# The Role of Supportive Contact in Increasing Collective Action Engagement Among Disadvantaged Group Members

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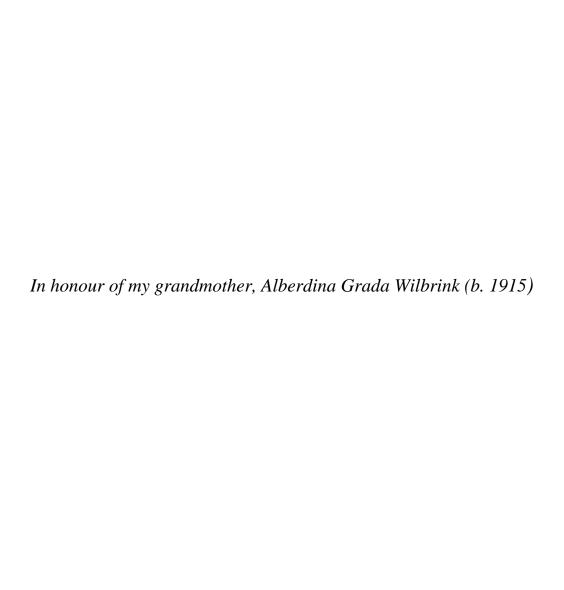
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#### **Abstract**

Recent research and theorizing suggests that friendly cross-group contact, while effective at improving intergroup attitudes, can undermine disadvantaged group members' collective action engagement. In a series of 3 experimental studies, the present research investigated "supportive contact" - friendly cross-group contact in which an advantaged group member demonstrates their interest and engagement in opposing group-based inequality. I hypothesized that supportive contact would not undermine collective action, and would instead empower disadvantaged group members, because of its potential to strengthen disadvantaged group members' perceptions of injustice and ingroup identification. Study 1 focused on immigrants to Canada, and provided an opportunity for cross-group contact with a Canadian-born individual. Study 2 focused on international students at an Australian university, and investigated the effects of recalling past contact with a domestic student. These two studies revealed that compared to a number of other forms of friendly cross-group contact, supportive contact led to greater collective action engagement. Across both studies, increased perceptions of injustice emerged as the key mediator of the relationship between supportive contact and increased collective action engagement. Study 3 focused on cross-group contact between men and women, and revealed a complex pattern of results. Overall, supportive contact led to lower collective action engagement among women, compared to low supportiveness contact. However, analysis of the indirect effects revealed a pattern of results consistent with a suppressor effect: supportive contact also increased collective action engagement among women, due to the supportive group-based emotions shared by the male friend, and the positive impact of these emotions on ingroup identification. The paper discusses the promise of supportive contact, suggests applied applications, and makes recommendations for future research.

**Key words:** Collective action; cross-group contact; intergroup contact; cross-group relationships; positive cross-group contact; supportive contact; social change



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Engage!

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#### Introduction

Since Allport's (1954) initial formulation of the contact hypothesis, an impressive literature has documented the benefits of cross-group contact (for reviews, see Dovidio, Gaertner & Kawakami, 2003; Dovidio, Glick & Rudman, 2008; Pettigrew & Tropp, 2006). This research has typically focused on improvements in intergroup attitudes, showing that cross-group contact can help to reduce prejudice, decrease reliance on stereotypes, and reduce intergroup anxiety. Cross-group contact that produces these benefits has come to be known by prejudice reduction theorists as "positive cross-group contact" (e.g., Pettigrew & Tropp, 2006). There has been considerable debate about the essential features of positive cross-group contact (i.e., the conditions and characteristics of contact that leads to the benefits described above; see Pettigrew, 1998). Allport (1954) proposed that positive cross-group contact would be characterized by equal group status within the situation, common goals, intergroup cooperation and support from authorities for the contact. More recently, some have focused on the particular case of cross-group friendship as the most effective form of positive cross-group contact (Davies, Tropp, Aron, Pettigrew, & Wright, 2011). At the very least, positive contact must involve affectively pleasant or neutral interactions between individual members of different groups.

Despite this debate over the essential features of positive cross-group contact, there has been a general consensus about its beneficial outcomes. Recently, however, a number of social psychologists have questioned the exclusive focus on the benefits of positive cross-group contact and have raised concerns about a potential downside of focusing on positive cross-group contact and prejudice reduction as the key means for achieving social equality (e.g., Cakal, Hewstone, Schwar, & Heath, 2011; Dixon, Levine, Reicher, & Durrheim, 2012; Saguy, Tausch, Dovidio, & Pratto, 2009; Wright, 2001b; Wright & Baray, 2012). Specifically, they have argued that social psychologists have underemphasized an important alternative route to achieving social equality: collective

action by disadvantaged group members. Collective action occurs when individuals take action on behalf of their ingroup, with the aim of improving conditions for the entire group (Wright, 2001b). Although promoting positive intergroup attitudes and working towards social equality through collective action may seem like complementary goals that could be pursued simultaneously, the underlying psychology that supports these goals may not be complementary at all (e.g., Wright & Lubensky, 2009). In fact, the specific type of pleasant, friendly cross-group contact recommended by prejudice reduction theorists may reduce the likelihood that disadvantaged group members will engage in collective action, resulting in a conflict that Saguy, Tausch and colleagues (2009) call the "irony of harmony." This undermining effect of pleasant, friendly cross-group contact on collective action engagement has now been demonstrated among a variety of disadvantaged groups including racial/ethnic minorities (Wright & Lubensky, 2009; Cakal, Hewstone, Schwar, & Heath, 2011; Saguy, Tausch et al., 2009; Dixon, Durrheim, Tredoux, Tropp, Clack, & Eaton, 2010), gay men (Becker, Wright, Lubensky, & Zhou, 2013), women (Becker & Wright, 2011), and in laboratory-created groups (Saguy, Tausch et al., 2009, Becker et al., 2013).

Efforts to discourage or eliminate pleasant, friendly cross-group contact do not seem to provide an ideal solution to the conflict between collective action engagement and friendly cross-group contact. Therefore, the current research focuses on another solution. I investigate the potential of friendly cross-group contact in which an advantaged group member shows explicit support by demonstrating their interest and engagement in opposing inequality (referred to as "supportive contact"). This form of contact may not only erase the disempowering effects found to result from other forms of friendly cross-group contact, but may actually empower disadvantaged group members and increase their willingness to engage in collective action. Across 3 studies, I: a) demonstrate the potential of supportive contact to increase collective action engagement; b) examine potential mediators of the relationship between supportive contact and collective action engagement (i.e., psychological factors that explain the empowering effect of supportive contact); and c) examine potential moderators of the relationship between supportive contact and collective action engagement (i.e., the contexts in which supportive contact is more or less effective in increasing collective action engagement).

## The prejudice reduction-collective action conundrum

Explanations for the contradiction between collective action and positive cross-group contact (e.g., Cakal et al., 2011; Dixon et al., 2012; Saguy, Tausch et al., 2009; Wright & Lubensky, 2009) are based on the contention that there is a conflict between the underlying psychologies required for participation in these two activities. That is, collective action engagement relies on several psychological factors that are likely to be undermined by positive cross-group contact.

First, in order to take action to improve the position of one's group, the individual must identify with that group (Stürmer & Simon, 2004; Tajfel & Turner, 1986; Van Zomeren, Postmes, & Spears, 2008; Wright, 2010). Seeing one's group membership as an important part of one's self-concept is a critical precursor to collective action. However, the suggested strategies for creating positive cross-group contact involve approaches that have the potential to weaken identification with the disadvantaged group, making it difficult for members of the group to remain psychologically engaged in collective action (for a discussion, see Wright & Baray, 2012). According to several models of cross-group contact, one of the main ways that positive cross-group contact improves intergroup attitudes is by changing individuals' perceptions of the intergroup relationship (at least for the duration of the interaction). Thus, their specific recommendations include encouraging interaction partners to ignore their group identities and instead focus on their personal identities and as much as possible (e.g., Brewer & Miller, 1984), or to blur the distinctiveness of these group memberships by focusing on commonalities (e.g., Gaertner & Dovidio, 2000). Similarly, the Common Ingroup Identity Model (e.g., Gaertner & Dovidio, 2000; Gaertner & Dovidio, 2012) suggests focusing on a higher order identity (a shared "superordinate" identity) and reducing attention to lower order identities like the disadvantaged group identity. Thus, positive cross-group contact is thought to be most effective in improving intergroup attitudes when it is structured so as to de-emphasize group memberships that distinguish the contact participants. These recommendations for structuring positive cross-group contact, all of which involve reducing attention to relevant ingroup identities, is incompatible with maintaining or strengthening disadvantaged group members' ingroup identification – a critical requirement of collective action engagement.

Hewstone and Brown's (1986) Mutual Ingroup Differentiation Model of positive cross-group contact does call for group memberships to remain salient during cross-group interactions. This model acknowledges that awareness of the group identity of one's interaction partner is needed to ensure that the positive attitudes generated for a single individual (as a result of friendly contact) will be generalized to the outgroup as a whole. However, because this model prioritizes the salience of the interaction partner's group identity, it does not solve the problem of positive cross-group contact reducing the salience of the disadvantaged group member's own group identity. While awareness of other collective identities is indeed useful for generating positive intergroup attitudes, it is the salience of one's own group membership that is critical for collective action engagement.

Finally, a more recent version of the Common Ingroup Identity Model, labeled the "dual identity model" (e.g., Gaertner et al., 2000), does acknowledge that at times it may be valuable to allow subgroup identities to remain salient. This proposal emerged out of the recognition that in some cases, a proposed common or shared group identity is likely to be dominated by the advantaged group (see also Hornsey & Hogg, 2000; Wright, 2009a), and disadvantaged group members may recognize this. For disadvantaged group members, identification with this "common" identity would thus represent a case of defacto assimilation to the advantaged group, and would not be very appealing. Thus, Gaertner and colleagues (2000) proposed that some recognition of disadvantaged group members' identities may be necessary to encourage them to participate in cross-group contact. However, this recognition of the disadvantaged group identity is not seen to be in service of inspiring a competitive desire to improve the status of the disadvantaged group (consistent with psychological engagement in collective action). Rather, it is only encouraged to the extent that it facilitates identification with a shared superordinate category that includes the advantaged group.

In sum, the models that have dominated the social psychology of positive cross-group contact either explicitly call for reducing attention to one's ingroup identity, or describe acknowledgement of that identity only as a tool to facilitate endorsement of other identities that unite the advantaged and disadvantaged group. Thus, all of these proposed models leave open the concern that contact will weaken identification with the

disadvantaged group, making it difficult for members of the group to remain psychologically engaged in collective action (for further discussion, see Wright & Baray, 2012).

Second, collective action engagement also depends on strong perceptions of injustice (see Wright, 2010). Only when disadvantaged group members perceive their group's lower status as unjust does resistance seem legitimate. One key psychological mechanism that supports these perceptions of injustice is the maintenance of a negative view of the advantaged outgroup (Cakal, et al., 2011; Dixon et al., 2010; Reynolds, Oakes, Haslam, Nolan, & Dolnik, 2000; Simon & Klandermans, 2001; Wright & Tropp, 2002; Stott & Drury, 2004) - for example, by identifying the advantaged group as responsible for the oppression faced by the disadvantaged group. These negative stereotypes strengthen the perceived legitimacy of collective action (Wright & Tropp, 2002). However, positive cross-group contact may undermine perceptions of injustice among disadvantaged group members, by breaking down negative stereotypes of the outgroup (Allport, 1954; Wright, Brody, & Aron, 2005). Indeed, positive cross-group contact's ability to break down negative stereotypes of the outgroup is one of its celebrated attributes (Allport, 1954; Dixon & Rosenbaum, 2004; Pettigrew & Tropp, 2006; Wright et al., 2005). Initial evidence provides support for the assertion that perceptions of injustice may be a key mediator by which positive cross-group contact undermines collective action engagement. For instance, Saguy, Tausch and colleagues (2009) showed that among Israeli Arabs, more contact with Israeli Jews lead to stronger perceptions of the outgroup as fair, and this in turn reduced support for social change.

Third, collective action engagement relies on strong perceptions of collective control, or the belief that the goals of the collective action can be achieved. Wright (2001b) has described two components of perceptions of collective control. The first component is that disadvantaged group members must believe that change is possible – that there is some degree of instability in the intergroup relations (see Tajfel & Turner, 1986). The second component is that disadvantaged group members must perceive that their group has the agency to take advantage of this instability – that they have suitable resources and abilities to effect change. This agency component of perceptions of collective control is consistent with the idea of group efficacy, as described by a number

of theorists (for recent discussions, see van Zomeren, Postmes, & Spears, 2008; van Zomeren, Spears, Fischer, & Leach 2004). A negative or adversarial view of the outgroup can contribute to perceptions of collective control, and to feelings of agency in particular. Describing the outgroup as responsible for the injustice helps clarify a target for collective action (Stott & Drury, 2004; Wright & Lubensky, 2009), which can be profoundly useful. Although it is likely that most instances of oppression are upheld by various factors and no one outgroup is likely to be entirely responsible for the lower status of the disadvantaged group, identifying a clear "adversary" (Simon & Klandermans, 2001) can provide a starting point for action. However, as noted above, positive cross-group contact is very likely to undermine this adversarial view of the advantaged outgroup.

In sum, there are a variety of mechanisms to explain why positive cross-group contact – friendly contact which leads to improved intergroup attitudes – might undermine collective action engagement. These mechanisms can help to explain why some intergroup relations in society remain extremely unequal, despite an abundance of pleasant and friendly interpersonal interactions across group boundaries, and often little obvious prejudice. For example, oppression on the basis of both gender and sexual orientation are clearly present in today's society (Johnson, 2005). However, for both women and LGBT individuals, close interpersonal interactions with outgroup members are a common and even desirable and rewarding aspect of everyday life.

# **Supportive contact**

Cross-group contact between an advantaged and a disadvantaged group member can undermine the disadvantaged group member's collective action engagement, and this outcome is especially likely when that contact is structured so as to encourage prejudice reduction (e.g., Allport, 1954; Pettigrew & Tropp, 2006, Davies et al., 2011). The most "obvious" solution to this conflict would be to do the opposite of what prejudice reduction theorists suggest: discourage friendly cross-group interactions, encourage segregation, or perhaps even embrace hostility between groups. However, although this solution would foster collective action engagement, it does not seem like an ideal solution. Besides the rather obvious costs of promoting intergroup hostility, in

terms of the potential for creating ongoing destructive or even deadly intergroup conflicts, avoiding cross-group contact is impractical in a multicultural society. Meeting and interacting with outgroup members has become a basic part of everyday life for people in many parts of the world. This is particularly true for members of minority groups, as their numerical status makes cross-group interactions extremely likely. Second, social psychologists have enumerated benefits of cross-group contact that extend beyond prejudice reduction. For example, having the opportunity to interact with different others can offer personal benefits such as increased feelings of self-growth and self-efficacy (Wright, Aron, & Tropp, 2001; Dys-Steenbergen, Wright, & Aron, in press) and the presence of diversity can also improve group performance (e.g., in workplace settings; Homan, Van Knippenberg, Van Kleef, & De Dreu, 2007; Meeussen, Otten, & Phalet, 2014). Thus, it seems essential to find alternative solutions that allow for friendly, pleasant interpersonal interactions across group boundaries, while also allowing for continued commitment to collective action.

Becker and colleagues (2013) offer some initial hope for such a solution by showing that not all instances of friendly cross-group contact necessarily undermine disadvantaged group members' engagement in collective action. Their research showed that when, as part of friendly cross-group contact, an advantaged group member made a statement about the illegitimacy of the intergroup inequality, the undermining effect of that friendly cross-group contact on collective action engagement was erased. This study appears to offer some redemption for friendly cross-group contact by demonstrating that at times it can be neutral for disadvantaged group members' collective action engagement. However, I propose that friendly cross-group contact can be taken one step further, such that that it can empower disadvantaged group members and increase their engagement in collective action. In order to achieve this, advantaged group members should engage in supportive contact: friendly cross-group contact in which the advantaged group member demonstrates personal engagement in opposing inequality and/or supporting social change. I propose that this form of contact will not only erase the undermining effect on collective action engagement found to result from other forms of friendly cross-group contact, but will also empower disadvantaged group members and heighten their collective action engagement. Specifically, supportive contact will maintain or increase disadvantaged group members' collective action engagement by strengthening exactly those mechanisms that collective action theorists propose are needed: collective identity, perceptions of injustice, and perceptions of collective control.

First, supportive contact may be beneficial to collective action engagement because of its potential to boost disadvantaged group members' ingroup identification (Tajfel & Turner, 1986; Wright, 2010). By openly opposing intergroup inequality, the advantaged group member would make group memberships explicitly salient and represent the disadvantaged group in a deserving and positive light. Thus, rather than reducing the salience of group identity, these interactions should provide an opportunity to strengthen identification with the disadvantaged group.

Supportive contact may also help to maintain collective action engagement by maintaining perceptions of injustice and control, via a process of subtyping. Individuals often engage in subtyping when they encounter an outgroup member who fails to confirm their existing stereotypes of the group (Kunda & Oleson, 1995). Instead of changing their stereotypes, they re-classify the particular individual as unrepresentative of the larger group. Historically, social psychologists have focused on the negative implications of subtyping as a means of maintaining prejudiced attitudes (see Richards & Hewstone, 2001). However, Wright and Lubensky (2009) suggested a positive role for subtyping: if disadvantaged group members were to subtype individual supportive advantaged group members as unlike the rest of the outgroup, their overall negative stereotypes of the advantaged group need not change, allowing them to maintain clear perceptions of injustice and control (Simon & Klandermans, 2001; Wright & Tropp, 2002; Stott & Drury, 2004). Supportive cross-group contact should facilitate this kind of subtyping – by demonstrating personal engagement in the cause of the disadvantaged group, the advantaged group member is likely to distinguish her/himself from the majority of the advantaged group who are responsible for the perpetuation of inequality and oppression.

A closer look suggests an even more optimistic role for subtyping. Wright and Lubensky's (2009) original subtyping suggestion calls for disadvantaged group members not to fence off just any outgroup member, but specifically those who care about social

justice and are willing to express these views. If the advantaged group members were to encourage disadvantaged group members to subtype them as "allies in the fight" (Wright & Lubensky, 2009, p. 304), positive cross-group interactions could do more than simply not undermine disadvantaged group members' collective action engagement, and could instead enhance it. This particular way of subtyping the individual majority group member - as an advantaged group ally - has the potential to increase collective action engagement by strengthening disadvantaged group members' perceptions of injustice and perceptions of collective control. First, the fact that the injustice is apparent even to someone who directly benefits from it is strong evidence of the reality of that injustice (e.g., Czopp & Monteith, 2003). Secondly, open support from an advantaged group member could indicate the availability of additional resources (e.g., financial support) held by outgroup members, strengthening perceptions that the group may have the capacity to work toward its collective goals. Thus, if disadvantaged group members subtype advantaged group members with whom they have supportive contact not only as unrepresentative of the large advantaged group, but more specifically as allies, their perceptions of injustice and collective control might be enhanced.

The notion of supportive contact is consistent with recent work on characteristics of advantaged group allies (Rattan & Ambady, 2014; Brown & Ostrove, 2013; Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003; Conley, Calhoun, Evett, Devine, 2002). Indeed, in many unequal intergroup relationships some advantaged group members question the legitimacy of their group privilege and are willing to form alliances with disadvantaged group members (e.g., Iyer & Ryan, 2009; Russell, 2011; Subašić, et al., 2008). Yet, to date, it has not been directly suggested that this kind of personal supportiveness be incorporated into cross-group contact. To do so might represent an effective (although, as we discuss later, not necessarily easy) solution to the conflict between friendly cross-group contact and disadvantaged group members' collective action engagement (e.g., Wright & Lubensky, 2009).

# The range of friendly cross-group contact

The ongoing dialogue about the potential downsides of friendly cross-group contact might be strengthened by considering a broader range of friendly cross-group

contact. In addition to supportive contact, disadvantaged group members may experience a range of other forms of friendly cross-group contact experiences. Supportive contact, in fact, may be quite rare. What may be more common is friendly cross-group contact where an advantaged group member is: a) ambiguous in terms of his/her level of supportiveness b) low in terms of his/her level of supportiveness or c) unsupportive.

Friendly cross-group contact that is ambiguous in terms of supportiveness may be the most frequent experience for disadvantaged group members. Cross-group interactions can be difficult and anxiety-provoking (e.g., Shelton, 2003; Tropp et al., 2006; Vorauer, 2006; Shelton, West, & Trail, & Bergseiker, 2010), and advantaged group members are often reluctant to discuss intergroup inequality (Johnson, 2005; Tropp et al., 2006). The resulting lack of communication regarding intergroup inequality during cross-group contact may often leave disadvantaged group members with a sense of ambiguity regarding their interaction partner's supportiveness. This ambiguity may undermine collective action engagement, in part because it could raise doubts about whether action against the seemingly friendly advantaged group is really justified, and whether such actions would be inconsistent with the maintenance of friendly cross-group relationships. These ideas are consistent with arguments made by Wright (1997; 2001a), who theorizes that ambiguity regarding the nature of intergroup inequality creates uncertainty for disadvantaged group members regarding the injustice of the status quo, and particular, creates doubt about whether other disadvantaged group members will be interested in engaging in collective action. As a result, they are unlikely to engage in collective action.

Disadvantaged group members may also experience friendly cross-group contact that is low in support. Some advantaged group members may express mild but equivocal supportiveness. For example, they might acknowledge injustice but fail to endorse action aimed at correcting it. Like cross-group contact that is silent in terms of supportiveness, this "low support" should also create uncertainty around whether collective action is justified and/or likely to receive support from others.

Finally, some friendly cross-group contact may occur with individuals who are openly unsupportive. For example, disadvantaged group members may have neutral or even pleasant contact with advantaged group individuals who openly express beliefs that legitimize intergroup inequality. This kind of contact could have one of two (opposite) effects on collective action engagement. On the one hand, clearly unsupportive contact may empower collective action, as it removes the uncertainty of ambiguous or low support contact and makes salient the adversarial nature of the intergroup relationship (Simon & Klandermans, 2001). On the other hand, Becker and colleagues (2013) showed that thinking about a close other who was openly unsupportive of same-sex marriage undermined collective action engagement among LGBT individuals. Thus, it appears that unsupportive positive cross-group contact may, under some circumstances, be disempowering. It is possible that the length and intimacy of the relationship, in part, account for these differential effects of unsupportive interactions. Unsupportive contact with a stranger or new acquaintance might be seen as provocative, even rude, and might heighten ingroup identification and perceptions of injustice. However, a long-term cross-group relationship with someone who is unsupportive (e.g., an old friend or family member) might lead the disadvantaged group member to perceive these as the norm (e.g., women who accept benevolent sexism from male friends, or LBGTQ individuals in homophobic/transphobic homes or neighbourhoods). Thus, as with low support and ambiguous contact, long-term positive contact with unsupportive outgroup members might lead to doubts about whether collective action is justified and/or likely to receive support from others, and thus decrease collective action engagement.

# The role of emotions in supportive contact

The collective action literature has emphasized the importance of group-based emotions as motivators of participation in collective action (e.g., lyer, Schmader, & Lickel, 2007; Tausch et al., 2011; Leach, lyer, & Pederson, 2006; Van Zomeren, Spears, Fischer, & Leach, 2004; Mallett, Huntsinger, Sinclair, & Swim, 2008). I propose that group-based emotions may also play a mediating role in the relationship between supportive contact and heightened collective action engagement. Specifically, I

hypothesize that the value of supportive contact for disadvantaged group members' collective action engagement may stem in part from advantaged group members' expressions of particular emotions. I focus on the three emotions that have dominated the intergroup relations and collective action literature – group-based anger<sup>1</sup>, shame, and guilt. The psychological antecedents and behavioural consequences of these emotional states differ considerably, especially for the individual who is experiencing them (Levenson, 1999; Tangney, 1992; Weis, Suckow, & Cropanzano, 1999; Tangney, Wagner, Flescher, & Gramzow, 1992; Frijda, Kuipers, & ter Schure, 1989). However, they all share an important common feature: they indicate a personal, negative affective reaction to intergroup inequality. Thus, given the assertion that supportive contact occurs when an advantaged group member demonstrates personal engagement in opposing inequality and/or supporting social change, it seems plausible to suggest that advantaged group members engaging in this contact would be willing and/or likely to express these emotions. When these emotions are shared by an advantaged group member with a disadvantaged group member as part of supportive contact, they may facilitate increased collective action engagement because a) they offer evidence of genuine support and b) they have the potential to boost ingroup identification.

Indicator of genuine support. The perceived genuineness of advantaged group members' expressions of support is a very real concern for structuring supportive cross-group contact. Disadvantaged group members may be well aware that advantaged group members have a variety of reasons to appear supportive, such as to alleviate feelings of responsibility (lyer, Schmader & Lickel, 2007; Schmitt, Miller, Branscombe, & Brehm, 2008), or to maintain a positive image of the ingroup (Vorauer et al., 2000). Thus, disadvantaged group members may not believe every expression of support to be sincere, and expressions of support that are interpreted as insincere are not likely to be empowering. However, if advantaged group members express support through the display of appropriate, relevant emotions, they may avoid the problem of being perceived as insincere. Research suggests that people who are more emotionally

Anger in the context of supportive contact refers to anger expressed by advantaged group members and directed at the advantaged ingroup or at representatives of the ingroup, such as a government composed of advantaged group members (e.g., Iyer, Schmader, & Lickel, 2007).

expressive are perceived as more trustworthy, perhaps because they are less likely (or less able) to hide their underlying motivations (Boone & Buck, 2003). Additionally, some supportive emotions experienced by advantaged group members (e.g., anger and guilt) are associated with participation in action on behalf of disadvantaged outgroups (e.g., Leach, et al., 2006; Mallett, et al., 2008). The correlation between these emotions and real supportive behavior could mean that individuals who express these emotions will be perceived as especially genuine. Thus, expressions of support that contain these group-based emotions are more likely to be interpreted as instances of true support.

**Boost ingroup identification.** Each of the group-based emotions discussed above (anger, shame, and guilt) could also strengthen or help to maintain a disadvantaged group member's ingroup identification, if expressed by an advantaged group member as part of supportive contact. As noted, positive cross-group contact is typically structured to blur or erase group boundaries. However, an advantaged group member's expression of shame or guilt regarding existing intergroup inequality and/or past or present mistreatment of the disadvantaged group clearly delineates group boundaries, as these emotional experiences are only relevant for members of the advantaged group. For example, although a disadvantaged group member might appreciate and attend to an advantaged group members' expression of group-based guilt, as an outgroup member they would not be able to share the experience of this emotion. Thus, this emotional expression would make structural and psychological differences between groups clearly salient, leading to increased ingroup identification.

At first glance, group-based anger may not seem to have the same potential to increase ingroup identification. After all, this emotion can be shared by advantaged and disadvantaged group members (for example, both advantaged and disadvantaged group members may share outrage at political leaders who belong to the advantaged group), and thus may not clearly delineate group differences. However, the relationship to the target of that anger is quite different for advantaged and disadvantaged group members. An advantaged group member's expression of anger regarding intergroup inequality is directed, at least in part, at the actions of his or her own group. This ingroup directed hostility may again delineate group boundaries and make group identities salient, thus helping to increase a disadvantaged group member's ingroup identification. In addition,

sharing anger at a similar target may also create emotional validation or contagion. That is, shared anger might validate the emotional experiences of a disadvantaged group member who is currently experiencing anger, or, for someone who may not have strong emotions regarding intergroup inequality, anger may arise as a result of the spread of emotional cues from person to person (e.g., Friedman & Riggio, 1981; Schacter & Singer, 1962). Thus, through either of these psychological pathways, an advantaged group member's expression of anger could lead their disadvantaged group interaction partner to experience group-based anger. Group-based anger, in turn, can lead to higher levels of ingroup identification (Kessler & Hollbach, 2005). Consistent with this idea, Thomas, McGarty and Mavor (2009) have described shared group-based emotions (especially anger and moral outrage) as one contributor to the maintenance of a collective identity over time, and thus as a contributor to sustained participation in a relevant social movement.

#### **Current research**

In a series of 3 experimental studies, I contrasted supportive contact with other friendly contact that was ambiguous in supportiveness, low in supportiveness, or openly unsupportive. I also tested potential mediators of the relationship between supportive contact and collective action engagement including ingroup identification (Studies 2 and 3), perceptions of injustice (Studies 1 and 2), perceptions of control (Study 1) and advantaged group members' expressions of group-based emotions (Study 3). In Study 1, I used a laboratory setting to create a real cross-group interaction between a disadvantaged group member (a first-generation Canadian) and an advantaged group member (a Canadian-born person). In Study 2, I tested the effects of recalling past supportive contact on the collective action engagement of international students in an Australian university context. In Study 3, I tested the effect of recalling past supportive contact on women's engagement in collective action for women's rights.

# Study 1

Study 1 tested the potential empowering effect of supportive contact on disadvantaged group members' collective action engagement, by creating a cross-group interaction in the laboratory. In addition, this study provided an initial investigation of the outcomes of expressions of different group-based emotions as part of supportive crossgroup contact, as the experimental conditions included supportive contact containing an expression of group-based guilt, and supportive contact containing an expression of group-based anger. I expected that both of these expressions would heighten the collective action engagement of disadvantaged group members, because these emotions would serve as a reminder of structural differences between the advantaged and disadvantaged group, and would also increase the likelihood that disadvantaged group members would interpret the expression of support as sincere. However, anger might be uniquely effective in boosting collective action engagement. Anger has been described as an action oriented emotion (Frijda, 1986), and is particularly associated with collective action participation (Thomas et al., 2009). It is also the emotion that is most closely associated with perceptions of injustice (Van Zomeren, Spears, Fischer, & Leach, 2004; Gurney & Tierney, 1982). Thus, although both guilt and anger may signal genuine support for the disadvantaged group, an expression of anger by an advantaged group member might be particularly likely to empower collective action engagement because of its association with both action and injustice.

The participants in this study were first-generation Canadians (i.e., Canadian citizens who were born outside of Canada). Research suggests that first-generation Canadians are worse off economically than Canadian-born individuals, and this difference persists over time (Picot, 2004; Reitz & Banerjee, 2007). Additionally, these disparities are likely to be heightened for non-White first-generation Canadians (e.g., Oreopoulos, 2011). Therefore, interactions between first-generation Canadians and Canadian-born individuals provide an appropriate intergroup context in which to examine

the impact of supportive contact on disadvantaged group members' collective action engagement.

The study involved a number of conditions. In the 4 experimental conditions, first generation Canadian students at a Canadian university engaged in a friendship-building interaction with a confederate who identified herself as a Canadian-born student. Thus, all of these participants were involved in friendly cross-group contact. Following the friendly interaction, they overheard the confederate make a comment regarding intergroup inequality faced by first-generation Canadians. Depending on the condition, this comment was: a) an explicitly supportive statement that included an expression of guilt regarding intergroup inequality; b) an explicitly supportive statement that included an expression of anger regarding intergroup inequality; c) an unsupportive statement dismissing the issue of intergroup inequality; d) an ambiguous statement that provided no information about feelings regarding the issue of intergroup inequality. A fifth (control) condition that did not include an interaction with the confederate was also included.

Participants then reported their willingness to engage in collective action, and a behavioural measure was used to assess their actual participation in collective action. In addition, they completed measures of plausible mediators of the link between supportive contact and increased collective action engagement: perceptions of injustice and perceptions of collective control.

## Hypotheses and planned comparisons

The focal hypothesis was that supportive contact (regardless of whether it included an expression of anger or guilt) would lead to higher collective action engagement, compared to ambiguous supportiveness, unsupportive contact, or no contact.

I also predicted that supportive contact involving anger would lead to higher levels of collective action engagement than supportive contact involving guilt. To investigate the similarity of ambiguous supportiveness, unsupportive contact, and no contact (which is assumed in the focal hypothesis), I also planned to make two other

comparisons. First, I planned to compare the ambiguous condition to the no-interaction control condition. The tentative prediction was that the ambiguous condition would lead to lower collective action relative to the no-interaction control. This prediction was based on the findings of Becker and colleagues (2013) who used a similar procedure and demonstrated that cross-group contact in which the advantaged group member was ambiguous in terms of her support produced lower collective action than a control condition. However, the control condition used by Becker and colleagues involved an interaction with an ingroup member, whereas the current control condition involves no interaction at all. Second, I planned to compare the unsupportive condition and ambiguous supportiveness conditions.

In terms of mediators, I predicted that higher willingness to engage in collective action in the supportive contact conditions, compared to the other conditions, would be accounted for by changes in perceptions of injustice and collective control.

#### **Method**

Scale items and other relevant study materials are included in Appendix A.

**Participants.** Participants were 203 first-generation Canadians at a large Canadian university, who participated in exchange for psychology course credit ( $M_{age} = 20.22$ , SD = 3.83)<sup>2</sup>. Participants indicated their ethnicity was Chinese (24.6%), Korean (11.3%), South Asian (10.3%), Caucasian (9.4%) or other (21.2%).<sup>3</sup>

**Design.** I manipulated the supportiveness of the advantaged group member to produce five conditions: Supportive Anger, Supportive Guilt, Ambiguous, Unsupportive Statement, and a No-Interaction Control.

<sup>&</sup>lt;sup>2</sup> Due to researcher error, demographic information was not collected for approximately 23% of participants.

<sup>&</sup>lt;sup>3</sup> See previous footnote.

**Procedure.** Participants took part in two ostensibly unrelated lab studies. They arrived at the lab for a "Social Issues in the Media" study, where they were met by a research assistant (Experimenter 1), as well as a female confederate posing as a research participant (this confederate would later identify herself as Canadian-born). Both the confederate and the research participant then read three media reports on various social issues, one of which addressed disadvantages faced by first-generation Canadians. To distract participants from the true purpose of the study, the article topics also included displacement of forest fire victims, and overfishing of the world's oceans. Each article was followed by a number of filler questions assessing perceptions of the media report, and interest in taking action to correct the social issues (e.g., by signing a petition).

Following this, participants in all conditions except the No-Interaction condition were invited to participate in an ostensibly unrelated additional study on "Friendship Formation" in a laboratory down the hall, run by a different research assistant (Experimenter 2). At the beginning of this second study, the participant and the confederate completed an adapted version of the Fast Friends exercise, a task designed by Aron, Melinat, Aron, Vallone and Bator (1997) to facilitate interpersonal closeness and friendship through mutual self-disclosure. Participants were seated facing each other, and for approximately 25 minutes they took turns answering a series of predetermined questions that became increasingly personal and required increasing levels of self-disclosure. To shorten the task from its original length, some questions were removed, and one additional question was added to the task ("Describe the story of your birth") to provide an opportunity for the confederate to indicate their status as a "Canadian-born person."

Following the Fast Friends exercise, participants were seated at separate tables and Experimenter 2 provided a questionnaire including a measure of how much the participant liked the confederate, as well as a variety of filler items. While the participant was completing the questionnaire, Experimenter 1 (the research assistant from the "first" study) arrived and indicated to Experimenter 2 that he had forgotten to administer one of his questionnaires and asked if he could administer it to the participants now. This "forgotten" questionnaire contained the measures of collective action and related

mediators. Upon receiving her questionnaire, the confederate made a comment to Experimenter 1, loud enough for the participant to overhear. This comment introduced the experimental manipulation of the supportiveness of the advantaged group member. The confederate made one of four comments:

Supportive (Anger) Statement: "Oh, right, the immigration article. I'm glad that we get to fill these ones out, I actually felt really angry when I was reading about those discriminatory policies. It just makes me so mad!"

Supportive (Guilt) Statement: "Oh, right, the immigration article. I'm glad that we get to fill these ones out, I actually felt really guilty about being a Canadian born person when I was reading about those discriminatory policies. It just makes me feel so bad!"

Ambiguous Supportiveness Statement: "Oh, right, the immigration article."

Unsupportive Statement: "Oh, right, the immigration article. I don't really feel like filling this one out, when I was reading it I didn't think those discriminatory policies sounded like that big of a deal. First-generation Canadians seem like they're doing fine to me!"

Participants then completed the questionnaire. Experimenter 1 also administered a behavioural measure of collective action. Participants were shown samples of buttons that promoted awareness of the social issues they had read about earlier, and completed a form on which they could request buttons to keep or distribute to others. Included was a button that read "All Canadians Are Equal" and text accompanying the sample button indicated that it could be used to "raise awareness of inequality faced by first-generation Canadians." The behavioural measure of collective action was the number of this particular button requested. Finally, Experimenter 2 administered a questionnaire that included demographics items.

Participants in the No-Interaction condition also participated in a second, ostensibly unrelated study. This study was described as a study on "Cognitive Formation," and participants completed a series of math problems and a jigsaw puzzle. They were informed that the confederate would complete the same task in an adjacent room. Thus, participants in this condition did not complete the Fast Friends task and

were not exposed to a statement from the confederate. However, they did complete the "forgotten" questionnaire described above, as well as the behavioural measure of collective action.

#### Measures

#### Potential mediators.

Perceptions of injustice was measured using a 4-item scale ( $\alpha$  = .72). Participants responded on 7-point Likert type scales (1 = not true at all, 7 = very true) to items such as, "I think that it is unfair that first generation Canadians face discriminatory policies."

Perceptions of collective control was measured using a 3-item scale ( $\alpha$  = .55). Participants responded on 7-point Likert type scales (1 = not true at all, 7 = very true) to items such as, "I think that if first generation Canadians work together, they can bring an end to discriminatory policies."

#### Dependent variables.

Willingness to engage in collective action was measured using a 9-item scale ( $\alpha$  = .91). Participants responded on 7-point Likert type scales (1 = not true at all, 7 = very true) to items such as "I am willing to do something together with fellow students to fight policies that discriminate against first-generation Canadians."

As a behavioural measure of collective action, participants were given an order form on which they could request 2, 4, 6, 8, or 10 buttons. Participants who did not indicate that they wanted any buttons were given a "0" on this measure.

#### **Additional measure**

Participants' degree of liking for the confederate was measured using a 6-item scale ( $\alpha$  = .85). Participants responded on 7-point Likert type scales (1 = not true at al, 7

= very true) to items such as, "I would like to have him/her as a friend." Participants completed this measure before overhearing the statement made by the confederate.

#### **Results**

#### Preliminary analyses.

**Descriptive statistics.** Table 1 presents the intercorrelations for the mediators and dependent variables. Table 2 presents the means and standard deviations.

**Liking of confederate.** A one-way ANOVA indicated that prior to the confederate's comment there were no significant differences across experimental conditions on participants' liking of the confederate, F(3, 152) = .573, p = .634. Follow-up Games-Howell comparisons revealed that all comparisons between individual conditions were not significant, all p-values < .679.

Table 1. Correlations between dependent variables and potential mediators in Study 1.

Measure	2	3	4
Willingness to engage in collective action	.381**	.161*	.227*
2. Behavioural measure of collective action		.150*	.181*
3. Perceptions of Control			.089
4. Perceptions of Injustice			

Note: \*\* p < .001, \* < .05

Table 2. Means and standard deviations by condition for dependent variables and potential mediators in Study 1.

	Dependent Variables		Potential Mediators	
	Willingness to engage in collective action	Behavioural measure of collective action	Perceptions of Control	Perceptions of Injustice
Condition				
Support (Angry) Statement	4.21 (1.30)	4.33 (4.35)	4.69 (1.21)	6.29 (0.81)
Support (Guilty) Statement	4.25 (1.36)	4.42 (4.14)	4.68 (0.95)	5.83 (0.97)
Ambiguous Supportiveness Statement	3.83 (1.38)	2.93 (2.72)	4.42 (1.20)	5.56 (0.94)
No-Interaction Control	3.68 (0.94)	2.26 (1.79)	4.02 (0.76)	5.64 (0.95)
Unsupportive Statement	3.86 (1.19)	2.49 (2.27)	4.37 (1.01)	5.14 (0.91)

# Planned comparisons.

Four a priori contrasts were conducted for the dependent variables and the mediators. The first contrast tested the focal hypothesis that cross-group interactions

with a supportive partner would lead to higher levels of collective action engagement than any of the other conditions. Thus, this first contrast compared the combined Supportive Anger Statement and Supportive Guilt Statement conditions to the other three conditions. Participants in the two supportive contact conditions reported higher willingness to engage in collective action, t(195) = 2.43, p = .016, more interest in the behavioural measure of collective action, t(196) = 3.93,  $p < .001^4$ , higher perceptions of control, t(194) = 2.72, p = .007, and higher perceptions of injustice, t(194) = 4.61, p < .001, compared to participants in the other three conditions.

The second contrast compared the two supportive contact conditions: Supportive Guilt Statement versus Supportive Anger Statement. This contrast revealed no statistically significant differences on willingness to engage in collective action, t(195) = -0.16, p = .871, responses to the behavioural measure of collective action, t(196) = -.12, p = .903, or perceptions of control, t(194) = 0.07, p = .947. Participants in the Supportive Angry Statement condition reported higher perceptions of injustice, compared to participants in the Supportive Guilt Statement condition, t(194) = 2.21, p = .028.

The third contrast compared the No-Interaction Control condition to the Ambiguous Statement condition and revealed no statistically significant differences on any of the four outcomes: willingness to engage in collective action, t(195) = 0.55, p = .585; responses to the behavioural measure of collective action, t(196) = 0.96, p = .340; perceptions of collective control, t(194) = 1.75, p = .083; or perceptions of injustice, t(194) = -0.44, p = .663.

To provide consistency with the cover story, participants were also given the opportunity to order buttons on 5 other social issues. Although originally intended as filler items, I conducted a post-hoc analysis investigating whether interest in these other buttons was also impacted by the experimental condition. Specifically, I repeated the focal contrast for each of the other available buttons. No significant differences emerged for participants' interest in buttons promoting increasing accessibility for persons with disabilities, providing assistance for forest fire victims, increasing equality in governmental hiring, or banning bottled water on campus. Participants in the two supportive contact conditions reported more interest in buttons on the issue of overfishing the world's oceans (M = 2.53), compared to participants in the other three conditions (M = 1.67), p = .013.

The fourth contrast compared the Ambiguous Statement condition to the Unsupportive statement condition and revealed no statistically significant differences on terms of willingness to engage in collective action, t(195) = 0.12, p = .907; responses to the behavioural measure of collective action, t(196) = -0.60, p = .546; or perceptions of collective control, t(194) = -0.23, p = .821. Participants in the Unsupportive Statement condition reported lower perceptions of injustice, t(194) = -2.02, p = .049.

#### Mediation

In order to determine whether the significantly greater collective action engagement in the two supportive contact conditions could be explained by higher levels of perceived injustice and perceived control, separate bootstrapping analyses were used to evaluate the indirect effects of supportiveness on each of the two collective action measures. Following Preacher and Hayes (2008), the indirect effects were computed using unstandardized-regression weights with 5000 bootstrap resamples. The independent variable was the focal contrast, which compared the two supportive contact conditions with the other three conditions. The other three contrasts were entered as covariates in the models, thus controlling for their effects.

The first analysis revealed that the indirect effect of supportiveness on willingness to engage in collective action via perceptions of injustice was significant (IE = .03, SE = .01, 95% [CI] = [0.0081, 0.0671])<sup>5</sup>. The indirect effect via perceptions of collective control was not significant (IE = .01, SE = .01, 95% [CI] = [-0.0021, 0.0374]).

Perceptions of injustice are significantly lower in the unsupportive condition, compared to the low support and ambiguous conditions. I investigated the possibility that this mediational pattern was driven by this condition. However, re-running this analysis without the unsupportive condition, the mediational pattern remains the same. Again, the indirect effect via perceptions of injustice was significant for willingness to engage in collective action (IE = .05, SE = .02, 95% [CI] = [0.0133, 0.1005]), but not for the behavioural measure of collective action, (IE = .07, SE = .05, 95% [CI] = [-0.0061, 0.1735]). There were no significant indirect effects via perceptions of control for willingness to engage in collective action (IE = .02, SE = .01, 95% [CI] = [-0.0024, 0.0559]) or the behavioural measure of collective action, (IE = .04, SE = .03, 95% [CI] = [-0.0127, 0.1127]).

The second analysis revealed that the indirect effect of supportiveness on the behavioural measure of collective action via perceptions of injustice was not significant (IE = .05, SE = .03, 95% [CI] = [-0.0046, 0.1128]), nor was the indirect effect via perceptions of collective control (IE = .02, SE = .02, 95% [CI] = [-0.0083, 0.0835]).

#### **Discussion**

These findings provide the first experimental evidence that supportive contact can increase disadvantaged group members' willingness to engage in collective action, as well as their actual participation in collective action behaviours. First-generation Canadians who interacted with a supportive Canadian-born partner (who expressed anger or guilt regarding intergroup inequality) reported higher levels of collective action on both measures, compared to first-generation Canadians who did not interact with a partner, or who interacted with a Canadian-born partner who was unsupportive or ambiguous in their level of support. The demonstration of this effect with a behavioural measure – requesting more buttons to be used to campaign for greater intergroup equality – provides particularly exciting evidence of the potential empowering impact of supportive contact.

The results of this study are particularly compelling because our procedure ensured that the quality of cross-group contact was extremely similar across all the experimental conditions. With the exception of a single comment near the end of the interaction (comprising the manipulation), the experimental procedure was designed to ensure that all participants had identical contact experiences. The fact that participants in all four conditions showed very similar levels of liking for the confederate provides some evidence that this procedure was successful. Thus, the design allowed us to contrast supportive contact with other conditions that involve similarly friendly contact. The benefits of this are two-fold. First, it ensures that supportiveness is not confounded with the friendliness of the contact. Second, this procedure allowed us to ensure that across all conditions, the contact experience was meaningful and friendly – consistent with other experimental research on cross-group friendships (e.g., Page-Gould, Mendoza-Denton, & Tropp, 2008; Davies et al., 2011). This ensures that the research findings are relevant to the debate about prejudice reduction and collective action, which

centers around the potential deleterious effects of pleasant cross-group contact and close cross-group friendships in particular (e.g., Wright & Lubensky, 2009).

The results also show the potential for the expression of group-based emotions (i.e., guilt and anger) as one means by which advantaged group members can effectively communicate genuine support for the disadvantaged group. Contrary to hypotheses, supportive contact including an expression of anger was no more effective than supportive contact including an expression of guilt for empowering collective action among disadvantaged group members. However, an expression of anger did lead to stronger perceptions of injustice than did an expression of guilt. This is consistent with previous research suggesting that expressions of anger may be a key motivator of collective action engagement (e.g., Van Zomeren at al., 2004). Future research could directly compare an expression of support containing group-based anger with a non-emotional expression of support, to better tap the unique effects of advantaged group members' expressions of group-based anger on disadvantaged group members' collective action engagement.

Mediation analyses revealed that supportive contact increased disadvantaged group members' willingness to engage in collective action by heightening perceptions of injustice. However, this mediational effect of perceptions of injustice was not significant for responses on the behavioural measure of collective action (requesting buttons). One possible explanation for this finding is that, although willingness to engage in collective action can be driven by perceptions of injustice, the decision to take the next step and actually participate may require a combination of mediators, including, for example, heightened perceptions of injustice and strong ingroup identification. In fact, taking action might even require a more specific form of "politicized" collective identity (Simon & Klandermans, 2001) or identification with an activist subgroup (McGarty, Bliuc, Thomas, & Bongiorno, 2009). Thus, future research should make an effort to further investigate psychological processes that account for actual behaviour compared to reported willingness to take action.

Study 1 showed that it is possible for friendly cross-group contact to empower, rather than undermine, the collective action engagement of disadvantaged group

members. First-generation Canadians in the two supportive contact conditions demonstrated more willingness to engage in collective action, compared to first-generation Canadians in any of the other conditions. In the two remaining studies, I attempted to replicate this effect, while also further exploring potential mediators and moderators. Although Study 1 utilized a cross-group interaction in the laboratory, the following two studies utilized a recall paradigm. In this paradigm, participants are asked to recall a particular cross-group contact experience (e.g., an instance of supportive or non-supportive contact), and then to report their willingness to engage in collective action. While the method used in Study 1 allowed for careful control of extraneous variables in the cross-group contact situation, as well as facilitating immediate assessment of collective action after supportive contact, the recall paradigm uses cross-group contact experiences that are highly relevant to participants' everyday experiences, increasing the external validity of the research.

# Study 2

Although international students studying in Western countries are a significant source of funding to their universities, and their presence stimulates local economies (e.g., Australian Bureau of Statistics, 2011; CBC News, 2014), evidence suggests that they often face discrimination (e.g., Australia Human Rights Commission, 2009; Reitmanova, 2008). As these students also have frequent opportunities to interact with advantaged group members (domestic students), these interactions provide an appropriate intergroup context to examine the impact of supportive contact on disadvantaged group members' collective action engagement.

In this study, international students at a large Australian university were asked to recall and think about a domestic student with whom they had a friendly relationship. Participants were randomly assigned to think of a domestic student who was a) clearly supportive of international students, b) who was a little supportive, c) who was ambiguous in terms of their support, or d) who was clearly unsupportive of international students. Participants then reported their willingness to engage in collective action. In addition, they completed measures of plausible mediators of the link between supportive contact and increased collective action engagement: their perceptions of injustice, and their level of identification with the international student ingroup.

# Hypotheses and planned comparisons

The focal hypothesis was that recalling contact with an advantaged group member who is clearly supportive of the disadvantaged group would again lead to greater willingness to engage in collective action, compared to recalling low supportiveness, ambiguous supportiveness, or unsupportive contact. To investigate the similarity of ambiguous supportiveness, low supportiveness, and unsupportive contact (which is assumed in the focal hypothesis), I also planned to make two other

comparisons. First, I planned to compare the low supportiveness condition to the ambiguous supportiveness condition. Second, I planned to combine the ambiguous supportiveness condition and the low supportiveness condition and compare them to the unsupportive contact condition.

In terms of mediators, I expected that higher willingness to engage in collective action in the supportive contact condition, compared to the other conditions, would be accounted for by increases in ingroup identification and perceptions of injustice.

#### Method

Scale items are included in Appendix B.

**Participants.** Participants were 138 international students ( $M_{age}$ = 22.86; SD = 3.13) at a large Australian university<sup>6</sup>. They were offered a candy bar in exchange for their participation in a study on "International Students' Rights." Participants indicated their ethnicity was Asian (77.5%), White/European (7.2%), mixed ethnicity, (3.6%), other (5.8%), or did not indicate their ethnicity (5.8%). Participants indicated their gender as female (69.6%), male (27.5%) or did not indicate their gender (2.9%).

**Design.** I manipulated the supportiveness of the advantaged group member to produce four conditions: Supportive Contact, Ambiguous Supportiveness, Low Supportiveness, and Unsupportive.

**Procedure.** To provide the context for the manipulation of the supportiveness of the advantaged group member, participants first read a short paragraph making salient the disadvantage faced by international students. Next, the supportiveness of the

Our entire sample consisted of 154 participants. However, 15 participants who did not nominate a domestic Australian student (1 from the Supportive condition, 5 from the Low Support condition, 1 from the Ambiguous condition, and 8 from the Unsupportive Condition) were excluded from the analyses. One additional participant was excluded for failing to follow directions.

advantaged group member was manipulated, by asking participants to think of a domestic Australian student they knew. Specifically, all participants were instructed, "If you can, try to think of someone who you know and like, such as a friend you have made at university." In the Supportive condition, participants were instructed to, "Please think of a native Australian student who you believe is supportive of international students." In the Ambiguous Supportiveness condition, participants were instructed to, "Please think of a native Australian student whose views on international students are unclear to you – you are not sure whether this person is supportive or unsupportive of international students." In the Low Supportiveness condition participants were instructed to, "Please think of a native Australian student who you believe is only a little supportive of international students." In the Unsupportive condition, participants were instructed to, "Please think of a native Australian student who you believe is not supportive of international students."

Participants were asked to provide this person's initials and a brief description of the last activity they had done with this person. They then completed measures of ingroup identification, perceptions of injustice, and willingness to engage in collective action.

#### Measures

#### Potential mediators.

Ingroup identification was measured using a 4-item scale with items taken from Cameron (2004) and modified for use with the ingroup "international students" ( $\alpha$  = .71). Participants responded on 7-point Likert type scales (1 = completely disagree, 7 = completely agree), to items such as "Being an international student is a central part of who I am."

Perceptions of injustice was measured using a 4-item scale with items designed specifically for use with this population ( $\alpha$  = .84). Participants responded on 7-point Likert type scales (1 = completely disagree, 7 = completely agree), to items such as "It is unfair

that international students have a lower status in Australian society than native Australian students."

#### Dependent variable.

Willingness to engage in collective action was measured using a 6-item scale designed specifically for this population but modeled on previous measures of this construct (e.g., Becker et al, 2013;  $\alpha$  = .84). Participants responded on 7-point Likert type scales (1 = completely disagree, 7 = completely agree) to items such as "At this moment, I am willing to distribute information on international student issues around campus."

### Manipulation Check.

Perceptions of supportiveness was measured by instructing participants to think about the native Australian student they had nominated and indicate their response to the question, "Generally, how supportive is this native Australian student of international students?" (1 = not supportive at all, 7 = very supportive).

#### Results

### Preliminary analyses.

**Descriptive statistics.** Table 3 presents the correlations between mediators and dependent variables. Table 4 presents the means and standard deviations.

Table 3. Correlations between dependent variables and potential mediators in Study 2.

iii Otady 2.		
Measure	2	3
Willingness to engage in collective action	.221**	.275**
2. Ingroup identification		.382**
3. Perceptions of injustice		

Note: \*\* p < .001, \* < .05

Table 4. Means and standard deviations by condition for dependent variable and potential mediators in Study 2.

	Dependent Variable	Potential Mediators	
	Willingness to Engage in Collective Action	Ingroup Identification	Perceptions of Injustice
Condition			
Supportive	4.93 (1.13)	5.44 (1.15)	5.70 (0.93)
Ambiguous	4.43 (1.10)	5.14 (1.01)	5.60 (0.87)
Low Support	4.28 (1.12)	5.28 (1.11)	5.16 (1.30)
Unsupportive	4.48 (1.18)	4.65 (1.16)	5.06 (1.13)

**Manipulation check.** A one-way ANOVA yielded a significant effect of supportiveness on the manipulation check, F(3, 137) = 7.06, p < .001. Follow-up Games Howell comparisons revealed that participants reported the domestic Australian person they nominated to be more supportive in the Supportive Contact condition (M = 5.40; SD = 1.28) than in the Ambiguous Supportiveness condition (M = 4.60; SD = 1.06), p = .024. There were no significant differences in how supportive participants reported the domestic Australian person to be in the Ambiguous Supportiveness and Low Supportiveness (M = 4.03; SD = 1.53) conditions, p = .278, and no significant differences in how supportive participants reported the domestic Australian person to be in the Low Supportiveness and Unsupportive (M = 4.25; SD = 1.50) conditions, p = .937.

### Planned comparisons.

Three a priori contrasts were conducted for the dependent variables and the mediators. The first contrast tested our focal hypothesis that recalling cross-group interactions with a supportive partner would lead to higher collective action engagement than any of the other conditions. Thus, this contrast compared the Supportive Contact condition to the other three conditions. Participants in the Supportive Contact condition reported higher willingness to engage in collective action, t(134) = 2.44, p = .016, stronger perceptions of injustice, t(134) = 2.06, p = .041, and higher ingroup identification, t(134) = 2.12, p = .036, compared to participants in the other three conditions.

The second contrast compared the Low Supportiveness condition to the Ambiguous Supportiveness condition. This contrast revealed no statistically significant differences on willingness to engage in collective action, t(134) = -.56, p = .566, ingroup identification, t(134) = .56, p = .577, or perceptions of injustice, t(134) = -1.76, p = .081.

The third contrast compared the Unsupportive condition to the Ambiguous Supportiveness and the Low Supportiveness conditions. This contrast revealed no statistically significant differences on willingness to engage in collective action, t(134) = -0.54, p = 0.592, or perceptions of injustice, t(134) = 1.41, p = 0.162. Participants in the

Unsupportive condition reported lower ingroup identification, compared to participants in the other two conditions, t(134) = 2.52, p = .013.

#### Mediation

In order to determine whether the significantly greater willingness to engage in collective action in the supportive contact condition could be explained by higher levels of ingroup identification and perceptions of injustice, bootstrapping analyses were again used to evaluate the indirect effects of supportiveness on willingness to engage in collective action. The independent variable was the focal contrast, which compared the Supportive Contact condition with the three other conditions. The other two contrasts were entered as covariates in the model, thus controlling for their effects.

These analyses revealed that the indirect effect of supportive contact on willingness to engage in collective action via perceptions of injustice was significant (IE = .02, SE = .02, 95% [CI] = [0.0015, 0.0636]). The indirect effect of supportive contact on willingness to engage in collective action via ingroup identification was not significant (IE = .02, SE = .02, 95% [CI] = [-0.0063, 0.0627]).

#### **Discussion**

This study demonstrated that recalling supportive contact led disadvantaged group members to be more willing to engage in collective action, compared to those recalling other forms of friendly cross-group contact. International students who recalled a domestic Australian student who was supportive of international students reported higher collective action engagement, compared to international students who recalled a

Perceptions of injustice are noticeably lower in the unsupportive condition, compared to the low support and ambiguous conditions. Although this difference is not statistically significant, I tested the possibility that the mediational patterns were driven by this condition. Without the unsupportive condition included the mediational pattern remained the same. Again, the indirect effect via perceptions of injustice was significant, (IE = .03, SE = .02, 95% [CI] = [0.0030, 0.1006]), and there were no significant indirect effects of ingroup identification (IE = .02, SE = .03, 95% [CI] = [-0.0110, 0.0980]).

domestic Australian student who was low in supportiveness, ambiguous in their level of supportiveness, or unsupportive. In addition, our mediation analyses revealed that recalling a more supportive domestic student increased willingness to engage in collective action by heightening perceptions of injustice. Thus, recalling a supportive domestic student may have been empowering because it drove home the reality of the injustice faced by international students.

Study 2 built on Study 1 by including an additional potential mediator: ingroup identification. Earlier, I suggested that interactions involving supportive contact should provide an opportunity to strengthen identification with the disadvantaged group, because open opposition to inequality by a member of the advantaged group would not only make group memberships explicitly salient, but would also represent the disadvantaged group in a deserving light. However, in the present study, perceptions of injustice emerged as the sole mediator of the relationship between supportive contact and increased collective action engagement. Although it is not unusual in collective action research for only one of a number of potential mediators to emerge, it is also possible that strengthening perceptions of injustice is particularly important in the international student context. Although international students studying in Western countries face real disadvantages (e.g., Australia Human Rights Commission, 2009; Reitmanova, 2008), as "quests" in the host nation where they are studying, some international students may not feel it is appropriate to complain or express feelings of discontent regarding their treatment. This may be particularly true of international students from Asian home countries (e.g. China, Korea) who may strongly value respect for authority and maintaining group harmony (Asghar et al., 2013; Kee, Tsai & Chen, 2008). For these students, hearing a message of support from an advantaged group member may be particularly important because it drives home the reality of the injustice and makes it clear that resisting their disadvantaged status is both justified and appropriate.

The manipulation check in this study asked international students to rate the supportiveness of the domestic student they nominated. Participants in the supportive condition indicated that they had recalled a more supportive person, compared to the ambiguous supportiveness, low supportiveness, and unsupportive conditions. However,

participants in the latter three conditions indicated that the domestic students they recalled were about equal in supportiveness. This similarity in responses across the latter three conditions may reflect the fact that the 1-item measure of supportiveness included in this study did not capture all of the qualitative differences between the different types of support tested in the study. The item did not ask about any other potential difference that might distinguish the behaviours of the individuals nominated in the conditions. For example, the item did not ask participants to assess how ambiguous the person was in communicating their support (one of the key theoretical reasons thought to underlie the deleterious effects of certain forms of positive cross-group contact). The possibility that this manipulation check only partially taps the differences between the various conditions is supported by the fact that although the ambiguous supportiveness, low supportiveness, and unsupportive conditions did not differ on the manipulation check, they did exert some unique effects on the proposed mediators. Another possibility is that participants may have been drawing on a relatively small pool of individuals during the recall task. Some may have been relatively new to Australia, and may not have had the opportunity to make friends with a large number of domestic students. Thus, although they were easily able to identify "supportive" individuals and distinguish them from "non-supportive" individuals, identifying individuals who fit into a range of specific non-supportive categories may have been more difficult. In Study 3, I investigated supportive contact in the context of cross-gender interactions and relationships. I expected that women would have a relatively large and varied network of male friends, and thus it might be easier for them to recall and think about specific individuals matching the descriptions of supportive, ambiguous in supportiveness, and low in supportiveness.

# Study 3

Study 3 focused on cross-gender relationships, in order to demonstrate the empowering effect of supportive contact in another intergroup context. It also focused on the potential mediating role of ingroup identification. As proposed earlier, supportive contact should provide an opportunity to strengthen, rather than undermine, identification with the disadvantaged group. Additionally, I expected that advantaged group members' expression of group-based emotions should partially account for the relationship between supportive contact and increased engagement in collective action, for two reasons. First, disadvantaged group members might interpret the expression of group-based emotions as an indicator of genuine supportiveness. Second, expressions of group-based emotions can serve to emphasize differences between the advantaged and disadvantaged group and thus can boost the salience of group memberships, leading to heightened ingroup identification.

Women were asked to recall and think about a man with whom they had a friendly relationship, and were randomly assigned to select one who was also: a) clearly supportive of women's rights; b) a little supportive of women's rights; or c) ambiguous in support for women's rights. Participants were also asked to indicate the group-based emotions this individual had shared in the past, and to complete measures of ingroup identification and willingness to engage in collective action in support of women's rights.

# Hypotheses and planned comparisons

As in Studies 1 and 2, the focal hypothesis was that recalling contact with a man who was clearly supportive of women's rights would lead to greater willingness to engage in collective action than recalling contact with a man who was ambiguous or low in his supportiveness. To investigate the similarity of low and ambiguous supportiveness that is assumed in this focal hypothesis, I also planned to test whether recalling contact

with a man who was ambiguous versus low in terms of his supportiveness led to different degrees of willingness to engage in collective action.

Predicted mediational paths for the impact of the focal contrast on willingness to engage in collective action are illustrated in Figure 1. The prediction was that the effect of supportive contact compared to low/ambiguous supportiveness on willingness to engage in collective action should be explained by a process of serial mediation, where supportive contact leads to increased reports of group-based emotions shared by the man, which in turn leads to increased identification with women, resulting in greater willingness to engage in collective action (see Introduction, p. 13). I also predicted an independent indirect effect of supportive contact on willingness to engage in collective action via identification with women, because supportive contact itself, independent of its relationship to group-based emotions, should increase the salience of group identity and provide an opportunity to strengthen identification with the disadvantaged group (see Introduction, p. 8). Finally, I predicted another independent indirect effect of supportive contact on willingness to engage in collective action via the advantaged group members' expression of group-based emotions. This indirect effect was expected to capture other benefits of advantaged group members' expression of group-based emotions, such as the fact that supportive contact involving emotional expressions is likely to be interpreted as sincere (see Introduction, p. 12).

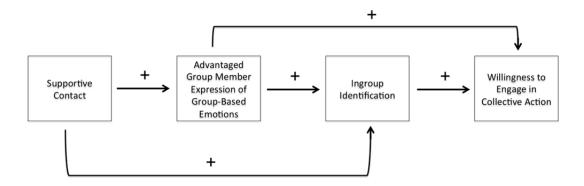


Figure 1. Hypothesized mediational paths for the impact of supportive contact on willingness to engage in collective action (Study 3)

#### Method

Scale items are included in Appendix C.

**Participants.** Participants were 119 women<sup>8</sup> ( $M_{age}$  = 19.71 years, SD = 3.09) recruited at a large Australian university. They were offered a candy bar in exchange for their participation in a study on "Women's Rights." Participants indicated their ethnicity as Caucasian/Australian (34.5%), Asian (9.2%), Black/African (1.7%), South Asian (1.7%), or did not indicate their ethnicity (52.9%).

**Design.** I manipulated the supportiveness of the advantaged group member to produce three conditions: Supportive Contact, Ambiguous Supportiveness, Low Supportiveness.

**Procedure.** The supportiveness of the advantaged group member was manipulated, by asking participants to think of a man they knew. Specifically, all participants were instructed, "Try to think of someone close to you, such as a family

Our entire sample consisted of 119 participants. However, 3 participants who did not nominate a man (1 from the Supportive Contact condition and 2 from the Low Support condition) were excluded from the analyses.

<sup>&</sup>lt;sup>9</sup> Participants were asked to indicate their ethnic background using an open-ended item, rather than a checklist, which may explain the number of non-responses.

member or friend." In the Supportive Contact condition, participants read, "Please think of a man who you like and who you would describe as nice, who you believe is supportive of women's rights." In the Ambiguous Supportiveness condition, participants read "Please think of a man who you like and who you would describe as nice, whose position on women's right is unclear to you – you are not sure whether he is supportive or unsupportive of women's rights." In the Low Supportiveness condition participants read, "Please think of a man who you like and who you would describe as nice, who you believe is only a little supportive of women's rights."

Participants were asked to provide the man's initials and a brief description of the last activity they had done together. Participants then answered an open-ended question about why they had nominated this particular man, followed by measures of the emotions expressed by the man, their identification as a woman, their willingness to engage in collective action, and a manipulation check.

#### **Measures**

#### Mediators.

Advantaged group member expression of group-based emotions was measured by asking participants to recall the emotions that the man they nominated had expressed to them in the past "about inequality faced by women". Participants were given a list of 10 possible group-based emotions ( $\alpha$  = .88). All of the items related to either anger, shame, or guilt. For example, the items "fury" and "outrage" indicated anger. Participants indicated how strongly the man had expressed each emotion using four-point scales (0 = not at all, 1 = a little, 2 = quite a bit, 3 = very much).

Ingroup identification was measured using a 4-item measure, including items such as "Being a woman is a central part of who I am." ( $\alpha$  = .68), using a 7-point Likert type scale (1 = completely disagree, 7 = completely agree).

### Dependent Variable.

Willingness to engage in collective action was measured using a 6-item measure, including items such as "At this moment, I am willing to distribute information on women's rights around campus" ( $\alpha = .84$ ), using a 7-point Likert type scale (1 = completely disagree, 7 = completely agree).

### Manipulation Check.

Perceptions of supportiveness was measured by instructing participants to think about the man they had nominated and indicate, "Generally, how supportive is this man of women's rights?" using a 7-point Likert type scale (1 = not supportive at all, 7 = very supportive).

### **Results**

### **Preliminary analyses**

**Manipulation check.** A one-way ANOVA yielded a significant effect of supportiveness on the manipulation check, F(3, 141) = 33.83, p < .001. Follow-up Games-Howell comparisons revealed that participants reported the man they nominated to be more supportive in the Supportive Contact condition (M = 5.72; SD = 1.26) than the Ambiguous Supportiveness (M = 4.86; SD = 1.30) condition, p = .009, and more supportive in the Ambiguous Supportiveness condition than the Low Supportiveness condition (M = 3.72; SD = 1.09), p < .001.

**Descriptive statistics**. Table 5 presents the correlations between mediators and dependent variables, and Table 6 presents the means and standard deviations across the three conditions.

Table 5. Correlations for dependent variables and mediators in Study 3

Variables	1	2	3
Willingness to engage in collective action		.245**	.193*
2.Ingroup identification			.137
3. Advantaged group member expression of group-based emotions			

Note: \*\* p < .01, \* < .05

Table 6. Means and standard deviations by condition for dependent variables and potential mediators in Study 3

	Willingness to engage in collective action	Ingroup Identification	Advantaged group member expression of group-based emotions
MEANS			
Supportive Contact	3.97 (1.42)	5.33 (1.16)	0.86 (0.67)
Ambiguous Supportiveness	3.93 (1.11)	5.48 (1.03)	0.40 (0.496)
Low Supportiveness	4.68 (1.32)	5.77 (0.87)	0.44 (0.43)

## Planned comparisons

Two a priori contrasts were conducted for the dependent variable and the mediators. The first contrast tested our focal hypothesis and compared the Supportive Contact condition to the combination of the Ambiguous Supportiveness and Low Supportiveness conditions. This contrast revealed no statistically significant differences on willingness to engage in collective action, t(113) = -1.33, p = .186, or ingroup identification, t(113) = -1.45, p = .150. However, participants in the Supportive Contact condition reported that their male friend expressed significantly more group-based emotions than participants in the other two conditions, t(113) = 3.68, p = .001.

The second contrast compared the Low Supportiveness condition to the Ambiguous Supportiveness condition and revealed that participants in the Low Supportiveness condition reported higher willingness to engage in collective action, t(113) = 2.52, p = .013. No statistically significant differences emerged for ingroup identification, t(113) = 1.23, p = .221, or advantaged group member expression of group-based emotions, t(113) = .25, p = .802.

### Summary of planned analyses

The results of the focal contrast were not consistent with hypotheses. Compared to Ambiguous Supportiveness and Low Supportiveness, Supportive Contact did not lead to significantly higher willingness to engage in collective action. The results of the second contrast provide a possible explanation for this finding: Ambiguous Supportiveness and Low Supportiveness differed significantly on willingness to engage in collective action. Thus, collapsing across these two conditions for the focal planned contrast could have masked the fact that one of these conditions did differ from the Supportive Contact condition, or that both these conditions differed from the Supportive Contact condition, but in different ways. In light of this possibility, additional analyses were conducted to separately compare Supportive Contact to each of the other two conditions. The increased potential for Type I error that accompanies these additional analyses is addressed in the discussion below.

#### Additional contrasts

The first additional contrast compared the Supportive Contact condition to the Ambiguous Supportiveness condition and revealed no statistically significant differences on willingness to engage in collective action, t(113) = .13, p = .899, or ingroup identification, t(113) = -.63, p = .529. However, participants in the Supportive Contact condition reported more advantaged group member expression of group-based emotions, t(113) = 3.70, p < .001.

The second additional contrast compared the Supportive Contact condition to the Low Supportiveness condition and revealed that participants in the Supportive Contact condition reported less willingness to engage in collective action, t(113) = -2.42, p = -2.42

.018, while participants in the Supportive Contact condition reported more advantaged group member expression of group-based emotions, t(113) = 3.40, p = .001. The effect of the manipulation on ingroup identification approached statistical significance, t(113) = -1.89, p = .065, with participants in the Low Supportiveness Condition tending to report greater ingroup identification.

### **Mediation analyses**

The additional contrasts revealed that the effects of Supportive Contact on willingness to engage in collective action emerged only when compared to the Low Supportiveness condition and were in the opposite direction to the initial hypothesis. I used bootstrapping analyses (Preacher and Hayes, 2008) to follow up on this theoretically interesting finding and to test the proposed mediational model (see Figure 1), beginning with the contrast between these two conditions.

**Supportive contact versus low supportiveness.** The initial bootstrapping model considered indirect effects of Supportive Contact on willingness to engage in collective action, compared to the Low Supportiveness condition (see Figure 1). This analysis revealed a pattern of indirect effects indicative of a suppressor model. Consistent with the overall negative effect of Supportive Contact on willingness to engage in collective action there was a significant negative indirect effect of Supportive Contact on willingness to engage in collective action via ingroup identification (IE = -0.06, SE = .04, 95% confidence interval [CI] = [-0.1829, -0.0019]). This negative effect indicated that Supportive Contact was associated with lower ingroup identification, which in turn reduced willingness to engage in collective action.

However, consistent with the original hypothesis that Supportive Contact should be associated with greater willingness to engage in collective action, the analysis also revealed a positive indirect effect of Supportive Contact on willingness to engage in collective action via the proposed serial mediation effect of advantaged group member expression of group-based emotions and ingroup identification (IE = 0.02, SE = .01, 95% confidence interval [CI] = [0.0006, 0.0611]). There was also a positive single-mediator indirect effect of Supportive Contact on willingness to engage in collective action via

advantaged group member expression of group-based emotions (IE = 0.12, SE = .06, 95% confidence interval [CI] = [0.0338, 0.2581]). These positive indirect effects indicate that Supportive Contact indirectly increased willingness to engage in collective action compared to Low Supportiveness, through two separate mediational paths.

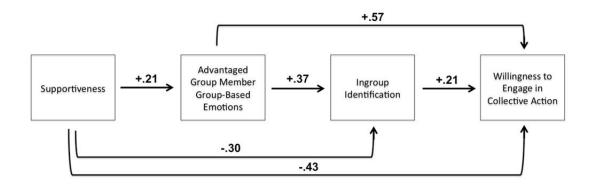


Figure 2. Bootstrapping results for the effect of the Supportive condition, compared to the Low Supportiveness condition (Study 3).

Coefficients shown are unstandardized beta weights; solid lines indicate statistically significant pathways.

Supportive contact versus ambiguous supportiveness. Given that the results of the first bootstrapping analysis revealed a hidden suppressor effect (see Figure 2), it seemed reasonable that a similar suppressor effect might account for the lack of a direct effect of Supportive Contact on willingness to engage in collective action when comparing the Supportive Contact condition to the Ambiguous Supportiveness condition. Thus, I conducted a separate bootstrapping analysis comparing the Ambiguous Supportiveness condition to the Supportive Contact condition (see Figure 3). This analysis revealed no significant mediation via ingroup identification (IE = -0.04, SE = .04, 95% confidence interval [CI] = [-0.1584, 0.0140]). However, the analysis again revealed a positive indirect effect of Supportive Contact on willingness to engage in collective action, via the predicted serial indirect effect through advantaged group member expression of group-based emotions and ingroup identification (IE = 0.02, SE = .02, 95% confidence interval [CI] = [0.0002, 0.0675]). There was also a positive singlemediator indirect effect through advantaged group member expression of group-based emotions (IE = 0.09, SE = .06, 95% confidence interval [CI] = [0.0004, 0.2404]).

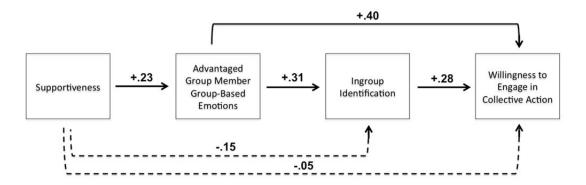


Figure 3. Bootstrapping results for the effect of the Supportive condition, compared to the Ambiguous Supportiveness condition (Study 3). Coefficients shown are unstandardized beta weights; solid lines indicate statistically significant pathways.

#### Discussion

### Unexpected negative impact on collective action engagement

In contrast to predictions and to the findings from Studies 1 and 2, which demonstrated the empowering effects of supportive contact, the current study yielded an unexpected pattern of results (see Table 6). Compared to women who thought of male friends who were supportive, women who thought of male friends who were ambiguous in their level of supportiveness reported similar collective action intentions, and women who thought of male friends who were clearly low in supportiveness reported higher collective action intentions. Mediational analyses revealed that this second direct effect, whereby low supportiveness contact led to greater willingness to engage in collective action, resulted in part because thinking about a male friend who was low in supportiveness was associated with higher identification with women. Earlier in this dissertation, I theorized that this kind of reactive effect might sometimes occur when a disadvantaged group member interacts with an advantaged group member who is openly unsupportive. Open unsupportiveness might be seen as hostile and provocative, making the adversarial nature of the intergroup relationship salient (Simon & Klandermans, 2001). This could heighten ingroup identification, perhaps even more than one might expect from supportive contact. However, in this study, this reactive effect

may have occurred even when the advantaged group member showed low supportiveness. This may point to the importance of considering the norms of the intergroup context for predicting the effects of contact that is unsupportive or low in supportiveness. The issue of women's rights is highly salient in Western society, especially on university campuses, where the issue may be openly discussed (e.g., discussions of sexism in classes, campaigns against domestic violence). Thus, for the young women in our study, inequality between men and women would be seen to be clearly unjust and high levels of supportiveness from male friends may be the expected norm. Thus, a man who is explicitly low in supportiveness may be surprising and nonnormative. Women may see this man's violation of norms as evidence of open hostility towards women, leading to the reactive process described above. Thus, in a context where norms of supportiveness are strong, low supportiveness may be perceived as negatively as unsupportiveness. In contrast, members of disadvantaged groups that face open discrimination on a regular basis might react quite positively to low supportiveness, as even this may be more supportive than the contact they would typically expect. To further explore this idea, future research on how supportive contact affects disadvantaged group members could include measures of their perceptions of the normativeness of support among advantaged group members.

In terms of direct effects, no differences were found between supportive contact and contact that was ambiguous in supportiveness. This lack of overall effect, combined with the presence of positive indirect effects (which I will discuss below), suggests that some aspect of the ambiguous supportiveness condition was also increasing collective action engagement. That is, some factor was likely "pushing back" against the positive indirect effects of supportive contact. One potential explanation is that even ambiguous supportiveness for women's rights is seen as non-normative among our sample of women and, thus, ingroup identification was also increased in the ambiguous supportiveness condition, compared to the supportive condition. An inspection of the means in Table 6 provides some tentative support for this idea. Although not statistically significant, the mean for ingroup identification in the Ambiguous Supportiveness condition appears to fall directly between the means for ingroup identification in the Supportive Contact and the Low Supportiveness conditions. Similarly, in mediational analysis the indirect effect of supportiveness through ingroup identification was negative,

although not statistically significant. Thus, in a design with more power, these effects may have been statistically significant. On the other hand, the small size of these effects (for the comparison of ingroup identification in the Supportive Contact and Ambiguous Supportiveness conditions, Cohen's d = 0.14) calls into question the meaningfulness of this effect, even if it were significant in a larger sample.

Thus, further research should explore other specific attributes of contact that is ambiguous in supportiveness, which might explain why this kind of ambiguity can dampen engagement in collective action. Again, measuring disadvantaged group members' perceptions of the norms for support among advantaged group members may be useful in this context. If these norms for support are low, disadvantaged group members may be likely to interpret ambiguous supportiveness from advantaged group friends as low supportiveness or even unsupportiveness. As discussed earlier, uncertainty in terms of the level of support from one's ingroup can have a deleterious effect on collective action engagement (see Wright, 1997, 2001a), because this raises doubts about the legitimacy of action, and the likelihood that others will be interested in mobilizing. Uncertainty about support from advantaged group friends may have similar undermining effects.

# Predicted positive impact on collective action engagement

The direct effects revealed in this study suggest that in the context of cross-gender relationships, friendly cross-group contact that is openly supportive may not necessarily empower greater collective action engagement among women. However, the indirect effects show that even in this context, there is support for the hypothesis that supportive contact can increase collective action engagement via a specific set of mediators. When comparing supportive contact to either low or ambiguous supportiveness, two specific positive indirect effects emerged: thinking of a more supportive man increased women's willingness to engage in collective action through the independent effect of the group-based emotions shared by the man, as well as via the positive effect of these emotions on identification with women.

### Complex role of ingroup identification

Overall, a complex relationship between supportive contact, ingroup identification, and collective action emerged. In terms of the direct effects, contact that was low in supportiveness produced higher levels of identification than did supportive contact (and a similar trend was shown when there was ambiguity in supportiveness). However, the analysis of the indirect effects for the relationship between supportive contact and ingroup identification revealed the opposite pattern - a suppressor effect. Supportive contact also heightened ingroup identification compared to these other conditions as a result of its influence on the reported expressions of group-based emotions by the male contact partner.

This complexity may mirror the general complexity of cross-gender relationships (e.g., Ridgeway & Correll, 2004; Glick & Fiske, 1996). Male-female relationships are often highly intimate and marked by extremely positive interpersonal relationships; these relationships may represent consistent and extremely important elements of a woman's life. Yet, the status of women in society remains markedly lower than men's. Thus, women may be particularly torn between engaging in actions on behalf of their gender identity and affirming their interpersonal relationships with male friends, partners, and family members. In some cases – they may attempt to do both, which could explain the complex pattern of results observed here.

### **Group-based emotions**

To our knowledge, this is the first direct demonstration that sharing of intergroup emotions occurs in naturalistic cross-group interactions. Although advantaged group members' intergroup emotions have been shown to be important predictors of engagement in action on behalf of outgroups (Leach, et al., 2006; Mallett, et al., 2008), the idea that these kinds of emotions might be spontaneously expressed by an advantaged group members during an interaction with a disadvantaged group friend has not previously been empirically demonstrated, nor has the potential impact of this sharing been investigated.

As predicted, the greater sharing of group-based emotions by the male friend was associated with increased willingness to engage in collective action, in part, because recalling these expressions of emotions led to increased identification with women. This is consistent with our theorizing that the sharing of group-based emotions can heighten the salience of group differences. There was also evidence in the indirect effects that an advantaged group member's expression of group-based emotions may have additional benefits for collective action engagement, beyond those mediated by increased ingroup identification. This is consistent with my earlier theorizing that shared group-based emotions may also serve as a marker of an advantaged group member's genuineness. That is, sharing group-based emotions may effectively communicate that one is a genuine ally.

### **Exploratory analysis**

The key patterns of interest that emerged in this particular study were based on exploratory analyses, after it became clear that the planned analyses (consistent with those conducted in Studies 1-2) did not provide a clear picture of the data. These exploratory analyses involved additional contrasts, meaning that I exceeded the number of contrasts recommended for the design (Cohen, Cohen, West & Aiken, 2003). Because these additional tests increased the likelihood of Type I error in our pattern of results, replicating the pattern of results observed here is an important priority for future research.

## Implications and conclusion

Since Wright and Lubensky's (2009) seminal paper on the potential deleterious effects of friendly cross-group contact (the kind espoused by prejudice reduction theorists) on disadvantaged group members' collective action engagement, other researchers have demonstrated this phenomenon in a number of different contexts (e.g., Cakal, Hewstone, Schwar, & Heath, 2011; Saguy, Tausch et al., 2009; Becker et al., 2013).

However, this is only the second of these studies to consider women's collective action engagement (for the other, see Becker & Wright, 2011). The results of the current research are generally consistent with the "dark side" of friendly cross-group contact as discussed in a number of recent papers. However, the findings also build on previous research suggesting solutions to this conundrum (Wright & Lubensky, 2009; Becker et al., 2013). There were positive indirect effects of supportive cross-group contact on collective action engagement, although weaker than the overall negative effect. In particular, these indirect effects point to the potential importance of advantaged group members' shared expressions of group-based emotions as a mechanism by which supportive contact can increase collective action engagement. Our task in continuing this line of work is to develop a clearer understanding of how supportive contact can be structured so as to capitalize on its empowering aspects (e.g., shared group-based emotions), while minimizing potential undermining effects.

## **General Discussion**

# **Key findings**

These three studies represent the first empirical demonstration of the empowering impact of supportive contact on disadvantaged group members' collective action engagement. They examine this effect across three very different intergroup contexts (first-generation Canadians, Australian international students, and women), using different procedures for manipulating supportive contact, and including questionnaire measures of willingness to engage in collective action, as well as a behavioural measure of collective action. Studies 1 and 2 provide clear support for the hypothesized benefits of supportive contact, and also demonstrate the mediating role of increased perceptions of injustice in accounting for the relationship between supportive contact and increased collective action engagement. Study 3 provided mixed evidence for the empowering role of supportive contact. Consistent with hypotheses, empowering effects resulted from supportive men sharing group-based emotions, and the effect that these emotions had on identification with the ingroup (women). However, there was also an unexpected effect whereby low supportiveness emerged as the more empowering condition, due to higher identification with the ingroup in this condition.

Recent research and theorizing have sounded an alarm about the potential deleterious effects of friendly cross-group contact (e.g., Dixon, et al., 2012; Wright, 2001b). However, even in the initial writing on this topic, some authors suggested that these negative effects may not be inevitable (e.g., Wright & Lubensky, 2009), and that it might be possible for disadvantaged group members to have friendly cross-group relationships and maintain strong collective action engagement. The present research suggests an even more optimistic outlook. When friendly cross-group contact is explicitly supportive, it may actually lead to increases in disadvantaged group members' collective action engagement.

# "Positive" cross-group contact

Discussions of "positive cross-group contact" have used the label "positive" in two senses. Initially, it was used to describe the outcomes or benefits of contact between members of different groups (e.g., Pettigrew & Tropp, 2006). Research and theory have typically focused on improvements in intergroup attitudes, showing that cross-group contact helps to reduce prejudice, decrease reliance on negative stereotypes, aid in the formation of positive stereotypes, and reduce intergroup anxiety. Positive contact, thus, meant contact that produced these positive intergroup outcomes. However, the term "positive contact" has also been used to describe what goes on during the cross-group contact that is most likely to lead to these intergroup outcomes (e.g., Pettigrew, 2008). In this sense, "positive" means contact that involves pleasant, or at the very least neutral, interactions between individual members of different groups (interactions marked by characteristics such as positive mood states and feelings of friendship). Cross-group contact marked by characteristics such as hostility, fear, dislike, and annoyance is not expected to lead to improvements in intergroup attitudes, and may well lead to quite the opposite (e.g., Mazziotta, Rohmann, Wright, De Tezanos-Pinto & Lutterbach, in press). It is clearly appropriate to use the "positive" descriptor in the second sense (to describe contact marked by pleasant or at least neutral interactions). However, to rightly apply the "positive" descriptor in the first sense (to describe the contact in terms of its benefits), we must consider outcomes beyond attitude change: we must also consider the impact of the contact on disadvantaged group members' engagement in collective action. In this sense, supportive contact is also a form of "positive" cross-group contact: although its goal is not to reduce prejudice per se, it provides the benefit of being psychologically consistent with disadvantaged group members' engagement in collective action.

Social psychologists have developed a number of successful interventions based on the cross-group contact approach (e.g., Schroeder & Risen, 2014; Paluck, 2009), perhaps the best known of which is the "Jigsaw Classroom" (Aronson, Blaney, Stephin, Sikes, & Snapp, 1978). These interventions are designed to foster liking and harmony across groups, and have been described as "positive" cross-group contact interventions, because of their effectiveness in achieving these outcomes. However, if labeling cross-group contact as "positive" requires the consideration of both attitude change and

collective action engagement by disadvantaged group members (as described above), we may also want to reconsider the criteria used to judge the effectiveness of such interventions. In the next generation of intervention work, researchers should consider how cross-group contact can be structured to encourage more than just liking. Interventions should be structured to focus attention on (rather than away from) groupbased identities, should make discussions of group-based inequality part of the contact experience, and should provide advantaged group members with guidance on appropriate supportive behaviour. For example, although advantaged group members may wish to avoid discussing group-based inequality (Saguy, Pratto, Dovidio, & Nadler, 2009; Johnson, 2006; Tropp et al., 2006), the current research suggests that recognition of inequality by the advantaged group member is likely beneficial for the collective action engagement of disadvantaged group members (see also Saguy, Tausch et al., 2009). In developing these new interventions, social psychologists would do well to draw on insights from those researching and facilitating intergroup dialogue (e.g., Schoem & Hurtado, 2001; Dessel, Rogge, & Garlington, 2006), which specifically aims to bring members of different social groups together to discuss issues of identity, conflict, and justice.

# The range of friendly cross-group contact

In Studies 1-3 in the current research, supportive contact was contrasted with a range of other forms of friendly cross-group contact that disadvantaged group members might encounter in their daily lives. These other forms of contact involved low supportiveness (Studies 2-3), ambiguous supportiveness (Studies 1-3), and explicit unsupportiveness (Studies 1-2), but the contact partner was always one with whom the participants had pleasant and affectively positive interactions. In Study 1 (investigating collective action engagement among first-generation Canadians) and Study 2 (investigating collective action engagement among international students), supportive contact consistently resulted in the highest levels of collective action engagement. The finding that ambiguous supportiveness was no more beneficial for disadvantaged group members' collective action engagement than low supportiveness (or even explicit unsupportiveness) seems particularly important. It provides support for the idea that

advantaged group members must be explicit in their support to ensure that disadvantaged group members' collective action engagement is not undermined by friendly cross-group contact, and is consistent with more general theorizing describing the deleterious effect of feelings of uncertainty (ambiguity) for collective action engagement (Wright, 2001a; Becker et al., 2013).

The effects of friendly interpersonal interactions with advantaged group members who are also clearly unsupportive are noteworthy. Although this type of contact may not immediately come to mind when we think of friendly or "positive" (in the second sense described above) contact, participants in Study 2 were clearly able to generate examples of unsupportive contact with individuals they knew and liked, suggesting that this is a relevant experience for at least some disadvantaged group members. My hypotheses for the impact of unsupportive contact were tentative, given apparent inconsistencies in previous research (Simon & Klandermans, 2001; Becker et al., 2013; see Introduction, p. 11). In the present work, unsupportive contact produced collective action engagement that was comparable to low supportiveness contact or ambiguous supportiveness contact, but it did exert unique effects on two of the potential mediators. In Study 1, firstgeneration Canadians who experienced unsupportive contact reported lower perceptions of injustice, compared to participants who recalled ambiguous supportiveness contact. In this intergroup context, interacting with a friendly advantaged group member who did not object to the existing group-based inequality, and apparently did not share participants' emotions regarding that inequality (e.g., anger, frustration) may have raised doubts for participants about the legitimacy of their own feelings of frustration and deprivation (e.g., Friedman & Riggio, 1981; Schacter & Singer, 1962). In Study 2, international students who recalled unsupportive contact reported lower ingroup identification, compared to participants who recalled ambiguous supportiveness contact or low supportiveness contact. It appears that in this intergroup context, cross-group contact with a friendly advantaged group member who was apparently unsupportive led disadvantaged group members to disengage from their unique collective identity. Disadvantaged group members might have been motivated to psychologically disengage from their identity in hopes of maintaining what might otherwise be a valuable interpersonal relationship with the specific advantaged group member, who although friendly, appears to be uninterested in the general problems faced by the disadvantaged group (e.g., Gaertner & Dovidio, 2000).

The fact that friendly, but unsupportive cross-group contact dampened ingroup identification (Study 2) and perceptions of injustice (Study 1) among disadvantaged group members is generally consistent with the claim that there is a conflict between friendly cross-group contact and collective action engagement, as discussed in recent work (e.g., Wright & Lubensky, 2009; Wright & Baray, 2012; Saguy, Tausch et al., 2009; Dixon et al., 2010). These findings may also provide further evidence of a cross-group relationship conflict for disadvantaged group members, who may have difficulty maintaining positive personal relationships with outgroup members when the intergroup relations are marked by clear inequalities (see Crosby, 1984). Clearly, more research is needed to fully unpack the variety of ways that contact with an advantaged group member who is friendly and pleasant, but not supportive of the disadvantaged group, can undermine the psychological pre-requisites of collective action engagement.

# Potential negative effects of supportive contact

The results of Study 3 appear somewhat concerning. Among women, low supportiveness contact was shown to be more empowering than supportive contact, due to the higher ingroup identification in the low supportiveness condition. It is possible that this reflects a "reactive" effect whereby women perceive low or unsupportive contact as rude or even hostile, which heightens gender identification and leads to increased collective action engagement. It is certainly not unexpected for group identification and collective intentions to increase under threat (e.g., see Ethier & Deux, 1994; Wohl, Giguère, Branscombe, & McVicar, 2011; Veenstra & Haslam, 2000; Stephan & Stephan, 2000). On the other hand, participants in all conditions were instructed to recall friendly contact, and thus these results also appear consistent with the "dark side" of friendly cross-group contact as discussed in a number of recent papers (Dixon, et al., 2012; Saguy, Tausch et al., 2009; Wright, 2001b; Wright & Baray, 2012), and suggests the possibility that even supportive contact can sometimes be disempowering. If so, it will be important for future research to identify the contexts where this negative effect may occur.

One possibility is that women as a group may be particularly likely to experience decreases in identification following supportive contact. Because women tend to be more communally oriented (Moskowitz, Suh, & Desaulniers, 1993; Eagly & Steffen, 1984), and thus highly value their personal relationships (Marini, 1988; Kessler & McLeod, 1984), cross-group contact may lead them to reduce identification with ingroups that are not shared by their interaction partner, or with ingroups that are potentially conflictual (e.g., based on a politicized collective identity). Other new research supports this idea - in a study of gay and lesbian Australians (Techakesari, Droogendyk, Wright, Louis, & Barlow, in prep), we found that recalling an interaction with an advantaged group member who was high in supportiveness for LGBT rights led gay men to report stronger identification with LGBT and higher collective action intentions, compared to recalling an interaction with an advantaged group member who was low in supportiveness for LGBT rights. However, recalling an interaction with an advantaged group member who was high in supportiveness for LGBT led lesbian women to become significantly less identified with LGBT and less willing to engage in collective action. This pattern of reduced collective action engagement among women following supportive contact is consistent with Study 3. Future research could consider whether communally oriented values and/or desire to maintain relationships mediate the relationship between supportive contact and reduced collective action engagement among women.

However, Study 3 also provides some further evidence of the benefits of supportive contact as well. Although weaker than the overall negative effect in this case, supportive cross-group contact was associated with more sharing of group-based emotions by the advantaged group member, which led to increased collective action engagement. Our next, critically important task will be to understand how we can structure contact that capitalizes on the empowering aspects of supportive cross-group contact (e.g., supportive emotions), while minimizing any undermining effects.

#### **Future directions**

**Longitudinal research.** This research provides an initial look at the impact of an immediate experience of supportive contact (Study 1), as well as the impact of

recalled supportive contact (Studies 2 and 3). It seems reasonable to suggest that the impact of recalled supportive contact on collective action engagement could differ from the immediate experience of supportive contact. For instance, it is possible that the empowering effects of supportive contact arise only after a period of reflection, or after repeated interactions. Thus, recalled supportive contact might have a more positive impact on collective action engagement than the immediate experience of supportive contact. On the other hand, the immediate experience of supportive contact could be more empowering than recalled contact, especially if the disadvantaged group member has experienced relatively little support from advantaged group members in the past, and finds the expression of support surprising. In this case, the disadvantaged group member might be particularly likely to attend to the message of support. Future research could directly investigate these claims by studying the impact of supportive contact on disadvantaged group members' collective action engagement over time (e.g., using a longitudinal design).

**More exploration of traditional mediators.** Identification with the disadvantaged ingroup (e.g., Stürmer & Simon, 2004; Tajfel & Turner, 1986; Van Zomeren, Postmes, & Spears, 2008; Wright, 2010) and perceptions of injustice (e.g., Van Zomeren, Postmes, & Spears, 2008; Wright, 2010; Wright & Tropp, 2002) have traditionally been viewed as key antecedents of collective action engagement. In Studies 1 and 2, the greater willingness to engage in collective action that occurred as a result of supportive contact was in part accounted for by stronger perceptions of injustice. This provides support for the idea that supportive contact sends a clear message that the unfairness of the intergroup inequality is apparent even to some who directly benefit from it (e.g., Czopp & Monteith, 2003). This legitimization of perceptions of injustice may help motivate disadvantaged group members toward action.

A measure of ingroup identification was included in Studies 2 and 3, but only emerged as a mediator of the relationship between supportive contact and collective action engagement in Study 3. Although unexpected, this finding is not unprecedented - depending on the intergroup context and the form of collective action being measured it is not uncommon for one particular mediator to emerge as the primary motivator of collective action (Van Zomeren et al., 2004; Wright, 2009). Thus, future research could

continue to examine the role of perceptions of injustice and ingroup identification in different contexts. However, it would also seem valuable for future research to broaden the scope of potential mechanisms that might also account for the effects of supportive contact across a wide array of intergroup relationships.

More exploration of shared group-based emotions. This research provides initial insights into the role of advantaged group members' expressions of group-based emotions during supportive contact. Study 3 showed that shared feelings of guilt, anger and shame were an important mediator of the relationship between supportive contact and increased collective action engagement, in part because the expression of these emotions increased the disadvantaged group member's ingroup identification. This finding provides support for the idea that expressions of group-based emotions may serve as a reminder of structural and psychological differences between the advantaged and the disadvantaged group. Additionally, the additional independent mediation via advantaged group members' shared group-based emotions provides some tentative evidence for the idea that expressing these group-based emotions makes an advantaged group member appear especially truthful or genuine in their supportiveness.

In Study 1, I compared an advantaged group member's expression of support containing group-based anger with an expression of support containing group-based guilt. I predicted that an expression of anger might be particularly effective in boosting collective action engagement, given that this emotion is strongly associated with action tendencies, and collective action participation in particular (Frijda, 1986; Thomas et al., 2009). Expressions of anger did lead to stronger perceptions of injustice than expressions of guilt. However, expressions of anger and expressions of guilt led to similar levels of collective action engagement. Thus, more research is needed to determine if there are contexts where the stronger feelings of injustice that emerge as a result of an advantaged group partner's expression of anger during supportive contact might be needed to inspire collective action engagement. Future research could also build on these ideas by directly comparing supportive contact including the expression of emotions with supportive contact demonstrated through other means (perhaps using an experimental paradigm similar to the one used in Study 1).

More exploration of normative expectations. An emerging theme in the present work is the potential importance of disadvantaged group members' normative expectations for support among advantaged group members. When evaluating the supportiveness of an individual advantaged group member, disadvantaged group members may compare the individual to these normative expectations. For instance, in Study 3, women who recalled a male friend who was low in supportiveness reported higher collective action engagement than women who recalled an instance of clearly supportive contact, because the low supportiveness contact heightened ingroup identification. I proposed that this might be an example of reactance: low supportiveness may have been perceived very negatively because women have high normative expectations of support for women's rights among men. As a result, women may have reacted defensively to an instance of low supportiveness — a response that was reflected in their heightened ingroup identification.

Disadvantaged group members' normative expectations for support among advantaged group members may also be relevant to understanding supportive contact more generally. Supportive contact is defined as "friendly cross-group contact in which the advantaged group member demonstrates personal engagement in opposing inequality and/or supporting social change." However, the degree of personal engagement that must be demonstrated by an advantaged group member in order for the contact to be perceived as supportive by disadvantaged group members may vary widely across intergroup contexts, and may particularly depend on the perceived norms for advantaged group support. Members of disadvantaged groups that face open discrimination on a regular basis, and thus perceive the normative level of support among advantaged group members to be very low, might react quite positively to even a small expression of supportiveness by an advantaged group member. In contrast, in intergroup contexts where the perceived norms of supportiveness are high (as with the women in Study 3), an advantaged group member might have to demonstrate significant engagement in supportive behaviour (e.g., actually participating in social action themselves) to be perceived as supportive.

Even for members of the same disadvantaged group, normative expectations for support, and thus how supportive contact is experienced, may vary widely. For example,

LGBT individuals living in the liberal environment of San Francisco, California likely perceive the normative level of support among straight San Franciscans to be quite high, whereas LGBT individuals living in a small town in Nebraska may see any kind of supportive behaviour as non-normative. Thus, we might expect a brief experience of supportive contact to more dramatically increase the collective action engagement of small-town Nebraskan LGBT individuals, compared to LGBT individuals from San Francisco. In future research on supportive contact, measuring disadvantaged group members' perceptions of the norms for advantaged group supportiveness might prove very useful, as these expectations may strongly predict the effectiveness of supportive contact for increasing collective action engagement.

**Ingroup versus outgroup support.** My intent in pursuing this line of work on supportive contact was to address a specific concern raised by Wright and Lubenksy (2009) and others (e.g., Dixon et al, 2012; Saguy, Tausch et al., 2009; Wright & Baray, 2012) that friendly cross-group contact, social psychology's key antidote for improving negative intergroup attitudes (e.g., Wright et al., 2005; Davies et al., 2011), may undermine disadvantaged group members' collective action engagement. Given that the key dependent variable here is the collective action engagement of disadvantaged group members, this concern is specific to cross-group interactions and relationships that occur between advantaged and disadvantaged group members. Thus, in defining supportive contact I specified that it must include an advantaged group member who demonstrates personal engagement in opposing inequality and/or supporting social change. Nevertheless, it may also be worthwhile to consider whether and how supportive contact is different from other interactions that may also empower disadvantaged group members. In particular, it seems likely that support from fellow ingroup members could be a source of empowerment for disadvantaged group members. In future research, it might be useful to contrast the effects of ingroup and outgroup members as sources of support for collective action engagement. Although both may be empowering, the psychological factors that explain this empowerment (i.e., the mediators) may differ.

**Measure subtyping.** I theorized that a process of subtyping would underlie the positive impact of supportive contact. By subtyping individual members of the

advantaged group as allies, disadvantaged group members could maintain or even strengthen their perceptions of injustice, perceptions of collective control, and ingroup identification, which would all contribute to strong collective action engagement. However, the current research provides no direct evidence that subtyping led to the stronger collective action engagement found to result from supportive contact. Future research should include direct assessments of subtyping (e.g., Queller & Mason, 2008; Deutch & Fazio, 2008).

Addressing the challenges. The idea of encouraging supportiveness during friendly cross-group contact provides a potential solution to the problem of contact undermining disadvantaged group members' collective action engagement. However, this solution also comes with multiple challenges. Finding supportive advantaged group members is not always easy for disadvantaged group members, nor is offering appropriate support always easy for advantaged group members who might be so inclined. Considerable research suggests that cross-group interactions are often awkward (e.g., Bergsieker et al., 2010; Richeson & Shelton, 2007) and anxiety-inducing (e.g., Page-Gould et al.,, 2008) for both parties. As we begin to address these challenges, we suggest that researchers turn to the small but growing literature on allies in the fight for social justice (e.g., Brown & Ostrove, 2013; Conley et al., 2002; Fabiano, et al., 2003; Rattan & Ambady, 2012), which has highlighted the characteristics of good allies, and how disadvantaged group members prefer them to behave during crossgroup interactions. This literature may not only provide insights into how to best foster supportive cross-group contact, but may also help us to understand the circumstances under which it is most likely to lead to positive outcomes.

### Conclusion

Although there is growing evidence that friendly cross-group contact can undermine collective action by disadvantaged group members, there is also reason for optimism. Specifically, this research investigated the benefits of "supportive contact" - friendly cross-group contact in which the advantaged group member demonstrates personal engagement in opposing inequality and/or supporting social change. The

present research provides initial evidence that this form of friendly cross-group contact may not only erase these negative effects but can also provide a source of empowerment for disadvantaged group members. Supportive contact can simultaneously involve pleasant cross-group interpersonal relationships, while also facilitating disadvantaged group members' participation in collective action aiming to produce social change.

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# Appendix A.

### Study 1 - Study Materials

#### **Text – Immigration Article**

First-generation Canadians (people born outside of Canada who immigrated here either on their own or with their families) do not have the same opportunities as Canadians who are Canadian-born. As immigration has steadily increased, Canadians have become less welcoming to newcomers. As a result, first-generation Canadians face the threat of increasingly discriminatory government policies. For instance, some Canadians view first-generation Canadians as "the competition" and support employment and taxation policies that make it more difficult for first-generation Canadians to get ahead financially. This has harmful results -StatsCan recently reported that many firstgeneration Canadians – even those who have been citizens for 5, 10, or 20 years – face significant financial barriers. Unfortunately, this is true even for highly educated firstgeneration Canadians. Many Canadians believe that immigration disrupts the Canadian way of life. They oppose allowing first-generation Canadians to keep their own cultural traditions, and support Stephen Harper's new legislation that opposes multiculturalism. These discriminatory policies are tough to combat, especially because most Canadianborn people are indifferent to the concerns of first-generation Canadians. In fact, a recent Globe and Mail survey suggested that many Canadians believe that problems in employment and daily life are "just part of being an immigrant."

### Items - Willingness to Engage in Collective Action

- 1. I am willing to do something together with fellow students to fight policies that discriminate against first-generation Canadians.
- 2. I am willing to sign a petition protesting policies that discriminate against firstgeneration Canadians.
- 3. I am willing to participate in a rally encouraging the government to stop policies that discriminate against first-generation Canadians.
- 4. I am willing to attend a protest to fight policies that discriminate against first-generation Canadians.
- 5. I am willing to join a group of activists demanding that policies that discriminate against first-generation Canadians be changed.
- 6. I am willing to participate in peaceful demonstrations that call for the elimination of policies that discriminate against first-generation Canadians.
- 7. I am willing to participate in actions to fight policies that discriminate against firstgeneration Canadians, even if those actions may get me in trouble.
- 8. I am willing to attend protests to fight policies that discriminate against first-generation Canadians, even it means breaking the law.
- 9. I am willing to engage in non-violent civil disobedience to protest policies that discriminate against first generation Canadians.

### **Items - Perceptions of Control**

- 1. Right now, I think that if first-generation Canadians work together, they can bring an end to discriminatory policies.
- 2. Right now, I think that the problem of discriminatory policies is too big for first-generation Canadians to tackle on their own.
- 3. Right now, I think that first-generation Canadians can influence society to implement policies that promote equality.

### **Items - Perceptions of Injustice**

- 1. Right now, I think that in reality, new Canadians deserve to face some tough policies.
- 2. Right now, I think that it is unfair that first-generation Canadians face discriminatory policies.
- 3. Right now, I think that first generation Canadians have the right to feel frustrated about policies that discriminate against them.
- 4. Right now, I think that first-generation Canadians have the right to feel angry about policies that discriminate against them.

# Appendix B.

### Study 2 - Study Materials

#### Items – Willingness to Engage in Collective Action

- 1. At this moment, I am willing to attend a talk or lecture on international student issues.
- 2. At this moment, I am willing to discuss international student issues with family or friends.
- 3. At this moment, I am willing to sign a petition encouraging the government to enhance the status of international students.
- 4. At this moment, I am willing to distribute information on international students issues around campus.
- 5. At this moment, I am willing to donate money to international student organizations or events aimed at international student issues.
- 6. At this moment, I am willing to participate in discussion groups designed to discuss issues or solutions to problems that will benefit international students in general.

### Items - Ingroup Identification

- 1. Being an international student is a central part of who I am.
- 2. I feel strong ties with other international students.
- 3. I often think about the fact that I am an international student.
- 4. I am proud to be an international student.

#### Items - Perceptions of Injustice

- 1. It is unfair that international students don't have access to the same privileges as native Australian students.
- 2. It is unfair that international students have a lower status in Australian society than native Australian students.
- 3. International students have the right to feel angry about the inequality they face.
- 4. International students have right to feel frustrated about the inequality they face.

# Appendix C.

### **Study 3 - Study Materials**

### Items - Willingness to Engage in Collective Action

- 1. At this moment, I am willing to attend a talk or lecture on women's rights.
- 2. At this moment, I am willing to discuss women's rights with family or friends.
- 3. At this moment, I am willing to sign a petition encouraging the government to enhance the status of women (e.g., pay equity, affirmative action).
- 4. At this moment, I am willing to distribute information on women's rights around campus.
- 5. At this moment, I am willing to donate money to women's organizations or events aimed at women's issues.
- 6. At this moment, I am willing to participate in discussion groups designed to discuss issues or solutions to problems that will benefit women in general.

### Items - Ingroup Identification

- 1. Being a woman is a central part of who I am.
- 2. I feel strong ties with other women.
- 3. I often think about the fact that I am a woman.
- 4. I am proud to be a woman.

#### Items - Advantaged Group Member Expression of Group-Based Emotions

- 1. This person has expressed guilt about gender inequality.
- 2. This person has expressed a sense of responsibility for gender inequality
- 3. This person has expressed feeling blameworthy for gender inequality
- 4. This person has expressed shame about gender inequality
- 5. This person has expressed embarrassment about gender inequality
- 6. This person has expressed anger about gender inequality
- 7. This person has expressed resentfulness about gender inequality
- 8. This person has expressed annoyance about gender inequality
- 9. This person has expressed outrage about gender inequality
- 10. This person has expressed fury about gender inequality