCauley, C. (2009). Measuring political mobilization: The distinction

- between activism and radicalism. *Terrorism and Political Violence*, 21, 239–260.
- Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology*, 76(2), 229-245.
- Pape, R. 2005. *Dying to win: The strategic logic of suicide terrorism*. New York: Random House.
- Post, J. M. (2007). *The mind of the terrorist: The psychology of terrorism from the IRA to al-Qaeda*. New York: Palgrave Macmillan.
- Post, J. M., Sprinzak, E., & Denny, L. M. (2003). The terrorists in their own words: Interviews with 35 incarcerated Middle Eastern terrorists. *Terrorism and Political Violence*, 15(1), 171-184.
- Pruitt, D. G., & Gahagan, J. P. (1974). Campus crisis: The search for power. In J. Tedeschi (Ed.), *Perspectives on Social Power*. Chicago: Aldine.
- Ransford, H. E. (1968). Isolation, powerlessness and violence: A study of attitudes and participation in the Watts Riot. *American Journal of Sociology*, 73, 581-591.
- Reicher, S. (1996). ‘The Battle of Westminster’: Developing the social identity model of crowd behaviour in order to explain the initiation and development of collective conflict. *European Journal of Social Psychology*, 26, 115-34.
- Reicher, S., & Stott, C. (2011). *Mad mobs and Englishmen? Myths and realities of the 2011 riots*. London: Constable & Robinson Ltd.
- Haslam, S. A. & Reicher, S. D. (2012). When prisoners take over the prison: A social psychology of resistance. *Personality and Social Psychology Review*, 16, 154-179.
- Saab, R., Tausch, N., Spears, R., & Cheung, W. (in press). Acting in solidarity: Testing an extended dual-pathway model of collective action by bystander

group members. *British Journal of Social Psychology*.

DOI: 10.1111/bjso.12095

Scheepers, D., Spears, R., Doosje, B., & Manstead, A. S. R. (2006). Diversity in in-group bias: structural factors, situational features, and social functions. *Journal of Personality and Social Psychology*, *90*, 944-960.

Scheepers, D., Spears, R., Manstead, A. S. R., & Doosje, B. (2009). The influence of discrimination and fairness on collective self-esteem. *Personality and Social Psychology Bulletin*, *35*(4), 506-515.

Sedgwick, M. (2004). Al-Qaeda and the nature of religious terrorism. *Terrorism and Political Violence*, *16*, 795-814.

Schock, K. (2005). *Unarmed insurrections: People power movements in nondemocracies*. Minneapolis, MN: University of Minnesota Press.

Smith, H. J., Cronin, T., & Kessler, T. (2008). Anger, fear or sadness: Faculty members' emotional reactions to collective pay disadvantage. *Political Psychology*, *29*(2), 221-246.

Smith, H. J., & Kessler, T. (2004). Group based emotions and intergroup behavior: The case of relative deprivation. In L. Z. Tiedens & C. W. Leach (Eds.), *The social life of emotions*. New York: Cambridge University Press.

Soibelman, M. (2004). Palestinian suicide bombers. *Journal of Investigative Psychology and Offender Profiling*, *1*, 175-190.

Spears, R., Scheepers, D., & van Zomeren, M., Tausch, N., & Gooch, H. (2015). *Nothing to lose: Desperate circumstances require desperate measures*. Manuscript submitted for publication.

Stephan, M., & Chenoweth, E. (2008). Why civil resistance works: The strategic logic of peaceful conflict. *International Security*, *33*, 7-44.

- Stott, C., & Drury, J. (2000). Crowds, context and identity: Dynamic categorization processes in the 'poll tax riot'. *Human Relations*, *53*, 247-273.
- Stürmer, S., & Simon, B. (2004). Collective action: Towards a dual-pathway model. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 15, pp. 59–99). Chichester, England: Wiley.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Allyn and Bacon.
- Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). CA: Brooks-Cole.
- Tausch, N., Becker, J., Spears, R., Christ, O., Saab, R., Singh, P., & Siddiqui, R.N. (2011). Explaining radical group behavior: Developing emotion and efficacy routes to normative and non-normative collective action. *Journal of Personality and Social Psychology*, *101*, 129-148.
- The Guardian (2010). Student protests over fees turn violent. Retrieved from: <http://www.theguardian.com/education/2010/nov/10/student-protest-fees-violent>
- Thomas, E. F., McGarty, C., & Mavor, K. I. (2009). Aligning identities, emotions and beliefs to create sustained support for social and political action. *Personality and Social Psychology Review*, *13*, 194-218.
- Van Zomeren, M. & Iyer, A. (2009). Toward integrative understanding of the social and psychological dynamics of collective action. *Journal of Social Issues*, *65*, 645 – 660.
- Van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin*, *134*(4), 504-535.

- Van Zomeren, M., Saguy, T., & Schellhaas, F.M.H. (2013). Believing in "Making a difference" to collective efforts: Participative efficacy beliefs as a unique predictor of collective action. *Group Processes and Intergroup Relations*, *16*, 618-634.
- Van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is! Explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology*, *87*(5), 649-664.
- Victoroff, J. (2005). The mind of the terrorist: A review and critique of psychological approaches. *Journal of Conflict Resolution*, *49* (1), 3-42.
- Wright, S. C. (2001). Strategic collective action: Social psychology and social change. In R. Brown & S. Gaertner (Eds.), *Blackwell Handbook of Social Psychology* (Vol. 4, pp. 409-430). Oxford, UK: Blackwell Press.
- Wright, S. C. (2009). The next generation of collective action research. *Journal of Social Issues*, *65*, 859-879.
- Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990a). The relationship of perceptions and emotions to behavior in the face of collective inequality. *Social Justice Research*, *4*, 229-250.
- Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990b). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology*, *58*, 994-1003.
- Zaal, M., van Laar, C., Ståhl, T., & Ellemers, N. (2012). *Why the ends sometimes justify the means: How regulatory focus and the effectiveness of peaceful collective action affect support for hostile collective action*. Manuscript submitted for publication.

Footnotes

¹ We recognize that the term *violent* can be contentious when describing certain forms of collective action, depending on the perspective of actors/observers/law enforcers.

² We also measured support for peaceful collective action and tendencies to engage in peaceful action using the same actions measured in peaceful action efficacy (see footnote 3). We conducted three separate principle components analyses on items measuring the efficacy of, support for and tendencies toward both peaceful and aggressive collective action. Each analysis showed that items pertaining to peaceful and aggressive actions loaded on two separate components. However, an extra peaceful action item pertaining to student occupations of university campus buildings cross-loaded on two factors (possibly because it is a less normative form of peaceful collective action) and was therefore excluded from our analysis.

³ While not the main focus of our paper, for exploratory purposes, we regressed support for peaceful action and peaceful action tendencies separately on the same predictors. We expected peaceful action efficacy to be a positive predictor, in line with the value-expectancy theory of behavior and previous research (e.g. Ginges & Atran, 2011; Hornsey et al., 2006; van Zomeren et al., 2008). However, we had no clear predictions concerning the effect of aggressive action efficacy. As expected, peaceful action efficacy emerged as a significant positive predictor of support for and tendencies toward peaceful action, over and above the effect of aggressive action efficacy. As for aggressive action efficacy, its effects were inconsistent. Aggressive action efficacy *negatively* predicted support for peaceful action, but also moderated the effect of peaceful action efficacy: the more efficacious aggressive action was perceived to be, the more peaceful action support became influenced by its efficacy. Surprisingly, however, aggressive action efficacy *positively* predicted peaceful action

tendencies (no significant interaction). One potential explanation is that aggression efficacy contributes to a general sense of efficacy that fosters peaceful collective action. Note that support for peaceful and aggressive action did not correlate (*Pearson's* $r = .03$) but peaceful and aggressive action tendencies were positively correlated (*Pearson's* $r = .33, p < .001$). Full results are available upon request. In sum, the overall positive effects of peaceful action efficacy suggest that when peaceful action has high efficacy, it can be appealing even if aggressive action is also efficacious, in line with the gun and the olive branch hypothesis. Furthermore, when aggression has low efficacy, the less efficacious peaceful action is, the lower its appeal is, but the greater the appeal of aggressive action (nothing to lose hypothesis).

⁴ There were various items relating to the efficacy of mass nonviolence (e.g. effect of using nonviolence on international support), but we picked the item with the greatest face validity in relation to our construct of interest.

⁵ We conducted further analyses on a measure of nonviolence support using the following item: "If there was a large-scale Palestinian movement committed to nonviolent action against Israeli occupation using such methods as demonstrations, boycotts, and civil disobedience, would you approve or disapprove of such a movement?", on a 4-point Likert scale ranging from strongly disapprove to strongly approve, which we reverse coded (see footnote 6).

⁶ For exploratory purposes, we conducted analyses on support for peaceful collective action and regressed it on the same predictors (see footnote 3). As expected, peaceful action efficacy emerged as a significant positive predictor, over and above the effect of aggressive action efficacy. As for aggressive action efficacy, it had no effect. Note that aggressive and peaceful action support did not correlate (*Pearson's* $r = -.03$). Full results are available upon request. In sum, the overall positive effect of peaceful

action efficacy suggests that when peaceful action has high efficacy, it can be appealing even if aggressive action is also efficacious, in line with the gun and the olive branch hypothesis (see footnote 3). Furthermore, when aggression has low efficacy, the less efficacious peaceful action is, the lower its appeal is, but the greater the appeal of aggressive action (nothing to lose hypothesis).

⁷ See footnotes 3 and 6.

Table 1

Descriptives and Zero-order Correlations among Key Variables (Study 1, N = 243)

	Scale	<i>M</i>	<i>SD</i>	1	2	3	4
1. Efficacy of Peaceful Action	0 to 9	5.26	2.11	-	.31***	.22***	.20***
2. Efficacy of Aggressive Action	0 to 9	3.67	2.80		-	.83***	.73***
3. Support for Aggression	-5 to 5	-1.00	3.18			-	.76***
4. Aggressive Action Tendencies	0 to 9	2.69	2.88				-

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

Table 2

Descriptives and Zero-order Correlations among Key Variables (Study 2, N = 533)

	Scale	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Efficacy of Peaceful Action	1 to 4	2.17	1.03	-	-.00	-.13**	.33***	-.19***
2. Efficacy of Aggressive Action	1 to 4	2.81	1.00		-	.27***	-.05	.18***
3. Desire for Vengeance	1 to 4	3.46	.80			-	-.17**	.31***
4. Perceived Counter-productivity of Aggression	1 to 4	2.20	1.00				-	-.30***
5. Support for Aggression	0 to 10	7.70	3.15					-

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

Figure Captions

Figure 1. Illustration of three alternative hypotheses on how the link between the perceived efficacy of peaceful collective action and aggressive collective action could vary as a function of the perceived efficacy of aggressive action.

Figure 2. Simple slopes of support for aggressive collective action regressed on the perceived efficacy of peaceful collective action at mean, low and high levels of the perceived efficacy of aggressive collective action (one standard deviation below and above the mean, respectively) (Study 1). The interaction is plotted using unstandardized coefficients.

Figure 3. Simple slopes of support for aggressive collective action regressed on the perceived efficacy of peaceful collective action at mean, low and high levels of the perceived efficacy of aggressive collective action (one standard deviation below and above the mean, respectively) (Study 2). The interaction is plotted using unstandardized coefficients.

Figure 4. Simple slopes of support for aggressive collective action regressed on the perceived efficacy of peaceful collective action at low, mean and high levels of the perceived efficacy of aggressive collective action (one standard deviation below and above the mean, respectively) (Study 2). The interaction is plotted using unstandardized coefficients, controlling for desire for vengeance and the perceived counter-productivity of aggression.

Figure 1

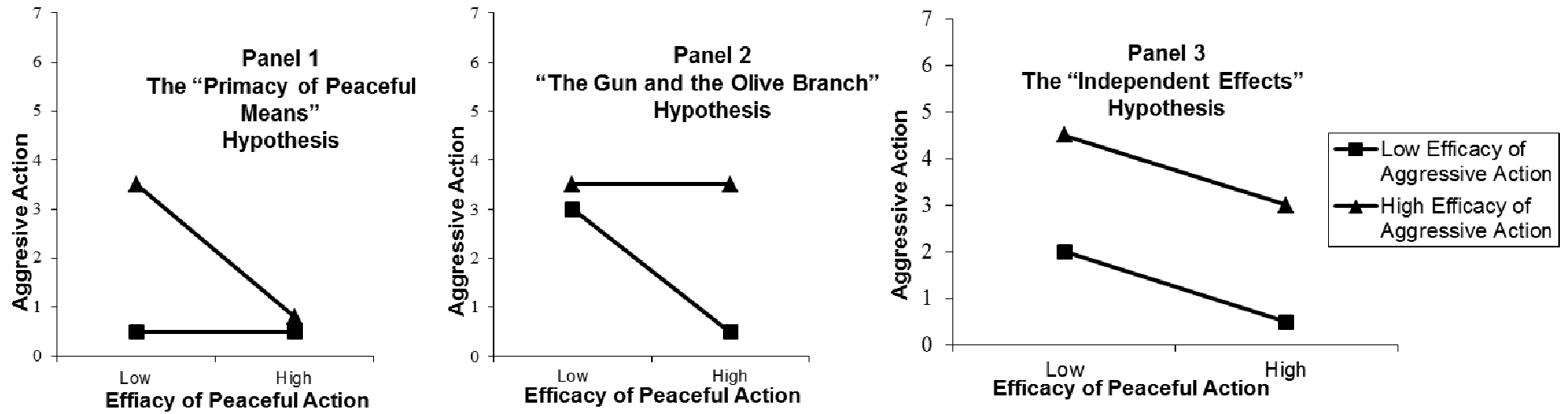


Figure 2

Mean Support for Aggressive Action

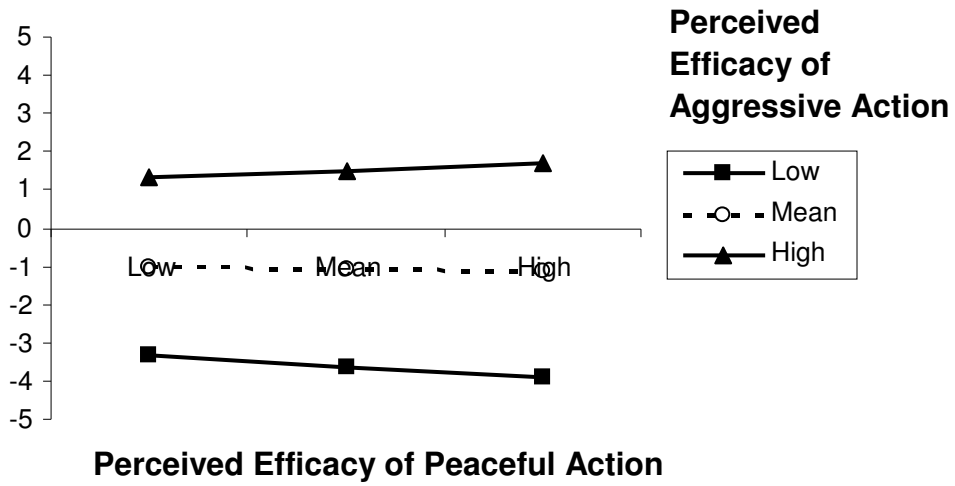


Figure 3

Mean Aggressive Action Tendencies

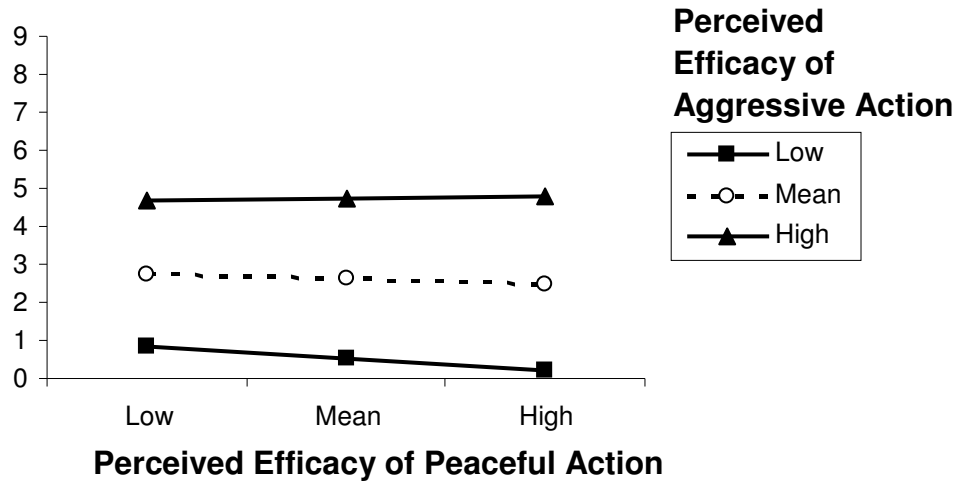


Figure 4

Mean Support for Aggressive Action

