AMERICAN UNIVERSITY OF BEIRUT

THE IMPACT OF REPRESSION THREAT ON COLLECTIVE ACTION TENDENCIES

by
MONA YOUSSEF AYOUB

A thesis
submitted in partial fulfillment of the requirements
for the degree of Master of Arts
to the Department of Psychology
of the Faculty of Arts and Sciences
at the American University of Beirut

Beirut, Lebanon
January 2015

AMERICAN UNIVERSITY OF BEIRUT

THE IMPACT OF REPRESSION THREAT ON COLLECTIVE ACTION TENDENCIES

by
MONA YOUSSEF AYOUB

Approved by:

[Signature]

Dr. Rim Saab, Assistant Professor
Department of Psychology
Advisor

[Signature]

Dr. Charles Harb, Associate Professor and Chair
Department of Psychology
Member of Committee

[Signature]

Dr. Nadiya Slobodenyuk, Assistant Professor
Department of Psychology
Member of Committee

Date of thesis/dissertation defense: [January 21, 2015]

AMERICAN UNIVERSITY OF BEIRUT

THESIS, DISSERTATION, PROJECT RELEASE FORM

Student Name: Ayoub (Last) Mona (First) Youssef (Middle)

☑ Master's Thesis ○ Master's Project ○ Doctoral Dissertation

☑ I authorize the American University of Beirut to: (a) reproduce hard or electronic copies of my thesis, dissertation, or project; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes.

☐ I authorize the American University of Beirut, **three years after the date of submitting my thesis, dissertation, or project,** to: (a) reproduce hard or electronic copies of it; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes.

monayoub 30/1/2015

Signature Date

This form is signed when submitting the thesis, dissertation, or project to the University Libraries

ACKNOWLEDGMENTS

Special thanks are for Dr. May Awaida for her great help in recruiting participants for the experiment. Also, special thanks to my friends Carole Abi Ghanem and Catherine Moughalian for their help in preparing for the experiment.

AN ABSTRACT OF THE THESIS OF

Mona Youssef Ayoub for Master of Art
Major: Psychology

Title: The Impact of Repression Threat on Collective Action Tendencies

There is little social psychological research on the impact of repression threat on collective action, and existing research relies on retrospective data and shows inconsistent results. In this study, we experimentally examined the impact of repression threat on collective action tendencies and studied the psychological process underlying this relationship. We led female students at the American University of Beirut to believe that the university's administration will raise the standards of accepting female students, and that they will repress (or not) any forms of protest against this decision. We found that repression threat had a deterring effect on collective action tendencies, and fear of punishment mediated this effect. Anger and efficacy acted as suppressors of this effect rather than mediators. Contrary to our hypotheses, identification as a supporter of women's rights did not moderate the relationship between repression threat and collective action. Future research is needed to further explore the role of identification and other variables in moderating the effect of repression threat on collective action.

CONTENTS

LIST OF TABLES

The Impact of Repression Threat on Collective Action Tendencies

Mona Y. Ayoub

American University of Beirut

Abstract

There is little social psychological research on the impact of repression threat on collective action, and existing research relies on retrospective data and shows inconsistent results. In this study, we experimentally examined the impact of repression threat on collective action tendencies and studied the psychological process underlying this relationship. We led female students at the American University of Beirut to believe that the university's administration will raise the standards of accepting female students, and that they will repress (or not) any forms of protest against this decision. We found that repression threat had a deterring effect on collective action tendencies, and fear of punishment mediated this effect. Anger and efficacy acted as suppressors of this effect rather than mediators. Contrary to our hypotheses, identification as a supporter of women's rights did not moderate the relationship between repression threat and collective action. Future research is needed to further explore the role of identification and other variables in moderating the effect of repression threat on collective action.

The Impact of Repression Threat on Collective Action Tendencies

Towards the end of 2010, thousands of Tunisians took to the streets to demand social justice and freedom against a politically corrupt and authoritarian regime (Lynch, 2011). The protests had an overall nonviolent nature, but they were met with brutal violence by the authorities, leading to thousands of casualties (Arab Spring, 2014). The assumption underlying this violent response was that repression will instill fear among citizens and deter them from further engagement in collective action. Paradoxically, however, angry protests persisted despite the threat of repression. The civil resistance campaign eventually led to the ousting of the president who had been in power for 23 years, and, surprisingly, inspired millions of citizens in Egypt, Libya, Yemen, Syria and other Arab countries to follow their footsteps although they were subjected to the threat of being violently repressed like their Tunisians neighbors. While recent decades have witnessed many research advances in our understanding of the social psychological factors that motivate nonviolent forms of collective action (e.g. see van Zomeren, Postmes, & Spears, 2008a), most of this work has not dealt with contexts where participants in collective action could potentially face severe punitive measures by authorities for their collective action engagement. As a result, we know little about the impact that the threat of repression has on collective action at the individual level. The aim of the present research is to examine the effect of repression threat on collective action tendencies, and explore some of the potential moderating and mediating mechanisms of this effect.

Collective action is commonly defined as actions taken by individuals on behalf of their groups with the aim of improving the conditions of the whole group (Wright,

Taylor, & Moghaddam 1990a; Wright, 2009), and can include both nonviolent forms of action (e.g. petitions, protests, strikes) as well as more violent forms of action (e.g. riots). The present research focuses on nonviolent forms of collective action, operationalized as collective action *tendencies*, that is, willingness to engage in collective action in the future. This is particularly common in social psychological research, due to methodological difficulties in measuring actual engagement in collective action (see van Zomeren et al., 2008a). Importantly, however, collective action tendencies were found to be good predictors of actual engagement in collective action (de Weerd & Klandermans, 1999; Webb & Sheeran, 2006).

Repression, on the other hand, is an action instigated by the state or private individuals/institutions that aims to constrain, control or prevent the initiation or spread of collective action (Earl, 2011). It is a mode of control that is employed by the elite to establish or maintain political influence and order (Davenport, 2007; Earl, 2011). It differs from other forms of political/social control, such as criminal justice systems, in that it aims to weaken or prevent phenomena which *directly* challenge political power, such as social movements, activism and protests (Earl, 2011).

Political repression can take different forms depending on three main factors (Earl, 2003). The first is the identity of the perpetrator, as repression can be performed either by state agents or by private agents. The second factor is the character of repression, as repression can be either coercive, involving usage of force, or done through channeling, which involves actions that limit the flow of resources to the social movements. The third factor pertains to the visibility of repression, as repression can be either overt/observable or covert/unobservable (Earl, 2003). Repression that is coercive,

overt and performed by state agents (e.g. protest policing) has received the greatest attention in the sociological and political science literature, while there are scant studies about other types of repression, such as those performed in the context of private institutions (Earl, 2003; Earl, 2011).

In the present research, we focus on how repression *threat*, rather than actual repression, affects collective action. Repression threat is the threat, by authorities, that collective action will be punished. In many authoritarian systems around the world, as exemplified in the recent Arab uprisings, citizens have to decide whether or not to participate in collective action with full knowledge that they could potentially face repression, due to past repression of collective actors. Therefore, repression threat can be perceived as a form of punishment threat because its aims to deter individuals from engaging in a certain behavior. It is important to note that repression threat has different elements such as likelihood, i.e. probability that repression will actually take place (Opp, 1994; Opp & Roehl, 1990), and magnitude, i.e. how costly repression is (Opp, 1994; Opp and Gern, 1993). The terms likelihood, probability, certainty and expectation of repression are used interchangeably, as well as magnitude, severity, strength and costliness of repression threat.

In the following sections, we provide an overview of existing studies on the impact of repression threat on collective action, as well as studies about the impact of punishment threat, in general, on behavior. We then provide an overview of the literature on the classical social psychological antecedents of collective action, namely group-based anger, group efficacy and collective identification, and the models which integrate these

factors. In the third section, we present our proposed model regarding the interplay between repression, identification, anger, fear, efficacy and collective action.

Repression and Collective Action

The topic of political repression has been extensively studied in the sociological and political science literature (e.g. Almeida, 2003; Davenport, 2007; Nepstad & Bob, 2006). Of primary interest in this literature is the effect of repression on collective action: does repression deter collective action, or does it fuel it further? The macro-level studies are inconclusive about the direction of the repression-collective action relationship. Some have found that repression escalates collective action tendencies (e.g. Almeida, 2003; Ondetti, 2006), while others demonstrated that there is a U-curve relationship (e.g. Lichbach & Gurr, 1981), or an inverted U-curve relationship between repression and collective action (e.g. DeNardo, 1985). Moreover, Earl and Soule (2010) found mixed support for a de-escalation effect. All in all, the sociological and political literatures are rich with studies about the link between repression and collective action, but not necessarily with repression *threat* and collective action.

Moreover, only few studies have examined the impact of repression threat on collective action at the individual level, that is, from a social psychological perspective. Opp (1994) found that the perceived "likelihood of repression" increased willingness to engage in collective action via increasing political discontent in the context of protests against nuclear power, while Opp and Gern (1993) found this relationship to be insignificant in the context of the German revolution in 1989. Further, Opp (1994) found that increasing the perceived costs of repression de-escalated collective action, but this

relationship was insignificant in Opp and Gern's (1993) study. Moreover, Opp and Roehl (1990) found that the perceived "expectation of repression" pushed individuals to participate in antinuclear protests in 1982, but it had no impact on participants in the antinuclear protests of 1987. Interestingly, Opp (1994) also found evidence for an interaction effect between likelihood of repression and social integration- defined as number of protest encouraging groups that an individual is embedded in- on political discontent, a predictor of collective action. It is important to note that these studies (Opp, 1994; Opp & Gern, 1993; Opp & Roehl, 1990) examined the same type of repression threat; repression threat was coercive, observable and perpetrated by a governmental agent (e.g. being arrested or hurt by security forces). They also included measures of repressive actions that are not necessarily observable or coercive (e.g. government causing problems at the job level or problems for close family members). Notably, however, these studies have an important limitation which is reliance on retrospective data, i.e. researchers asked individuals about their participation in protests that took place in the past and required them to remember how they viewed the situation at the time. This methodology could have yielded distorted data due to its reliance on memory and post-event re-interpretations. For example, participants might have underestimated the likelihood of repression, or overestimated the costs of repression. This might account for the inconsistency in the results across the three studies. It is also important to note that key terms similar to repression, such as oppression, were used in the literature search, but no additional references were found.

Another line of research that is worth noting is the Elaborated Social Identity Model of collective action (ESIM, Drury & Reicher, 2000; Reicher, 1996; Stott &

Reicher, 1998). This model is relevant to our research because it looks at how conflict between the crowd and the police (a potentially repressive agent) develops. According to ESIM, the police typically perceive *all* crowd members as potentially dangerous; therefore, when attempting to control a confrontational subgroup of the crowd, the police typically end up treating all crowd members harshly. As a consequence of this undifferentiated treatment by the police, the crowd starts perceiving the confrontational factions among them as part of the ingroup and the police as an illegitimate outgroup. This results in an escalation of the conflict between the crowd, who now adopt a single unitary identity, and the police (Drury & Reicher, 2000; Reicher, 1996; Stott & Reicher, 1998). Some research within the ESIM tradition has looked at the social psychological consequences of participation in collective action (e.g. empowerment, Drury & Reicher, 2005, 2009). However, given that research within the ESIM tradition typically relies on ethnographic methods (e.g. Drury & Reicher, 2000; Stott & Drury, 2000; Stott, Hutchison & Drury, 2001), existing studies do not offer a direct and controlled comparison of repressed versus non-repressed participants on social psychological precursors of collective action. Furthermore, research within the ESIM tradition typically focuses on contexts where collective actors do not necessarily anticipate repression by the police (e.g. Reicher, 1996; Stott, Hutchison & Drury, 2001). As such, this research does not examine how the *threat* of repression influences tendencies to engage in collective action in the first place. Furthermore, ESIM studies do not directly and quantitatively measure the role of pre-existing factors such as collective identification that could moderate the impact of repression on collective action tendencies. Instead, they typically focus on the social identity that emerges as a result of police repression. Nevertheless, the

ESIM studies suggest that repression can backfire and lead to an escalation of conflict between the police and the protesters. Accordingly, it is possible that repression threat can backfire and push individuals to further engage in collective action.

Repression as a Form of Punishment

As previously mentioned, repression could be considered as a form of punishment. Therefore, psychological studies done on the effect of punishment threat on behavior could provide insights about the impact of repression threat on collective action, especially that research done on the latter topic is scarce.

Actually, several researchers have found that punishment threat deters people from engaging in the target behavior, at both the individual and the group levels. For example, at the individual level, Levin, Dato-on, and Manolis (2007) found that punishment threat dissuaded participants from illegal downloading of music. Participants who were threatened with jail or fines were more likely to refrain from illegal downloading of music compared to those who were not threatened, and the deterrence effect increased with the increase of the cost of the threat (Levin et al., 2007). Although they did not measure it, Levin et al. (2007) argue that fear, which is the emotion that arises after perceiving a threat, is what pushes individuals to change their behavior intentions and/or attitudes. Furthermore, Gire and Williams (2007) found that participants who came from a college which severely punishes violations to the honor code were less likely to take money found in public spaces compared to those who came from colleges that punish these violations more leniently. Moreover, Evans, Neville and Graham (1991) found that the certainty of punishment threat (i.e. probability of

punishment) was positively linked to avoiding the targeted behavior. In particular, they showed that when individuals were more certain that they will be punished for drinking while driving by observing more sobriety checkpoints, they were more likely to be deterred from engaging in this behavior. On the other hand, at the group-level, Miles and Greenberg (1993) found that the group performance of swimmers improved when they were threatened by penalty laps compared to the performance of the groups that were not threatened. They also found that the deterrence effect increased with the increase of penalty laps threat (Miles & Greenberg, 1993). Interestingly, reading a message from Osama Bin Laden in which he threatened violence if the troops of the participants' countries were not removed from Afghanistan increased participants' support for withdrawing their countries' troops (Iyer, Hornsey, Venman, Esposo & Ale, 2014). The authors found that the punishment threat increased compliance with perpetrators' demands through instilling fear (Iyer et al., 2014). Overall, there is widespread evidence that punishment threat acts as a deterrent to engagement in the targeted behavior, and that deterrence is directly linked to the threat's certainty and severity.

In sum, studies examining repression threat directly are inconsistent in their findings, showing either no relation or a positive relation between likelihood of threat and collective action. The ESIM studies suggest that repression threat could backfire. The studies mentioned, however, are either retrospective in nature or they do not directly study the effect of *threatening* to repress *collective action*. On the other hand, the punishment threat literature is more consistent in showing that punishment threat deters the punished behavior, potentially suggesting that repression threat may deter willingness to engage in collective action. However, this literature has not focused on punishment

threat of collective action per se. Overall, there is a gap in the social psychological literature on how and when repression threat could influence collective action. Hence, our study aimed to examine *experimentally* the impact of repression *threat* on collective action tendencies and the social psychological processes potentially moderating and mediating this impact.

We reasoned that if repression threat affects individuals' collective action tendencies, as has been proposed (e.g. Opp, 1994; Opp & Roehl, 1993), it likely does so through its influence on the social psychological precursors of collective action. In the following section, we therefore review the most widely studied social psychological factors which push individuals to engage in collective action.

Social Psychological Predictors of Collective Action

While several predictors of collective action have been identified in the literature (e.g. Iyer, Schmader & Lickel, 2009; Tabri & Conway, 2011; van Zomeren, Postmes &Spears, 2010), those that have received the greatest scholarly interest are collective identification, perceptions of collective/group efficacy, and perceptions of injustice and the accompanying affective reactions, typically anger (Gamson, 1992; van Zomeren, et al., 2008a). We provide an overview of research on each of these predictors, and then we review integrative models.

Collective Identification

According to the social identity perspective (Tajfel & Turner, 1979; Turner et al., 1987), social or collective identification is considered as a proximal predictor for participation in collective action. Social Identity Theory (SIT, Tajfel & Turner, 1979) and

Self- Categorization Theory (SCT, Turner et al., 1987) -which emerged from it later- define collective identity as "that part of an individual's self -concept which derives from his [or her] knowledge of his [or her] membership of a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978, p: 63). This definition captures two important dimensions of identity. These are cognitive centrality, which refers to the importance that an individual assigns to his/her membership in a group, and the affective ties with group members, which are manifested in the commitment, attachment and connection one has towards the group (Cameron, 2004).

As for the reason behind the link between collective identification and collective action, Brown and Gartner (2001) argue that a collective identity makes an individual aware of the commonalities between his interests and the group members' interests, and it fosters perceptions of group strength, cooperation and trust. Based on that, it can be inferred that, unlike individual identifiers who attend to their individual interest, group identifiers will have feelings, perceptions and actions that are in line with the goals and interests of the group (see Ellemers, Spears, & Doosje, 2002). The stronger collective identification is, the greater the readiness to behave in terms of the group identity (Turner, 1999). It is important to note too that the individual's life experiences and history determines the level of strength of his/her collective identification with a particular group (Turner, 1999). According to classical social identity theory (Tajfel, 1978), collective action by disadvantaged group members is contingent on three factors. First, group members need to perceive group boundaries as impermeable, that is, to believe that it is not possible for them to move individually from the disadvantaged group

to a higher-status group. Second, they need to perceive status inequalities between their group and another as being illegitimate. Third, they need to perceived status differences as unstable (i.e. changeable). Illegitimacy and instability ensure that group members can think of alternatives to the status quo (e.g. Ellemers, 1993; Tajfel, 1978; Turner & Brown, 1978). If personal "exits" (e.g. leaving the group physically or psychologically) are available, or if the group's disadvantage is legitimized or perceived as stable, collective identity is undermined (e.g. Ellemers, Spears, & Doosje, 1997; Tajfel & Turner, 1979). If, however, the three conditions of impermeability, illegitimacy and stability exist, the collective identity is strengthened, and the belief that the only way to change the disadvantage is through collective action is fostered (Tajfel & Turner, 1979).

A substantial body of empirical studies found support for the link between group identification and collective action tendencies. For example, Simon et al. (1998) manipulated the salience of the disadvantaged identity of their participants, and found that individuals in the "high collective identity salience" condition were more willing to engage in collective action compared to individuals in the "low collective identity salience" condition. The results of this experiment suggest a causal link between collective identification and collective action tendencies. Also, Giguere, Lalonde and Jonsson (2012) found that identification with Native Canadians predicted willingness to engage in collective action that aims to reclaim Natives' lands. There is also evidence that politicized identification, i.e. identification with relevant social movements, is an even stronger predictor of collective action tendencies than broad identification with the disadvantaged group. For instance, Kelly and Breinlinger (1995) demonstrated that identification as an activist, and as a woman were the two most important predictors of

women's participation in political actions related to gender relations, with identification as an activist being a stronger predictor. Moreover, Simon et al. (1998) found that identification with older people or gay people was a significant predictor of collective action tendencies, but identification with social movements that defend the rights of these disadvantaged groups was an even better predictor. Furthermore, Giguere and Lolande (2010) found that identification as a student activist significantly predicts students' engagement in protests against changes to the students' loan system in Canada. Sturmer and Simon (2004b) argue that a politicized collective identity is a better predictor of collective action than general collective identity because it creates an "inner obligation" that pushes individuals to engage in collective action to redress the disadvantage of their group. In short, as proposed by the social identity perspective, empirical findings support the role of collective identification as a motivator of collective action tendencies.

Group-Based Anger

According to Intergroup Emotions Theory (IET, Mackie, Devos, & Smith, 2000; Smith, 1993), when individuals' collective identity is salient, events that harm the ingroup are appraised as harmful to the self, even if the self is not directly affected by the harm inflicting the ingroup. This leads the self to experience specific emotions such as anger towards the outgroup on behalf of the ingroup, known as group-based anger. Group-based anger, which therefore results from perceiving injustice done to the ingroup, should lead ingroup members to move against the outgroup deemed responsible for the harm.

Similarly, Relative Deprivation Theory (RDT, Crosby, 1976; Runciman, 1966) posits that group-based anger follows from one's perception that his/her *entire group members* are at a disadvantage or unfairly treated compared to another group (e.g. Bettencourt, Charlton, Dorr & Hume, 2001; Wright, Taylor & Moghadddam, 1990b). Group-based anger, in turn, should gear group members to partake in collective action (e.g. Ellemers & Barreto, 2009; Yzerbyt, Dumont, Wigboldus & Gordijin, 2003).

Members of disadvantaged groups who experience anger are more likely to take action because anger energizes people to do something about their disadvantage. Unlike other emotions, anger is characterized by a state of elevated physiological arousal (Roseman, Wiest, & Swartz, 1994). Angry people feel that their blood is rushing and that they want to explode (Roseman et al., 1994). Therefore, anger drives them to fight back or move against others who are causing the disadvantage (Averill, 1983; Frijida et al., 1989, Roseman et al., 1994).

Recent empirical studies support the idea that group-based anger pushes disadvantaged group members to protest their disadvantage. For example, Smith, Cronin and Kessler (2008) found that faculty members who were angrier about receiving less payment and benefits than faculty in other universities were more willing to protest. By contrast, sadness and fear in relation to this disadvantage were not significant predictors of protest willingness. Similarly, Leach, Iyer, and Pedersen (2007) demonstrated that Australians who felt angry about the government's plan to restore the rights of ethnic minorities were more willing to engage in political action against the government. Moreover, Iyer and Ryan (2009) demonstrated that women who highly identified with their gender experienced more group-based anger when presented with an example of

gender discrimination. Those angry women, in turn, were more willing to engage in collective action to redress gender discrimination. All in all, empirical research provides evidence for the role of group-based anger in predicting collective action tendencies.

Group Efficacy

In addition to collective identification and group-based anger, another predictor of collective action that has been extensively studied in the literature is group efficacy. Group efficacy refers to the individual's belief that group effort can solve group-related problems (Bandura, 1995, 1997). Mummendey, Kessler, Klink and Mielke (1999) found group efficacy to be a positive and unique predictor of the willingness of disadvantaged East Germans to engage in collective action against West Germans. Moreover, van Zomeren et al. (2010) found that participants who have high group-efficacy perceptions are more likely to engage in environmental collective action. The authors also manipulated group-efficacy beliefs, and demonstrated that individuals in the "high group-efficacy" experimental condition had higher collective action tendencies. In summary, there is empirical evidence in the literature that group efficacy is an important antecedent of willingness to engage in collective action.

Integrative Models of Predictors of Collective Action

Instead of studying the predictors of collective action independently, researchers have attempted to integrate these predictors in theoretical models (e.g. Dual Pathway Model by Sturmer and Simon, 2004b; Social Identity Model of Collective Action by van Zomeren et al., 2008). The most relevant models to our study are the Dual Pathway

Model (van Zomeren et al, 2004) and the Dynamic Dual Pathway Model (van Zomeren et al., 2012), which is an extension of the first model.

The Dual Pathway Model (van Zomeren, Spears, Fischer & Leach, 2004)

The dual pathway model, which was proposed by van Zomeren et al. (2004), specified group-based anger and group efficacy as two distinct and independent pathways to collective action. The group-based anger pathway is considered as an emotion-focused way of coping with the collective disadvantage, while the group efficacy pathway is considered as a problem-focused way of coping. This dual pathway model has been supported by empirical evidence. For example, in three separate studies, van Zomeren et al. (2004) found that group-based anger and group efficacy positively and independently predicted collective action tendencies among university students in the context of increasing tuition fees of university students. Furthermore, in another series of studies in Germany, India and the United Kingdom, Tausch et al. (2011) demonstrated that group-based anger and group efficacy positively and independently predicted nonviolent forms of collective action tendencies, with group-based anger mediating the link between perceived injustice and collective action.

The Dynamic Dual Pathway Model (van Zomeren, Leach & Spears, 2012)

This model expands the dual pathway model (van Zomeren et al., 2004) to incorporate the role of collective identification. The Dynamic Dual pathway model (van Zomeren et al., 2012) specifies that individuals need to make the primary appraisal that the collective disadvantage is relevant to them before engaging in collective action. A chronic identification or an acute self-categorization with the disadvantaged group will

make an individual relate to the disadvantage (Leach et al., 2008). However, the *level* of relevance of the group identity to them will affect the pathway they undertake to collective action (van Zomeren et al., 2012). Van Zomeren et al. (2012) argue that a highly salient collective identification will facilitate the process of blaming an external agent for the disadvantage, and hence, evoking group-based anger towards that target. On the other hand, the efficacy pathway is more predictive of collective action among lower identifiers (van Zomeren et al., 2012). Although they care about the group's interest less than higher identifiers, lower identifiers would still relate to the group's disadvantage if it affects their personal interests (e.g. a woman who does not highly identify with her gender group will be harmed if women were paid less). Lower identifiers would therefore partake in collective action if they believe that it can achieve these personal interests. In other words, low identifiers will have high collective action tendencies if they have high group efficacy perceptions (van Zomeren et al., 2012). Hence, collective identification moderates the efficacy pathway as lower identifiers are more likely to undertake this pathway to collective action compared to higher identifiers. This proposition was supported by empirical evidence. For example, van Zomeren, Spears and Leach (2008b) demonstrated in a field study that strong identification with the disadvantaged group is linked to higher collective action tendencies through increased group-based anger. Importantly, they also found that group efficacy positively predicted collective action tendencies among low identifiers but not among high identifiers. These results were replicated in an experiment where van Zomeren et al. (2008b) manipulated salience of group identity. They noted, however, that although a strong identity weakens the link between efficacy and collective action tendencies, this does not imply that this link is

nonexistent. The authors argue that a strong group identity simply makes efficacy concerns less relevant (van Zomeren et al., 2008b). On a different note, van Zomeren et al. (2012) show that the link between identity, efficacy and anger is not unidirectional, but rather bidirectional. Accordingly, undertaking collective action would in turn increase appraisals of identification, efficacy and anger; hence the name "dynamic model". However, these feedback loops are beyond the scope of our study; therefore, we will not elaborate more on them.

The Present Research

The reviewed social psychological models of collective action provide a useful framework to explore how repression could potentially influence collective action through its effect and interaction with social psychological precursors of collective action. In particular, the present research sought to examine whether the effect of repression on collective action is moderated by collective identification, and whether it is mediated by group-based anger, group efficacy, and fear of punishment, a previously unexplored predictor of collective action. The rationale behind this proposed model is explained in the following sections.

Collective Identification as a Moderator

As previously explained, high collective identifiers care deeply about group interests and are more likely than low identifiers to take collective action to defend the group's interests (e.g. van Zomeren et al., 2008b). As such, one could imagine that repression threat will impact high and low identifiers differently, with high identifiers being less deterred by repression threats or more encouraged to take collective action

than low identifiers. Previous research on repression and collective action did not directly look at the role of collective identification, but examined a conceptually related variable, namely social integration, measured as membership in protest-encouraging groups and number of friends critical of the authorities (Opp, 1994; Opp & Gern, 1993). Opp (1994) found that social integration moderated the impact of "likelihood of repression" on political discontent, which predicts collective action. In particular, likelihood of repression increased political discontent more strongly among those who had many friends who are critical of the regime than those who had few critical friends. However, likelihood of repression increased political discontent among participants who were *not* embedded in protest encouraging groups, while it had no significant effect among those who were members in such groups. Despite these mixed results, there is some evidence that "social integration" is a moderator of the relationship between perceived likelihood of repression and collective action tendencies. Accordingly, we expected collective identification to have a moderating effect as well. We predicted that the direction and/or strength of the relationship between repression and collective action tendencies is different among high identifiers and low identifiers. However, given the insufficient evidence in the literature about the direction of the link between repression threat and collective action, we left the direction of the moderation effect for exploration.

Group-Based Anger, Fear, and Group Efficacy as Mediators

On one hand, repression threat could be thought of as a form of injustice, which should fuel collective action. In line with previous research showing that injustice increases anger, which then increases collective action (e.g. van Zomeren et al., 2008a), repression threat should increase anger among members of the disadvantaged group,

which should, in turn, increase collective action tendencies. This claim is supported by Opp's (1994) finding that likelihood of repression is linked to increased political discontent, measured as participants' dissatisfaction with the government. Accordingly, group-based anger should mediate the relationship between repression threat and collective action tendencies.

On the other hand, repression threat is likely to be perceived as a cost (Opp & Roehl, 1990), since protesters might suffer punitive measures if they participate in collective action. Because it is a negative incentive, repression threat should pull group members away from protesting (see Klandermans, 1984; Opp & Roehl, 1990). This should happen through two routes.

Firstly, repression threat should instill fear of punishment from authorities. Previous studies have examined how fear of an outgroup (e.g. Makie et al., 2000; Smith et al., 2008), or fear of negative consequences of a disadvantage (e.g. Miller, Cronin, Amber & Branscombe, 2009; van Zomeren et al., 2010) might negatively affect willingness to engage in collective action, but none have looked, specifically, at the effect of "fear of punishment" on collective action tendencies. In the present research, we argue that repression threat should increase fear, which should reduce collective action tendencies. Hence, fear should mediate the link between repression threat and collective action tendencies.

Second, repression threat should undermine the perceived ability of the group to change the status quo, that is, group efficacy. This is because the threat of repression should signal that the system is less amenable to change and harder to challenge, that is,

the system is more stable. Repression should also reduce the perceived willingness of other group members to take part in collective action (i.e. instrumental social support), which has been shown to increase group efficacy (van Zomeren et al., 2004). Hence, we predicted that repression threat should decrease perceptions of group efficacy (van Zomeren et al., 2004) and resulting collective action tendencies. In other words, group efficacy should mediate between repression threat and willingness to engage in collective action.

The Overall Model

Our model proposes that repression threat has an effect on collective action tendencies, and that this effect is moderated by collective identification. Our model also proposes that the effect of repression threat on collective action tendencies is mediated by group-based anger, fear of punishment, and group efficacy. An important question to examine is whether the social psychological mechanisms (i.e. the mediators) through which repression influences collective action differ among low and high identifiers. It is possible, for instance, that repression impacts group-based anger, fear, and group efficacy differently for high and low identifiers. Given the absence of previous research on this topic and the various possible ways in which this moderating effect could operate, we tested these hypotheses in an exploratory fashion. A second possibility is that identification moderates the impact of group-based anger, fear, and group efficacy on collective action. There is no indication from previous research that identification moderates the influence of anger on collective action. Instead, identification facilitates experiencing group-based anger which then feeds into collective action (van Zomeren, 2008b; van Zomeren et al., 2012). However, previous research indicates that

identification moderates the influence of group efficacy on collective action. In particular, the drive towards collective action among high identifiers is independent on group efficacy concerns, whereas the drive among low identifiers is dependent on group efficacy concerns (van Zomeren et al., 2008b; van Zomeren et al., 2012). Accordingly, repression should have a stronger deterring effect among low identifiers – through reduced group efficacy – than among high identifiers. As for fear of punishment, there is no previous research on whether its impact on collective action is moderated by social identification. We therefore also tested this hypothesis in an exploratory manner. To sum up, we hypothesized the following:

H1: Repression threat affects collective action tendencies (exploratory hypothesis).

H2: Collective identification moderates the link between repression threat and collective action tendencies (in which direction is left for exploration).

H3a: Repression threat increases group-based anger.

H3b: Group-based anger increases collective action tendencies.

H3cb: Group-based anger mediates the effect of repression threat on collective action tendencies.

H4a: Repression threat increases fear of punishment.

H4b: Fear of punishment decreases collective action tendencies.

H4c: Fear of punishment mediates the effect of repression threat on collective action tendencies.

H5a: Repression threat decreases perceived group-efficacy

H5b: Perceived group efficacy increases collective action tendencies.

H5c: Perceived group efficacy mediates the effect of repression threat on collective action tendencies

H6: Identification moderates the effect of repression threat on collective action tendencies via the mediators anger, fear and efficacy (exploratory hypothesis)

The Context

This experimental study was conducted in the context of discrimination against women regarding admission to university. All participants were female university students. Their level of collective identification was assessed in the beginning of the experiment. Then, participants in the experimental condition were led to believe that the university administration will repress possible student protests against its plan of increasing standards for admitting women to its undergraduate programs. Participants' group-based anger against the administration, fear of punishment and their collective efficacy perceptions were measured, in addition to their collective action tendencies.

Method

Participants

One hundred and sixty two female students from the American University of Beirut took part in this experiment. We used a between-participants experimental design to test the hypotheses of the study. Participants were randomly assigned to one of two conditions: half were in the repression threat condition (experimental group) and half

were in the no repression threat condition (control group).They came from different classes and majors.

Procedure

A pilot study was conducted prior the actual experiment, with three AUB graduate students, and two undergraduate students. The purpose of the pilot study was to check whether the students would believe the information in the passages, and whether there were any unclear words/expressions. The results of the pilot study led us to change information in the passages to make them more believable. The time that students took to complete the survey was also recorded and did not exceed 20 minutes.

As for the actual study, the vast majority of participants were recruited through the Psychology 201 Research Pool in exchange for one extra grade toward their final course grade. These participants were emailed by the Psychology 201 Pool coordinator to inform them about the study. Three participants only were recruited through advertisement flyers. The experiment was disguised as a study about students' opinions regarding upcoming university policies.

Only one experimental session was held to prevent cross-talk between students. All participants gathered in a big university hall and sat on individual tables. In addition to the experimenter, a female assistant was present to prevent interaction between participants. While the students were filling the surveys, no questions were allowed, and there was no interaction between the assistant and the participants.

Upon arrival to the hall, participants were asked to randomly pick from two piles of envelopes one sealed envelope containing the survey, and an information sheet. Half

the envelopes contained the survey of the experimental group, while the other half contained the survey of the control group. The envelopes in each pile, however, were mixed. The experimenter did not know what surveys the envelopes contained. The participants were then asked to take a seat in the hall, and not to interact with their colleagues. Then, the experimenter explained verbally the content of the information sheet to participants, and asked them to sign it in case they agree with its content. They were then permitted to start the survey, and were given 20 minutes to finish it[1]. Participants who finished earlier were asked to return the survey to the envelope and wait in their seats. It was necessary to limit the time to ensure that all participants would be available for a general debriefing session. The vast majority of students sat on every other seat in the hall. It is important to note though that some students sat close to each other because of lack of space, and few side talks between students were detected[2].

Participants were first asked in the survey to answer items that measured their collective identification as supporters of women's rights. Then, they all read a passage that is purportedly extracted from Outlook, an independent student newspaper at AUB. The passage intended to falsely inform the participants that AUB's administration is willing to raise the standards of accepting female students starting next year because (false) studies showed that males perform better than females in undergraduate studies even if they start college with the same academic level (Appendices B & C).

[1] The time needed to complete the survey was estimated from the results of the pilot study.
[2] Despite the close seating and interaction incidences, the assumption of independence of observations were met as Durbin-Watson score (2.05) was acceptable. Also, participants who reported having suspicions were deleted from the final analysis.

Participants subsequently answered a manipulation check to ensure they understood the text, and a measure of perceived injustice to make sure that they all perceived the situation as unjust and therefore had a motive to take collective action.

Afterwards, they were randomly assigned to one of two conditions. They all read an additional passage allegedly taken from the same source, but half of them were informed that AUB will impose a one-year hold on their degrees/transcripts in case they participated in protests against the university regarding its new plan (repression condition), while the other half (the control condition) were informed that AUB will respect their right to protest if they wished to. A comprehension question assessed the two groups' understanding of the content of the additional passage, followed by measures of the perceived likelihood of repression.

All participants subsequently answered measures of group-based anger, fear of punishment, perceptions of group efficacy, and willingness to engage in collective action against the university's new plan.

At the end, their perception of the costliness of the repression was assessed, and they answered questions about their past engagement in activities about women's rights to check whether collective identification is linked to actual participation in such activities. They also indicated their age, major, class, and whether they had suspicions while reading the questions and passages of the survey.

The experimental session lasted around 20 minutes. The experimenter then carefully debriefed participants. Then, they were asked to sign a post-informed consent form and return back the sealed envelope in case they agreed for their data to be used.

Instruments

Collective identification. This variable was measured using the following five items adapted from Zaal, Saab, O'Brien et al. (2014): "I identify with supporters of women's rights", "I feel a bond with other supporters of women's rights", "I consider myself to be a supporter of women's rights", "I have a lot in common with supporters of women's rights", "I don't feel connected to supporters of women's rights [reverse scored]". Each item was rated on a 7-point Likert scale (1=strongly disagree, 7=strongly agree) to ensure variability on the scale.

Group-based anger. Three items derived from the study by Smith et al. (2008), were used to assess group-based anger: "When I think of the AUB administration's treatment of students, I feel angry/outraged/furious". Each item was rated on a 5-point Likert-type scale (1= Not at all, 5= Very Much).

Fear. Participants' fear from the potential consequences of participating in collective action were assessed using three items adapted from Smith et al.'s (2008) study. The items were the following: "I worry/fear/am scared I might get punished by the AUB administration if I take part in collective action against the new policy". Each item was rated on a 5-point Likert-type scale (1= Not at all, 5= Very Much).

Group Efficacy. Three items adapted from Van Zomeren et al., (2010) were used to assess group efficacy. These items were the following: "I think that students can jointly prevent the administration's plan to raise female students' acceptance standards? "/"I think that students can collectively stop the administration's plan to raise female students' acceptance standards?"/"I think that students can together, through joint effort,

achieve the goal of stopping the administration's plan to raise female students' acceptance standards*"*. Each item was rated on a 5-point Likert scale scale (1= Strongly disagree, 5= Strongly agree).

Willingness to participate in Collective Action. Participants were asked the following: "To what extent are you willing to engage in the following actions to oppose AUB administration's plan to raise female students' acceptance standards: participate in a demonstration/participate in a sit-in/participate in a strike". Ratings were made using a 5-point Likert-type scale (1=not willing at all; 5= very much willing).

Manipulation and Control Checks

Manipulation Checks. Participants answered the following comprehension checks with true or false: "According to the article in Outlook, the AUB administration is planning to raise female students' acceptance standards starting next year", and "According to the article in Outlook, the AUB administration is planning to punish anyone who engages in protests, strikes or sit-ins against its plan of raising female students' acceptance standards starting next year". Participants were also asked "How likely do you think it is that the AUB administration will punish students who engage in protests, strikes or sit-ins against the plan of raising female students' acceptance standards?" on a 5-point Likert- scale (1=not likely at all; 5= very likely).

Perceptions of Injustice. This variable was measured using items adapted from Tausch et al. (2011), rated on: "The administration's plan is unjust", "The administration's plan is legitimate" (reverse-coded), "The administration's plan is

unfair," and "The administration's plan is justified" (reverse-coded). Each item was rated on a 5-point Likert scale (1=strongly disagree, 5=strongly agree).

Cost of Repression. A single item was used to assess students' perception of the cost of the repressive measure. It was administered at the end of the study so as not to prime participants in the no-repression condition. The item was used by Opp (1994) and Opp and Gern (1993): " How costly do you think is imposing a one-year hold on a student's degree, meaning that they cannot obtain their degree or transcripts until one year after graduation?" Ratings were made using a 5-point Likert scale (1=not costly at all; 5= very costly).

Participation in Activities Regarding Women's Rights. Participants were asked if they had engaged in any of these activities in the last 12 months a) participated in a protest/public gathering for women's rights, b) signed a petition about women's rights, c) posted a link regarding women's rights d) liked a page on Facebook/social media for women's rights e) blogged about women's rights f) wrote an article about women's rights g) are members in a women's rights organization/society/club.

Suspicion Checks. Students were asked the following two questions at the end of the survey: "What do you think is the purpose of this study?" and " While reading the passages and answering the questions, did you feel that there was something strange or suspicious? If yes, please explain."

Results

Manipulation Checks

Of 162 participants, two students guessed the true purpose of the study, and 30 students failed to answer one of the manipulation checks correctly, or missed answering

it. Therefore, their data was excluded from the analysis, yielding a sample of 130 students (n = 69 in the repression condition, n = 61 in the control condition).

Missing Values Analysis

One participant had more than 40% of her data missing, so she was excluded from the final analysis.

All variables, except two, had less than 5% missing values. However, two variables, namely age and the second item on the injustice scale (see Method) had 24.6% and 6.2% of values missing, respectively. Little's MCAR test was significant ($p<.001$), which means that the items were not missed completely at random. However, the box space allocated for writing participants' age was very small compared to boxes allocated for other questions, so participants may not have noticed it, explaining why they failed to report their age. As for the Injustice Item 2, we decided to drop it from the Perceived Injustice Scale, especially as this improved the scale's reliability from Cronbach's alpha= .61 to .69 (Check Reliability Analysis Section).

As for variables which had less than 5% of missing values, we replaced the missing values using the Expectation Maximization algorithm (Tabachnick & Fidell, 2007) instead of deleting them to preserve as much statistical power of the data as possible, especially as moderations are typically hard to detect[3].

Factor Analysis

[3] The sample size would drop from n=129 to n=123 if we delete the missing values.

A one-component factor analysis with principal component extraction and varimax rotation was conducted on the items of each scale (identity, injustice, anger, fear, efficacy and collective action). There were no issues of multicollinearity or singularity of data because all determinants were larger than .00001, and there were no correlations above .8 in the correlation matrices. Furthermore, the data appeared to be eligible for factor analysis as Bartlett's test of sphericity was significant for all scales (Identity, $\chi^2(10)= 333.72$, $p<.001$; Injustice (item 2 dropped), $\chi^2(6)=75.47$, $p<.001$; Anger, $\chi^2(3)=357.48$, $p<.001$; Fear, $\chi^2(3)= 394.74$, $p<.001$; Efficacy, $\chi^2(3)= 276.52$, $p<.001$; Collective Action, $\chi^2(3)=211.26$, $p<.001$), and Kaiser-Meyer-Olkin values were above .70 for all scales except for the injustice scale even after item 2 was dropped (KMO= .82, KMO=.66[4], KMO=.76, KMO=.77, KMO=.75; KMO=.73). Furthermore, there were no variables which needed exclusion because all measures of sampling adequacy (MSA) were above .5.

The single extracted component explained a total of 67.59% of the variance for the identity scale, 62.93% of the injustice scale, 89.90% for the anger scale, 91.40% for fear scale, 85.92% for efficacy scale, and 81.27% for collective action scale.

Reliability analyses were conducted for all scales. All scales had very good reliability as their Cronbach's alpha exceeded .80, except for the injustice scale (see

[4] According to Field (2013), KMO of .60 is considered acceptable.

Table 1). When the second item of the injustice scale was dropped, the scale's reliability improved from Cronbach's $\alpha = .61$ to $\alpha = .69$[5]. Therefore, we decided to drop this item.

Table 1

Reliability Coefficients of Scales

Scale	Number of Items	Cronbach's Alpha
Identity	5	.88
Injustice	4	.61 improves to .69 without item 2
Anger	3	.94
Fear	3	.95
Efficacy	3	.92
Collective Action	3	.88

Outliers

We first inspected the univariate outliers through z-scores in each group separately. There were five univariate outliers (z-scores beyond 3.29 in absolute value); three of them were in the control group, and two in the experimental group. Their z-scores were the following: +3.44 (Fear control group), -3.48 (Injustice control group), -4.18 (Identity control group), -3.49 (Injustice experimental group), -3.62 (Identity experimental group). To check for multivariate outliers, we looked at Mahalanobis distances using SPSS SYNTAX in each group separately, and this revealed that there was one multivariate outlier in the control group data and another one in the experimental group as their chi-square values exceeded $\chi^2 (5) = 15.09$, $p < .01$.

Normality Tests

[5] The low reliability of the scale could be due to participants' misunderstanding of the word "legitimate" in the second item of the scale, or to the presence of two separate constructs in the scale (injustice and illegitimacy).

We looked at the z-skewness and z-kurtosis of the variables in each group to determine their normality (See Tables 2 and 3). Significant skewness and kurtosis were concluded if the z-skewness or z-kurtosis scores of the variable were above 3.29 in absolute value. A variable is considered to violate the normality assumption if it violates normality in one or both of the groups. Identity, injustice and fear showed relatively substantial deviation from normality (z scores above 4 in absolute value), while efficacy and anger showed relatively lower deviations from normality (z scores below 4 in absolute value).

It is important to note that normality improved when both univariate and multivariate outliers were removed from the data; however, we retained the univariate and multivariate outliers because their removal did not affect the results[6].

Table 2
Skewness and Kurtosis Scores (Control Group)

Variable	z-skewness	z-kurtosis
Identity	-5.94	7.51
Anger	-1.45	-1.48
Fear	4.57	3.06
Efficacy	-1.94	.23
Collective Action	3.15	1.13

[6] We did moderation analysis on the data without univariate or multivariate outliers (Identification, repression threat and their product term as predictors, and collective action as the dependent variable). Regression assumptions were tested (influential cases, normality, homoscedasticity, multicollinearity and independence of errors). They were all met except for the homoscedasticity assumption. Therefore, bootstrapping was performed, and we got the same results that we got from the bootstrapping test done on the data which includes outliers. Furthermore, we performed mediation analysis through PROCESS (IV= repression, mediators= anger, fear, efficacy, DV=collective action) on the data without outliers, and we got the same results as the ones obtained from the data with the outliers.

Table 3
Skewness and Kurtosis Scores (Experimental Group)

Variable	z-skewness	z-kurtosis
Identity	-4.58	+3.89
Anger	-3.76	+1.29
Fear	-.18	-2.49
Efficacy	-3.73	+1.52
Collective Action	+2.05	-.96

Sample Descriptives

The final sample included 129 participants. Participants' ages ranged between 18 and 30 years old. They came from different classes (Freshman 8.5% , Sophomore 67.4%, Junior 14 %, Senior 4.7 %, graduate 1.6 % , other 1.6 %, missing 2.3%), and different faculties (Arts and Sciences, Business, Engineering and Architecture, Agriculture and Food Sciences, and Health sciences). Only 7% of the participants were majoring in Psychology.

Participants showed relatively strong identification with supporters of women's rights as their average score on this scale was well above the midpoint (*M*= 5.87, *SD*= 1.03). The range for the identification scores varied between one and seven, but only 5.43% of the participants scored below the midpoint of the scale, while the rest scored above it (94.57%). The median of the scores was six. As such, identification had relatively restricted variance. Identification was similarly high in the control group (*M*= 5.85, *SD*=1.16) and the repression condition (*M*=5.90, *SD*=.91).

However, the two groups showed variation in their anger, fear and efficacy scores. As expected, the participants who read about the repression threat were more angry (*M*= 4.02, *SD*=1.06) than those who did not (*M*= 3.39, *SD*=1.26), although both

groups scored above the midpoint, showing relatively high anger levels. Also, participants in the repression threat condition were more fearful of punishment (*M*= 2.94, *SD*=1.39) than participants in the control condition (*M*= 1.79, *SD*=.93) although scores of both groups were below the midpoint, showing relatively low levels of fear. However, surprisingly, participants in the repression condition had slightly stronger efficacy perceptions (*M*= 3.94, *SD*=1.03) than those in the control condition (*M*= 3.74, *SD*=.85), but both groups scored above the midpoint, showing relatively high group efficacy levels. As for collective action, participants in the repression condition scored lower on this scale (*M*= 2.64, *SD*=1.12) than those in the control condition did (*M*= 1.97, *SD*=.92), although both groups showed relatively low collective action tendencies, scoring lower than midpoint.

We also found that participants had different levels of engagement in different types of activities that support women's rights. Most of the participants (77.5%) had liked a page on Facebook/social media for women's rights, and 59.7% of them posted a link in social media about women's rights. However, only a minority participated in a protest/ gathering for women's rights (20.6%) signed a petition about women's rights (33.3%), blogged (32.5%) or wrote an article about women's rights (39.7%). Most importantly, only 3.2% of the participants were members in a women's rights organization.[7]

We also inspected the correlation matrix of the main variables. We found that repression had a significant, negative and small-to-moderate size correlation with

[7] The percentages of participation in these activities were based on those who completed the entire question (n=126).

collective action (r = -.26, p<.01), a significant positive correlation with anger (r = .26, p<.01) and an even stronger positive correlation with fear (r = .44, p<.001). Surprisingly, repression threat did not significantly correlate with efficacy (r = .11, p=.23, *ns*). On the other hand, as expected, both anger and efficacy positively and significantly correlated with collective action (r = .27, p<.01; r = .33, p<.001). Fear of punishment too showed a significant, negative, and moderate size correlation with collective action (r = -.28, p<.01). As for the correlations between the proposed mediators, anger positively and significantly correlated with both fear (r = .26, p<.01) and efficacy (r = .21, p<.01). However, fear did not correlate with efficacy (r = .05, p=.60, *ns*).

Control Checks

Participants perceived the situation to be highly unjust as their mean of Injustice score was well above the midpoint (M= 4.37, SD= .73). As expected, there was no significant difference in the injustice perceptions between the control condition (M= 4.31, SD=.76) and the repression condition (M=4.42, SD=.70), as shown by a one-way ANOVA test (F (1,127) = 0.75, p= .39, *ns*). There was also no significant difference in the level of identification as supporters of women's rights between the control group and the repression condition, as shown by a one-way ANOVA test (F (1,127) = 0.07, p= .79, *ns*). The inspection of the correlation matrix revealed that identification as a supporter of women's rights showed a positive but non-a significant correlation with perceived injustice of the admission policy toward female students (r= .14, p=.13, *ns).* Nevertheless, identification significantly and positively correlated with past participation

in activities that support women's rights (r= .26, p<.01)[8], as one would expect, suggesting that the measure has some criterion validity. On the other hand, a one-way ANOVA test (*F-Welch* [9](1,126.56) = 13.89, p<.001) revealed that participants in the repression condition believed that repression was significantly more likely to occur (M= 2.64, SD=1.12) than those in the control condition did (M= 1.97, SD=.92), indicating that our manipulation was successful in changing repression threat perceptions. Note, however, that in both groups the likelihood of repression was below the mid-point of the scale, indicating participants were relatively skeptical about the seriousness of the threat. Finally, participants overall considered the repressive measure to be highly costly as they scored well above the midpoint of the costliness scale (M=4.67, SD=.68).

Moderation Analysis

Multiple linear regression was used to assess the impact of repression threat (dummy variable), identification (mean centred continuous predictor), and their interaction term, on collective action tendencies. There were no influential cases, and the sample size was adequate for the test. The assumptions of normality, independence of errors, and multicollinearity were met (Check Appendix E for details about assumptions testing). However, the assumptions of homoscedasticity and normality of errors were not met; therefore, we relied on bootstrapping (as recommended by Field, 2013, p: 350-353). Bootstrapping is a technique which calculates the statistic of interest and generates significance tests and confidence intervals by taking repeated samples with replacement

[8] A "past participation in women's rights activities" scale was created for each participant by calculating the sum of her scores on the seven activities (Yes=1, No=0). The correlation's calculation was based on those who completed the entire scale (n=126 participants)

[9] *F-Welch* was reported because the assumption of homogeneity of variance was violated. Leven's test was significant (F(1, 127)=5.44, p<.05)

from the dataset, and calculating the statistic of interest of each sample (Field, 2013, p:871). The effects were estimated using bias-corrected (BC) 95% confidence intervals, based on 1000 bootstrap samples, as recommended by Field (2013).

Contrary to expectations, the test showed that the interaction between identification and repression was not significant (*b*= .14 [-.34, .53], *p*= .53). However, there was a significant main effect of repression on collective action (*b*= -.57 [-.95, -.19], *p*<.01) such that students faced with repression threat were less willing to engage in collective action (*M*= 3.53, *SD*=1.20) compared to those who were not (*M*=4.09, *SD*= .87). The link between identification and collective action was not significant (*b*= .08 [-.06, .31], *p*= .39). Bootstrapping does not provide standardized coefficients; therefore, we could not compare the size of the regression coefficients. The model accounted for very little of the variance in the willingness to engage in collective action (adjusted R^2=6.5%), but it was significantly better than the mean in fitting the data (*F* (3,125) = 3.95, *p*<.01).

Mediation Analysis

To check whether the link between repression threat and collective action was mediated by efficacy, anger and fear, we used the macro PROCESS Model 4, which tests the effects of multiple mediators simultaneously. PROCESS also follows the bootstrapping procedure, which, according to Hayes (2009), should be the method of choice for testing mediation. It estimated the effects using bias-corrected (BC) 95% confidence intervals, based on 1000 bootstrap samples. A confidence interval that does not include zero indicates a significant indirect effect (Field, 2013, p: 416). It is important to note that bootstrapping makes no assumptions about the normality of the sampling distribution of the indirect effect (Hayes, 2009; Preacher & Hayes, 2008). Bootstrapping

can also be used to estimate effects in multiple linear regression when the assumption of normality is broken (Field, 2013, p.350).

According to the results generated by PROCESS, repression threat had a significant effect on fear and anger, as expected, but no effect on efficacy, contrary to expectations. On the other hand, fear, anger and efficacy all had significant effects on collective action tendencies, as expected (see Tables 6 and 7).

Table 4
Effect of repression threat on fear, anger and efficacy

Variable	*B*	*se*	*t(127)*	p-value	BCa CI
Fear	1.15	.21	5.44	$p<.001$	[.73,1.57]
Anger	.63	.20	3.09	$p<.01$	[.23,1.04]
Efficacy	.20	.17	1.22	$p=.23$, *ns*	[-.13,.54]

The table contains unstandardized regression coefficients (b), standard errors (se), t-values, p-values and the bias corrected 95% confidence intervals (BCa CI)

Table 5
Effect of anger, fear and efficacy on collective action

Variable	*B*	*se*	*t(125)*	p-value	BCa CI
Anger	.32	.07	4.46	p<.001	[.18,.46]
Fear	-.22	.07	-3.30	p<.01	[-.36, -.09]
Efficacy	.35	.09	4.03	p<.01	[.18,.51]

The table contains unstandardized regression coefficients (b), standard errors (se), t-values, p-values and the bias corrected 95% confidence intervals (BCa CI)

As for the indirect effects, the test showed that there was a significant indirect effect of repression threat on collective action through fear, b= -.26, BCa CI [-.48, -.10], and through anger, b =.20, BCa CI [.10, .38], as expected, but not through efficacy, contrary to expectations, b=.07, BCa CI [-.04, .21]. However, the total indirect effect (through all mediators combined) was not significant, b =.01, BCa CI [-.24, .28]. This indicates that the individual indirect effects were acting in opposite directions (Hayes,

2009). Furthermore, the direct effect of repression threat on collective action (b= -.58, t= -3.21, p<.01) was stronger than the total effect (b= -.56, t= -3.01, p<.01). This indicates the presence of suppression effects (Tabachnick & Fidell, 2007).

To explore which variables acted as suppressors of the effect of repression threat on collective action, we performed three hierarchical multiple regression analyses where we investigated the effect of repression threat on collective action in the first step, followed by the inclusion of one of the three intervening variables in the second step (anger, fear, or efficacy). Because the assumption of homoscedasticity was violated, we used the bootstrapping procedure. If the effect of repression threat becomes stronger after the inclusion of another variable, that variable can be deemed to suppress the effect of repression threat. The strength of the repression coefficient dropped from b = -.56 [-.92,-.20], p<.01 to b= -.36 [-.76, .07], p=.10 upon the inclusion of fear. This shows that fear acted as a mediator of the link between repression and collective action. On the other hand, the repression coefficient increased to b = -.77 [-1.17,-.43], p<.01 upon the inclusion of anger, and to b = -.65 [-.97,-.29], p<.01 upon the inclusion of efficacy. This increase in the repression coefficients indicates that both efficacy and anger acted as suppressors of the relationship between repression threat and collective action.

Discussion

This experimental study examined the impact of repression threat on willingness to partake in collective action. It looked at whether collective identity moderates this impact, and whether group-based anger, fear, and perceptions of group efficacy mediate it. After measuring their level of collective identification with supporters of women's

rights, a sample of AUB female students were led to believe that the university's administration will raise standards of accepting female students. Then, students in the experimental group were informed that the administration will repress protests, while students in the control group were informed that the administration respects their right to protest. Students' anger, fear of punishment, perceptions of collective efficacy and their willingness to engage in collective action were measured.

To the best of our knowledge, this is the first experimental study of the effect of political repression threat on collective action tendencies, and it is the first such study to shed light on the social psychological mechanisms underlying this impact. Therefore, this study is an important contribution to the scarce socio-psychological literature of political repression. Importantly, this study also introduces a convenient paradigm which can be used in future research seeking to understand the impact of repression threat on collective action.

Regarding the effect of repression threat on collective action tendencies, we found that participants were less willing to engage in nonviolent forms of collective action when they were faced with a threat of repression. This means that repression threat, which we perceived to be a form of punishment threat, acted as a deterrent to collective action. Our results are consistent with the literature on punishment threat, which found that costly punishment threat acts as a deterrent of the targeted behavior, whether at the individual level (e.g. Gire & Williams,2007; Levin et al., 2007), or group-level (e.g.Iyer et al., 2014; Miles & Greenberg,1993). Participants perceived the repression threat to be overall very costly, but also not very likely to occur. Hence, although they did not think that such a repressive measure will actually happen, they seem to have preferred to avoid

the risk of getting punished. On the other hand, our results are inconsistent with the findings of the few psychological studies done on the impact of repression threat on collective action tendencies (Opp, 1994; Opp & Gern, 1993; Opp & Roehl, 1990). The inconsistency between our findings and the findings of these studies could be due to several reasons. As previously mentioned, these studies have an important limitation, which is reliance on retrospective survey data, while our study overcame this limitation by asking participants about their willingness to engage in future protests rather than their past participation. Also, unlike these studies, our study adopted an experimental design to investigate the effect of repression threat on collective action. Moreover, these studies examined the effect of repression threat in political contexts (e.g. anti-nuclear power protests) where policemen and governmental agents were the perpetrators, while our study looked at the influence of repression threat by a private agent in the context of support for women's rights.

As for the proposed role of collective identification, we did not find evidence that it moderated the link between repression threat and collective action, or that it predicted collective action. These findings are inconsistent with the literature. Identification, especially in its politicized form, was found to be a strong predictor of collective action (e.g. Simon et al. 1998, van Zomeren et al., 2008a, Stürmer, Simon, Loewy & Jorger, 2003) with group-based anger as a mediator of this link (dynamic dual pathway model, van Zomeren et al., 2012). Similarly, "social integration" which we argued has similarities with the social identification construct, was previously found to be a moderator of the pathway between repression threat and collective action (Opp, 1994). It is possible that our results are due to the way in which we measured identification. We

explicitly asked students whether they identify with supporters of women's rights or not. As a result, it could be that students answered the identity items according to what is socially desirable, i.e. supporting women's rights. The restricted variance in the identity score (*M*= 5.87, *SD*= 1.03) could have thus reduced our ability to detect an effect of identification.

As for anger, fear and efficacy, we found mixed support for their role as mediators of the link between repression threat and collective action. We found that anger positively predicted collective action tendencies, which is consistent with the literature (Ellemers & Barreto, 2009; Leach, et al., 2007; Smith et al., 2008; Yzerbyt, Dumont, Wigboldus & Gordijin, 2003), and efficacy positively predicted willingness to protest, which is also consistent with previous studies (Mummendey et al., 1999; van Zomeren et al. 2010). The fact that anger and efficacy are independent predictors of collective action supports the dual pathway model (van Zomeren et al, 2004), which proposes that anger and efficacy constitutes two independent pathways to collective action. Moreover, we found that fear of punishment negatively predicted collective action tendencies as we hypothesized. The current research goes beyond previous studies which have examined fear either as fear as an outgroup (e.g. Makie et al., 2000; Smith et al., 2008), or fear of the negative consequences of a disadvantage (Miller, Cronin, Amber & Branscombe, 2009; van Zomeren et al., 2010). It highlights the important role that fear can play in inhibiting collective action, and suggests that fear should be incorporated in future integrative models of predictors of collective action, particularly in repressive contexts. , Importantly, however, only fear turned out to act as a mediator between repression threat and collective action. Contrary to our hypotheses, anger and efficacy only acted as

suppressors (see Thompson & Levine, 1997 and MacKinnon, Krull & Lockwood, 2000 for discussions on suppression effects). In particular, the overall effect of repression threat was to reduce willingness to engage in collective action via increasing fear of punishment, which in turn decreased collective action tendencies. However, the meditational path of anger acted in an oppositional way; repression threat increased anger, which in turn increased collective action tendencies. This finding is consistent with Opp (1994) who showed that the likelihood of repression would increase perceptions of political discontent, which is a form of injustice, closely linked to anger. Efficacy, on the other hand, was surprisingly not affected by repression threat. However, its inclusion appeared to "un-suppress" the deterring effect of repression threat too. In sum, repression threat appears to reduce collective action via increasing fear, even after controlling for anger levels and efficacy perceptions.

Regarding the absence of a link between repression threat and efficacy, we speculate that this could be due to two reasons. First, it is established in the literature that injustice perceptions are positively linked to anger but not to efficacy (Tausch et al., 2011); van Zomeren et al., 2004, van Zomeren et al., 2012), and repression threat could be perceived as a form of injustice; hence repression threat would affect anger but not efficacy. It therefore seems that repression threat affects collective action tendencies through the emotion-focused route, rather than the instrumental route (see van Zomeren et al., 2004 and van Zomeren et al., 2012, for a distinction between these two paths). Second, it could be that participants' efficacy perceptions were not affected by repression threat because they did not believe that repression will actually happen. Actually, participants scored below the midpoint on "likelihood of repression", but they still had

high efficacy perceptions (*M*=3.85, *SD*=.95*)*. More research is therefore needed to investigate the effect of repression threat on efficacy perceptions.

Limitations, Practical Implications and Future Directions

There are several limitations that should be taken into consideration when interpreting the results of the study. First, the study measured people's tendencies to engage in collective action rather than their actual involvement in this behavior. Although it has been shown that collective action tendencies are positively associated with collective action behavior (de Weerd & Klandermans, 1999; Webb & Sheeran, 2006), it is important to investigate how repression threat affects people's actual collective action. Second, the identification scale we used had restricted variance, which could have undermined the findings related to identity. Also, although we tried our best to achieve independence of observations through seating participants on individual seats, side talks between a couple of participants could have contaminated our results. Despite that, the measure of independence of errors (Durbin-Watson) was acceptable. Moreover, the fact that the sample size decreased from 162 to 129 participants after data cleaning could have decreased the power; thus, a larger sample size could have yielded more accurate results, particularly as interactions are notoriously difficult to detect.

Although it is tempting to use these findings to understand the effect of repression threat on important collective action events, such as repression threats performed by authorities during Arab uprisings, one should be cautious in generalizing the findings. This study examined the effect of the threat of repression that is coercive, observable, and perpetrated by private agents. Therefore, the results might apply only to cases where

repression threat falls into the aforementioned category (e.g. university administration threatening its students; employers threatening their employees). Finally, it is unclear whether our model would generalize to advantaged groups such as male participants, or to cases where the disadvantage directly affects participants themselves, rather than their group in general. Future research should therefore examine the generalizability of our results to repression threats by public agents and repression threats directed at different samples of participants.

Nevertheless, the findings of our study provide preliminary insights for collective action organizers who aim to mobilize others against a private agent. For example, mobilizers can devise strategies to reduce the fear of punishment among people; thus, they would increase their willingness to protest. Also, they can work on increasing the level of anger at the perpetrating agent among people to the extent that it can help overcome the deterring effect of repression threat through fear. Furthermore, they can encourage protesting by working on increasing perceptions of efficacy, which do not seem to be affected by repression threat, but still predict collective action.

Finally, despite some limitations, our study paves the way for more research on repression threat. Building on this paradigm, future research could explore potential moderators of the impact of repression threat on collective action. For example, researchers could investigate the effect of variables other than identity, such as efficacy and injustice. Also, it would be interesting to borrow further from the literature on punishment theory in order to study the impact of repression threat on collective action. In particular, researchers could experimentally manipulate the repression threat's credibility, magnitude and certainty and examine their impact on collective action. Of

particular interest would be exploring whether increasing the magnitude of repression threat would exhibit a linear, a U-curve or an inverted U-curve relationship with collective action tendency, especially that previous research has found an inconsistent link between repression and collective action at the macro-level (see Earl, 2011 for a review on macro-level studies on repression and collective action).

Conclusion

In summary, this study is the first to examine experimentally the impact of repression threat on collective action. It showed that repression threat had a negative impact on collective action tendencies. When faced with repression threat, people's willingness to engage in collective action decreased due to increasing fears of getting punished, even after controlling for levels of anger and group efficacy. Anger counteracted this deterrence effect as it was fuelled by repression threat and in turn increased willingness to protest, but this effect was not sufficient to offset the deterring effect of repression on collective action. No evidence was found that people's collective action tendencies when faced with repression threat are moderated by their level of collective identification. We hope this study helps generate further research to understand the impact of repression on collective action and the underlying social psychological mechanisms involved in it.

References

Almeida, (2003). Opportunity organizations and threat-induced contention: Protest waves in authoritarian settings. *American Journal of Sociology, 109(2),* 345–400.

Arab Spring. (2014). In *Encyclopaedia Britannica*. Retrieved from http://www.britannica.com/EBchecked/topic/1784922/Arab-Spring

Averill, J. R. (1983). Studies on anger and aggression. *American Psychologist, 38,* 1145–1160.

Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. InA.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Bettencourt, B. A., Charlton, K., Dorr, N., & Hume, D. L. (2001). Status differences and in-group bias: A meta-analytic examination of the effects of status stability, status legitimacy, and group permeability. *Psychological Bulletin*, *127,* 520–542.

Brown, R., & Gaertner, S. L. (2001). Intergroup processes. Blackwell Handbook of Social Psychology (Vol. 4). Oxford: Blackwell.

Cameron, J. (2004). A three-component model of social identification. *Self and Identity*, *3*, 239–262.

Cramer, D., Howitt, D.L., (2005). The SAGE Dictionary of Statistics: a Practical Guide for Students in the Social Sciences, 3rd ed. SAGE, London, England.

Crosby, F. J. (1976). A model of egotistical relative deprivation. *Psychological Review*, *83*, 85–113.

Davenport C., (2007). State repression and political order. *Annual Review of Political Science, 10,* 1–23.

De Weerd, M., & Klandermans, B. (1999). Group identification and political protest: Farmers' protests in the Netherlands. *European Journal of Social Psychology, 29*, 1073–1095.

DeNardo J., (1985). *Power in Numbers*. Princeton, NJ: Princeton University Press.

Drury J., & Reicher S. D. (2009). Collective psychological empowerment as a model of social change: Researching crowds and power. *Journal of Social Issues, 65, 707-726.*

Drury, J., & Reicher, S. D. (2000). Collective action and psychological change: The emergence of new social identities. *British Journal of Social Psychology, 39*, 579–604.

Drury, J., & Reicher, S. D. (2005). Explaining enduring empowerment: A comparative study of collective action and psychological outcomes. *European Journal of Social Psychology*, *35*, 35–38.

Earl J, Soule SA. 2010. The impacts of repression: The effect of police presence and action on subsequent protest rates. *Research in Social Movements and Conflict Change,30*, 75–113.

Earl J., (2003). Tanks, tear gas and taxes: Toward a theory of movement repression. *Sociological Theory, 21(1),* 44–68.

Earl, J., (2011). Political repression: Iron Fist, velvet gloves, and diffuse control. *Annual Review of Sociology, (37),* 261-284.

Ellemers N., Barreto M.(2009). Collective action in modern times: How modern expressions of prejudice prevent collective action. *Journal of Social Issues, 65, 749-768.*

Ellemers N., Spears R., Doosje B.(2002). Self and social identity. *Annual Review of Psychology, 53, 161-186.*

Ellemers, N. (1993). The influence of socio-structural variables on identity management strategies. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (*Vol. 4*, pp. 22–57). Oxford, England: Blackwell.

Ellemers, N., Spears, R., & Doosje, B. (1997). Sticking together or falling apart: Ingroup identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology, 72,* 617 – 626.

Evans, W. N., Neville, D., & Graham, J. D. (1991). General deterrence of drunk driving: Evaluation of recent American policies. *Risk Analysis, 11(2),* 279–89.

Field, A. (2013). Discovering statistics using SPSS (4nd Ed.). London, UK: Sage Publications Ltd.

Friedman, D., & McAdam, D. (1992). Collective identity and activism: Networks, choices, and the life of a social movement. In A. D. Morris & C. M. Mueller (Eds.), Frontiers in social movement theory (pp. 156 – 173). New Haven, CT: Yale University Press.

Frijda, N. H., Kuipers, P., & ter Schure, L. (1989). Relations among emotion, appraisal, and action tendency. *Journal of Personality and Social Psychology, 57,* 212–228.

Gamson, W. A. (1992). The social psychology of collective action. In A. D. Morris & C. M. Müller (Eds.), *Frontiers in social movement theory* (pp. 53–76). New Haven, CT: Yale University Press.

Giguère, B. and Lalonde, R. N. (2010), Why Do Students Strike? Direct and Indirect Determinants of Collective Action Participation. *Political Psychology,31,*227–247.

Giguère, B., Lalonde, R. N., & Jonsson, K., (2012). *Canadian Journal of Behavioral Science, 44(3),* 182-191

Gire, J., & Williams, T. (2007). Dissonance and the honor system: Extending the severity of threat phenomenon. *The Journal of Social Psychology, 147(5),* 501-509.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis a regression-based approach*. New York, NY: Guilford Press.

Hayes, A.F., (2009).Beyond Baron and Kenny: Statistical mediation analysis in the new millennium , *Communication Monographs, 76,* 408-420.

Iyer A., Ryan M. K.(2009). Why do men and women challenge gender discrimination in the workplace? The role of group status and in-group identification in predicting pathways to collective action. *Journal of Social Issues, 65, 791-814.*

Iyer, A., Schmader, T., & Lickel, B. (2007). Why individuals protest the perceived transgressions of their country: The role of anger, shame and guilt. *Personality and Social Psychology Bulletin, 33,* 572-587.

Iyer, A., Hornsey, M. J., Vanman, E. J., Esposo, S. and Ale, S. (2014), Fight *and* flight: evidence of aggressive capitulation in the face of fear messages from terrorists. *Political Psychology*. doi: 10.1111/pops.12182

Kelly, C. (1993). Group identification, intergroup perceptions and collective action. In W.Stroebe & M. Hewstone (Eds.), European Review of Social Psychology (Vol. 4, pp. 59 – 83). Chichester, UK: Wiley.

Kelly, C., & Breinlinger, S. (1995). Attitudes, intentions and behavior: A study of women's participation in collective action. *Journal of Applied Social Psychology, 25,* 1430–1445.

Klandermans, B. (1984). Mobilization and participation: Social-psychological expansions of resource mobilization theory. *American Sociological Review, 49,* 583–600.

Klandermans, B. (1997). *The social psychology of protest*. Oxford, England: Blackwell.(2007). Angry opposition to government redress: When the structurally advantaged perceive themselves as relatively deprived. *British Journal of Social Psychology, 46, 191-204.*

Levin, A. M., Dato-on, M. C., & Manolis, C. (2007). Deterring illegal downloading: The effects of threat appeals, past behavior, subjective norms, and attributions of harm. *Journal of Consumer Behavior, 6(2-3),* 111-122.

Lichbach, M.I., Gurr ,T.R., (1981). The conflict process: A formal model. *Journal of Conflict Resolution, 25(1),* 3–29.

Lynch, M. (2011). The Big think behind the arab spring. *Foreign Policy (190),*46-47.

Mackie, D. M., Devos, T., & Smith, E. R. (2000). Inter-group emotions: Explaining offensive action tendencies in an inter-group context. *Journal of Personality and Social Psychology*, *79*, 602–616.

MacKinnon, D.P., Krull, J.L., Lockwood, C.M. (2000). Equivalence of the mediation, confounding, and suppression effect. *Prevention Sciences,1,* 173–181.

Miles, J. A., & Greenberg, J. (1993). Using punishment threats to attenuate social loafing effects among swimmers. *Organizational Behavior and Human Decision Processes, 56,* 246-265.

Mummendey, A., Kessler. T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology, 76,* 229–245.

Nepstad, S.E., Bob, C., (2006). When do leaders matter? Hypotheses on leadership dynamics in social movements. *Mobilization, 11(1),* 1–22.

Ondetti, G. (2006). Repression, opportunity, and protest: Explaining the takeoff of Brazil's landless movement. *Latin America Political Sociology, 48(2),* 61–94.

Opp, K.-D. & Gern, C. (1993). Dissident Groups, Personal Networks, and Spontaneous Cooperation: the East German Revolution of 1989. *American Sociology Review, 58,* 659-680 .

Opp, Karl-Dieter, (1994). Repression and revolutionary action: East germany in 1989, *Rationality and Society,6(1),* 101-138.

Opp, K-D, Roehl, W., (1990). Repression, micromobilization, and political protest. *Social Forces, 69(2),*521–47.

Reicher S. D.(1996). Social identity and social change: Rethinking the context of social psychology. *In Robinson P. (Ed.), Social groups and identities: Developing the legacy of Henri Tajfel (pp. 317-336). Oxford, UK: Butterworth-Heinemann.*

Reicher, S. D. (1996). The battle of Westminster: Developing the social identity model of crowd behaviour in order to explain the initiation and development of collective conflict. *European Journal of Social Psychology, 26,* 115 – 134.

Roseman, I.J., Wiest, C., T.S. Swartz., (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology, 67,* 206–211.

Runciman, W. G. (1966). *Relative deprivation and social justice: A study of attitudes to social inequality in twentieth-century England*. Berkeley: University of California Press.

Schrager, L. S. (1985). Private attitudes and collective action. *American Sociology Review, 50,* 858–859.

Simon, B., Loewy, M., Stuermer, S., Weber, U., Freytag, P., Habig, C., *et al.* (1998). Collective identification and social movement participation. *Journal of Personality and Social Psychology, 74,* 646–658.

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

Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297–315). San Diego, CA: Academic Press.

Stott, C. J., & Drury, J. (2000). Crowds, context and identity: Dynamic categorization processes in the 'poll tax riot'. *Human Relations, 53,* 247–273.

Stott, C. J., & Reicher, S. (1998). Crowd action as intergroup process: Introducing the police perspective. *European Journal of Social Psychology, 26,* 509–529.

Stott, C. J., Hutchinson, P., & Drury, J. (2001).Hooligans abroad? Inter-group dynamics ,social identity and participation in collective disorder at the 1998 World Cup Finals. *British Journal of Social Psychology, 40,*359–384

Stürmer, S. & Simon, B. (2004b). The role of collective identification in social movement participation: A panel study in the context of the German gay movement. *Personality and Social Psychology Bulletin, 30,* 263–277.

Stürmer, S. (2000).Social movement participation: A psychological dual-pathway model. Doctoral thesis, Faculty of Philosophy, Christian-Albrechts-Universita¨ t zu Kiel, Germany.

Stürmer, S., & Simon, B. (2004a). The role of collective identification in social movement participation: A panel study in the context of the German gay movement. *Personality and Social Psychology Bulletin, 30,* 363 – 277.

Stürmer, S., & Simon, B. (2004b). Collective action: Towards a dual pathway model. *European Review of Social Psychology*, *15,* 59–99.

Stürmer, S., Simon, B., Loewy, M., & Jörger, H. (2003). The dual pathway model of social movement participation: The case of the fat acceptance movement. *Social Psychology Quarterly*, *66,* 71–82.

Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics (5th ed.). Boston, MA: Pearson Education, Inc.

Tabri, N., & Conway, M. (2011). Negative expectancies for the group's outcomes undermine normative collective action: Conflict between Christian and Muslim groups in Lebanon. *British Journal of Social Psychology*, *50* (4), 649-669.

Tajfel, H. (1978). The achievement of inter-group differentiation. In H. Tajfel (Ed.), *Differentiation between social groups* (pp. 77–100). London: Academic Press.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of inter-group relations* (pp. 33–47). Monterey, CA: Brooks/Cole.

Tausch N., Becker J., Spears R., Christ O., Saab R., Singh P., Siddiqui R. N.(2011). Explaining radical group behavior: Developing emotion and efficacy routes to

normative and non-normative collective action. *Journal of Personality and Social Psychology, 101, 129-148.*

Thompson, F. T., & Levine, D. U. (1997). Examples of easily explainable suppressor variables in multiple regression research. *Multiple Linear Regression Viewpoints, 24,* 11-13.

Turner, J. C. (1999). Some current themes in research on social identity and self-categorization theories. In N. Ellemers, R. Spears, & B. Doosje (Eds.), Social identity: Context, commitment, content (pp. 6 – 34). Oxford: Blackwell.

Turner, J. C., & Brown, R. (1978). Social status, cognitive alternatives, and inter-group relations. In H. Tajfel (Ed.), *Differentiation between social groups* (pp. 201–234). San Diego, CA: Academic Press.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). Rediscovering the social group. A self-categorization theory. Oxford: Blackwell.

van Zomeren M., Postmes T., Spears R. (2008a). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin, 134,* 504-535.

van Zomeren M., Spears R., Leach C. W.(2008b). Exploring psychological mechanisms of collective action: Does the relevance of group identity influence how people cope with collective disadvantage? *British Journal of Social Psychology, 47,* 353-372.

van Zomeren M., Spears R., Leach C. W.(2010). Experimental evidence for a dual pathway model of coping with the climate crisis. *Journal of Environmental Psychology, 30,* 339-346.

van Zomeren, M., Leach, C. W., & Spears, R. (2012). Protesters as "passionate economists": A dynamic dual pathway model of approach coping with collective disadvantage. *Personality and Social Psychology Review, 16(2),* 2180-199.

van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is: Explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology, 87*, 649–664.

Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin, 132*, 249–268.

Wright, S. C. (2009). The next generation of collective action research. *Journal of Social Issues, 65,* 859 – 879.Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990a). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology, 58,* 994–1003.

Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990b). The relationship of perceptions and emotions to behavior in the face of collective inequality. *Social Justice Research, 4*, 229–250.

Yzerbyt, V. Y., Dumont, M., Wigboldus, D., & Gordijn, E. (2003). I feel for us: The impact of categorization and identification on emotions and action tendencies. *British Journal of Social Psychology, 42,* 533–549.

Zaal, M., Saab, R., O'Brien, K., Jeffries, C., Barreto, M., & van Laars, C. (2013). *You're either with us or against us! Moral conviction determines how the politicized distinguish friend from foe.* Manuscript under review.

Appendix A

Information Sheet

Students' Opinions Regarding Policies of the American University of Beirut Administration

Dear participants, we would like to invite you to participate in a research study conducted at the American University of Beirut. The research will investigate students' opinions regarding upcoming university policies of the American University of Beirut concerning women. In order to take part in this study, you have to be an AUB student, and 18 years of age or above.

Before we begin, we would like to take a few minutes to explain why we are inviting you to participate and what will be done with the information you provide. You will be asked to read this information sheet, and then complete some questions, after which you will read an upcoming article from the independent student newspaper (Outlook) and respond to an anonymous questionnaire. Please read and consider each question carefully, but do not agonize over your answers. There are no right or wrong answers, and first impressions are usually fine. Just think about what best reflects your own knowledge. You will sign next to your name on a separate sheet, for you to receive one extra credit on your general average in the Psyc 201 class or enter a 50$ cash prize draw in exchange for your participation if you are not a current Psyc 201 student.

We will be asking 200 AUB students to complete the study questions , and this collected information will be used in published research as well as in academic presentations. Your individual privacy and confidentiality of the information you provide will be maintained in all published and written data analysis resulting from the study. There are no threats for the anonymity or confidentiality of your results since no direct identifiers will be recorded in the study; no names nor signatures. You will only provide your name and signature on a **separate** list, therefore no one will be able to track your name back to any particular study questions.

All answers are **anonymous** and no one would be able to trace your name to your responses. All data from this study will be kept in a locked cabinet in the office of the primary investigator (hard copies), or on a password protected computer (soft copies). Only the researchers of this project will have access to the data.

Participation should take approximately TWENTY minutes. Please understand your participation is entirely on a voluntary basis and you have the right to withdraw your consent or discontinue participation at any time without justification or penalty. You have the option to refuse to participate in the study with no penalty or any possible loss of benefits, and your relationship with the American University of Beirut will not be affected in any way. You might feel stressed as a result of reading information presented in the study questions. The stress you might feel resembles what you experience when you think of a disadvantage that is imposed on your group.

The results of the study will help researchers to better understand students' reactions to their university's upcoming policies. Furthermore, you will receive one extra point on your final PSYC 201 grade, or enter a 50$ cash prize draw.

If at any time and for any reason, you would prefer not to answer any questions, please feel free to skip those questions.

Research designs often require that the full intent of the study not be explained prior to participation. Although we have described the general nature of the tasks that you will be asked to perform, the full intent of the study will not be explained to you until after the completion of the study.

If you have questions, concerns or complaints about this research study later, you may contact Dr. Rim Saab at rim.saab@gmail.com or Mona Ayoub at mona.ayoub89@gmail.com.

If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about research or your rights as a participant, please contact the AUB Social & Behavioral Sciences Institutional review Board (SBSIRB) at AUB: 01- 350 000 ext. 5445 or irb@aub.edu.lb.

By signing this information sheet, you agree to participate in this research project. The purpose, procedures to be used, as well as, the potential risks and benefits of your participation have been explained to you in detail. You can refuse to participate or withdraw your participation in this study at anytime without penalty and still receive the extra credit. You will be given a copy of this information sheet.

_____
Your Printed Name

_____ _____
Your Signature Today's Date

_____
Printed Name of Research Director

_____ _____
Signature of Research Director Today's Date

INSTITUTIONAL REVIEW BOARD APPROVAL STAMP:

THANK YOU FOR YOUR COOPERATION

Appendix B

Survey Questions- Control Group

Please answer the following questions carefully. Please note that that there are no right or wrong answers. We care about knowing your genuine opinion. You may omit the questions that you do not want to answer.

Using a scale from 1 to 7, please rate your agreement with the following statements by putting an "X" in the appropriate cell.

Statement	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Neither Agree nor Disagree	5 Slightly Agree	6 Agree	7 Strongly Agree
I identify with supporters of women's rights.							
I feel a bond with other supporters of women's rights.							
I consider myself to be a supporter of women's rights.							
I have a lot in common with supporters of women's rights.							
I don't feel connected to supporters							

for women's rights.							

Please read the following passage carefully. It is extracted from an upcoming article in Outlook newspaper, which is the official and independent student newspaper in AUB.

NEW ADMISSIONS POLICY AT AUB RESTRICTS FEMALE APPLICANTS' CHANCES OF ENTRY

Outlook Team

News has been circulating at AUB that the administration plans to impose restrictions on acceptance of female students to AUB starting next year. To investigate this further, Outlook team interviewed Mr. Jamil Salem, a top administrator from the Admissions office on April, 15th. Salem confirmed the news: "This plan has been approved by the AUB administration. Starting next academic year, female applicants to AUB will need higher grades than males in order to enter into our undergraduate programs". When asked about the reasons behind this new policy, the administrator said:" This decision has been taken to improve AUB's academic rank in the region. AUB's student records show that male and female applicants do not differ in terms of SAT, TOEFL and high school scores when they enter AUB. However, by the time they graduate, women on average have lower GPAs than men. This trend has been observed across all faculties and departments. To raise the academic standing of the university, the administration has therefore decided to raise the standards of acceptance for female students. Starting next year, female applicants to AUB will have to earn higher school grades, and higher SATs and TOEFL scores in order to be admitted to AUB."

Using a scale from 1 to 5, please rate your agreement with the following statements by putting an "X" in the appropriate cell.

Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
The new policy is unjust.					
The new policy is legitimate.					
The new policy is unfair.					
The new policy is justified.					

Please read carefully the following paragraph that is extracted from the same article.

Outlook team contacted Mr. Ziad Raji in the Office of Student Affairs to inquire further about the new policy. Raji, who is a top administrator at the Office of Student Affairs, confirmed that the upcoming policy will take place starting next year. When asked "How do you expect AUB students' body, especially females, to react to this decision? Are there fears that this plan might lead to the eruption of student protests on campus?" Raji simply replied that the administration respects students' rights to take peaceful collective action on campus.

Please answer the following comprehension questions by true or false. The questions are related to the paragraphs you have just read. Put an "X" in the appropriate case.

Statement	True	False
According to the article in Outlook, AUB's administration is planning to raise female students' acceptance standards starting next year.		
According to the article in Outlook, AUB's administration respects students' right to protest.		

Using a scale from 1 to 5, please rate the following statements by putting an "X" in the appropriate case.

Statement	1 Not Likely at All	2 Not Likely	3 Neither Likely nor Unlikely	4 Likely	5 Very Likely
How likely do you think it is that the AUB administration will punish students who engage in protests, strikes or sit-ins against the plan of raising female students' acceptance standards?					

Using a scale from 1 to 5, please rate the following statements by putting an "X" in the appropriate case.

When I think of the AUB administration's treatment of students in this situation:

Statement	1 Not at All	2	3	4	5 A Lot
I feel angry.					
I feel outraged.					

I feel furious.					

Using a scale from 1 to 5, please rate the following statements by putting an "X" in the appropriate case.

When I think about the punitive measures the AUB's administration might take against me if I decide to participate in collective action against the new policy:

Statement	1 Not at All	2	3	4	5 A Lot
I feel worried about participating.					
I feel afraid about participating.					
I feel anxious about participating.					

Using a scale from 1 to 5, please rate your agreement the following statements by putting an "X" in the appropriate case.

Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
I think that students can jointly prevent the administration's plan to raise female students' acceptance standards.					
I think that students can collectively stop the administration's plan to raise female students' acceptance standards.					

I think that students can together, through joint effort, achieve the goal of stopping the administration's plan to raise female students' acceptance standards.					

Using a scale from 1 to 5, please rate the following statements. Put an "X" in the appropriate case.

To what extent are you willing to engage in the following actions to oppose AUB administration's plan:

Statement	**1 Not at all**	**2**	**3**	**4**	**5 To a Great Extent**
participate in a demonstration					
participate in a sit-in					
participate in a strike					

Using a scale from 1 to 5, Please rate the following statements by putting an (X) in the appropriate case.

Statement	**1 Not costly at all**	**2 Not Costly**	**3 Neither Costly nor Uncostly**	**4 Costly**	**5 Very Costly**

How costly do you think is imposing a one-year hold on a student's degree, meaning that they cannot obtain his/her degree or transcripts until one year after graduation?					

Did you engage in any of these activities in the last 12 months? Please answer by Yes or No.

Activity	**Yes**	**No**
Participated in a protest/public gathering for women's rights		
Signed a petition about women's rights		
Posted a link in social media regarding women's rights		
Liked a page on Facebook/social media for women's rights		
Blogged about women's rights		
Wrote an article about women's rights		
Are you a member in a women's rights organization/society/club		

Age	
Class	
Major	

Question	**Yes**	**No**
Are you currently enrolled in Psychology 201 course?		

In the adjacent space, please answer the following question: **what do you think is the purpose of this study?**	

Question	**Yes**	**No**	**Explanation (if answer is yes)**
While reading the passages and answering the questions, did you feel that there was something strange or suspicious? If yes, please explain.			

Appendix C

Survey Questions- Experimental Group

Please answer the following questions carefully. Please note that that there are no right or wrong answers. We care about knowing your genuine opinion. You may omit the questions that you do not want to answer.

Using a scale from 1 to 7, please rate your agreement with the following statements by putting an "X" in the appropriate cell.

Statement	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Neither Agree nor Disagree	5 Slightly Agree	6 Agree	7 Strongly Agree
I identify with supporters of women's rights.							
I feel a bond with other supporters of women's rights.							
I consider myself to be a supporter of women's rights.							
I have a lot in common with supporters of women's rights.							
I don't feel connected to supporters							

for women's rights.							

Please read the following passage carefully. It is extracted from an upcoming article in Outlook newspaper, which is the official and independent student newspaper in AUB.

NEW ADMISSIONS POLICY AT AUB RESTRICTS FEMALE APPLICANTS' CHANCES OF ENTRY

Outlook Team

News has been circulating at AUB that the administration plans to impose restrictions on acceptance of female students to AUB starting next year. To investigate this further, Outlook team interviewed Mr. Jamil Salem, a top administrator from the Admissions office on April, 15th. Salem confirmed the news: "This plan has been approved by the AUB administration. Starting next academic year, female applicants to AUB will need higher grades than males in order to enter into our undergraduate programs". When asked about the reasons behind this new policy, the administrator said:" This decision has been taken to improve AUB's academic rank in the region. AUB's student records show that male and female applicants do not differ in terms of SAT, TOEFL and high school scores when they enter AUB. However, by the time they graduate, women on average have lower GPAs than men. This trend has been observed across all faculties and departments. To raise the academic standing of the university, the administration has therefore decided to raise the standards of acceptance for female students. Starting next year, female applicants to AUB will have to earn higher school grades, and higher SATs and TOEFL scores in order to be admitted to AUB."

Using a scale from 1 to 5, please rate your agreement with the following statements by putting an "X" in the appropriate cell.

Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
The new policy is unjust.					
The new policy is legitimate.					
The new policy is unfair.					
The new policy is justified.					

Please read carefully the following paragraph that is extracted from the same article.

Outlook team contacted Mr. Ziad Raji in the Office of Student Affairs to inquire further about the new policy. Raji, who is a top administrator at the Office of Student Affairs, confirmed that the upcoming policy will take place starting next year. When asked "How do you expect AUB students' body, especially females, to react to this decision? Are there fears that this plan might lead to the eruption of student protests on campus?", Raji replied: "AUB's administration is planning to take severe measures against students who protest this decision by engaging in actions such as protests, sit-ins or strikes, as these actions disrupt campus life. Any student caught engaging in a protest, strike or sit-in will

automatically get a one-year hold on their degrees. The administration will be very strict in implementing this measure, which will be easy to implement given that the administration has recently increased the number of security staff on campus."

Imposing a one-year hold on a student degree means that the student will not be able to obtain his/her degree or transcripts until one year after his/her graduation. This measure undermines students' chances to apply for jobs or graduate schools after their graduation, and prevents them from transferring to other universities in case they decided to.

Please answer the following comprehension questions by true or false. The questions are related to the paragraphs you have just read. Put an "X" in the appropriate case.

Statement	True	False
According to the article in Outlook, AUB's administration is planning to raise female students' acceptance standards starting next year.		
According to the article in Outlook, AUB's administration is planning to punish anyone who engages in protests, strikes or sit-ins against its plan of raising female students' acceptance standards starting next year.		

Using a scale from 1 to 5, please rate the following statements by putting an "X" in the appropriate case.

Statement	1 Not Likely at All	2 Not Likely	3 Neither Likely nor Unlikely	4 Likely	5 Very Likely

How likely do you think it is that the AUB administration will punish students who engage in protests, strikes or sit-ins against the plan of raising female students' acceptance standards?					

Using a scale from 1 to 5, please rate the following statements by putting an "X" in the appropriate case.

When I think of the AUB administration's treatment of students in this situation:

Statement	**1 Not at All**	**2**	**3**	**4**	**5 A Lot**
I feel angry.					
I feel outraged.					
I feel furious.					

Using a scale from 1 to 5, please rate the following statements by putting an "X" in the appropriate case.

When I think about the punitive measures the AUB's administration might take against me if I decide to participate in collective action against the new policy:

Statement	**1 Not at All**	**2**	**3**	**4**	**5 A Lot**
I feel worried about participating.					
I feel afraid about participating.					
I feel anxious about participating.					

Using a scale from 1 to 5, please rate your agreement the following statements by putting an "X" in the appropriate case.

Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
I think that students can jointly prevent the administration's plan to raise female students' acceptance standards.					
I think that students can collectively stop the administration's plan to raise female students' acceptance standards.					
I think that students can together, through joint effort, achieve the goal of stopping the administration's plan to raise female students' acceptance standards.					

Using a scale from 1 to 5, please rate the following statements. Put an "X" in the appropriate case.

To what extent are you willing to engage in the following actions to oppose AUB administration's plan:

Statement	1 Not at all	2	3	4	5 To a Great Extent
participate in a demonstration					
participate in a sit-in					
participate in a strike					

Using a scale from 1 to 5, Please rate the following statements by putting an (X) in the appropriate case.

Statement	1 Not costly at all	2 Not Costly	3 Neither Costly nor Uncostly	4 Costly	5 Very Costly
How costly do you think is imposing a one-year hold on a student's degree, meaning that they cannot obtain his/her degree or transcripts until one year after graduation?					

Did you engage in any of these activities in the last 12 months? Please answer by Yes or No.

Activity	Yes	No
Participated in a protest/public gathering for women's rights		
Signed a petition about women's rights		
Posted a link in social media regarding women's rights		
Liked a page on Facebook/social media for women's rights		
Blogged about women's rights		

Wrote an article about women's rights		
Are you a member in a women's rights organization/society/club		

Age	
Class	
Major	

Question	Yes	No
Are you currently enrolled in Psychology 201 course?		

In the adjacent space, please answer the following question: **what do you think is the purpose of this study?**	

Question	Yes	No	Explanation (if answer is yes)
While reading the passages and answering the questions, did you feel that there was something strange or suspicious? If yes, please explain.			

Appendix D

Debriefing Letter

Background information about the issue being investigated

Since the end of 2010, the Arab world has been witnessing protests against political regimes. Despite their overall nonviolent nature, those protests were met with brutal violence by the authorities in many countries, leading to thousands of casualties, with the aim of deterring further engagement in collective action (e.g. protests, demonstrations, strikes…etc).Paradoxically, however, angry protests sometimes persisted despite the threat of repression. We know little about the impact of repression threat on collective action. For instance, some studies found that repression increases collective action, while others found that repression decreases collective action.

Real purpose of the study, experimental conditions, and hypothesis

The aims of this research study are to a) experimentally examine the impact of repression threat (or lack thereof) on collective action and b) the psychological processes underlying this impact. To examine our research question, we randomly assigned female participants to either an experimental or control condition. Participants in both groups were told that AUB's administration is planning to raise standards of admitting female students to its undergraduate programs. In the repression condition, participants were told that AUB's administration will punish students who take part in protests against this plan, while in the no-repression condition students were told that AUB respects students' rights to protest. We predict that the potential impact of repression threat on collective action will differ depending on participants' level of identification as supporters of womens' rights, and that the potential effect of repression on collective action can be explained by its effect on levels of anger, fear, and perceptions of effectiveness of protesting. We expect anger and fear to be higher in the repressed group, and effectiveness to be lower among them.

The rationale behind the necessary use of deception

When you began the study, you were told that certain details will not be disclosed to you so as not to as not to bias your responses. PLEASE NOTE that we left out a few details and provided you with information that **misrepresented** the real purpose of the study. What this means is the study was actually different than what we explained in the beginning. Some studies in psychology involve deception – that is, participants are led to believe the study is about one thing when it is actually about something else. This is one of those studies. Accordingly, please take note of the following:

1) This study is conducted by a Master's student as part of her thesis project, and it is supervised by Dr. Rim Saab in the Psychology department.

2) The true purpose of this study is NOT to explore students' opinions regarding upcoming university policies, but rather to examine the link between repression threat and collective action tendencies. All the passages you read in the study were **completely FICTITIOUS**. Outlook Newspaper magazine will never be publish those passages in any of its issues. There is **NO** plan by AUB's administration to raise standards of admitting female students to its undergraduate programs. In fact, as stated in the admission application of AUB: "*The American University of Beirut seeks students of sound character who have demonstrated academic achievement and promise. The **University admits students regardless of** race, color, religion, **gender**, disability or national origin". http://www.aub.edu.lb/admissions/Pages/index.aspx*
3) There is **NO** research showing that male and females at AUB start differing in their performance at AUB once they come in.
4) *There are no professors named Samir Sharaf and Rima Nasr in AUB, and there are no officials named Jamil Salem or Ziad Raji.*
5) According to the AUB Student Code of Conduct:

> "*Students have the right to express their opinions on matters of concern to the University in an organized manner and in a public space […], but they must notify and consult with the dean of student affairs before doing so. The nature of the event and any publicity accompanying it must be reviewed by the dean to assure that neither Lebanese law, nor university policies and norms are being violated. […] In cases where student-sponsored events, including protests, sit-ins, and demonstrations are, after such consultation, not approved by the dean of student affairs, or, if needed by the Board of Deans or the president, it may become necessary for the dean of student affairs to undertake disciplinary measures and even to instruct campus protection to bring the public gathering to an end. Disrupting or obstructing the normal educational process or any university function or activity by student demonstrations, sit-ins, or 'strikes' is strictly prohibited."* http://goo.gl/oKMGx8

The necessity for using deception in this study was because we needed participants' behavior and attitudes **to be as natural as possible**. Thus, we could not give participants complete information before their involvement in the study since it may have influenced participants' attitudes in a way that would make investigations of the research question invalid. Simply withholding the real aim of the study may have resulted in responses that depend on each participant's expectations regarding the true aim of the study. As such, it was necessary that all participants receive uniform information ("deception") regarding the true purpose of the study. Therefore, **active deception was NOT intended to embarrass anyone** but to prevent distortion of results and to ensure that the validity of conclusions would not be jeopardized.

The hypothetical situation – AUB's administration plan to raise standards of admitting female students, and to repress (or not) possible protests – was necessary to

actively engage our participants, who are AUB students. Experimental researchers strongly recommend using realistic conditions that can engage participants. As such, our proposed hypothetical situation works well as it invites female students to actively engage in an experiment that may have implications on them. Other less relevant alternatives are likely to create a detached feeling that would offset the research purpose and design ("this does not concern me"; "I do not care about policies in some other or unknown university I have no link to").

The research team apologizes for omitting details and for providing you with fictional information about the purpose of the study. We hope that you understand the need for the use of deception now that the purpose of the study has been more fully explained to you.

Confidentiality issues

Even though this study involved deception, the information given to you previously about confidentiality, data storage, and security still applies. All data collected is confidential and securely stored at all times. No one other than the researchers have access to the data. Raw data on data-recording systems will be kept in a locked cabinet in the office of the investigator for a period of seven years following the termination of the study, after which it will be shredded.

Furthermore, there is no link between your names and the experimental questionnaires you completed. We took your names during the recruitment phase only to enable us to keep track of students names that need to be compensated with an extra credit or the opportunity to enter into a prize draw for research participation. However, while collecting your responses, we did not ask for any form of personal identifiers (e.g. names, telephone numbers etc…) and thus there is no way to link your name with the experimental questionnaires you completed, especially with a large sample of 200 participants.

Participants' Gained Benefits

Once you showed up to the lab, you have automatically gained an extra grade towards your final PSYC 201 grade if you are enrolled in PSYC 201 this semester.

If you are not a current 201 student, you gained a chance to win a 50$ cash prize draw. All the names of participants who are not current Psyc 201 students will be written on small separate pieces of paper, and the chairman of the psychology department will draw the name of the winner. The co-investigator will send an email ONLY to the winner of the cash prize on the last day of classes of Spring Semester (May 16th, 2014).

Contact information of the researchers, Counseling Center and the Office of Research Ethics

If you were upset, disturbed or distressed by participation in this experiment or found out information about yourself that is upsetting, disturbing, or distressing, we encourage you to make contact with the Counseling Center in AUB.

Counseling Center
Location: West Hall 2nd Floor Room 210-210 C
Phone: 01- 350000, ext: 3178

Also, if you have any questions or concerns about this study, you are encouraged to contact the principle investigator and/or the co-investigator. You will be provided with a sheet that contains their contact information before you leave the lab.

Principle Investigator
Dr. Rim Saab
Assistant Professor
Psychology Department
American University of Beirut
rs147@aub.edu.lb
Phone: 01-350000, ext: 4367

Co-Investigator
Mona Ayoub
Graduate Student- MA in progress
Psychology Department
American University of Beirut
Email: mya19@aub.edu.lb
Phone: 70- 89 51 15

If you have any other questions or concerns about your rights as a research participant, or to report any feelings of discomfort, you may contact the Institutional Review Board via the following:

Institutional Review Board
American University of Beirut
PO BOX: 11-0236 F15
Riad El Solh, Beirut 1107 2020
Lebanon

Tel: 00961 1 374374, ext: 5445
Fax: 00961 1 374374, ext: 5444
Email: irb@aub.edu.lb

Because there are still other students that will participate in this study, please don't tell anyone about the deception used in this study. If other students found about what we are really studying and then came to participate in our experiment, we wouldn't be able to trust the results of the experiment because their responses could be biased.

Appendix E

Assumptions Testing

Linear multiple regression was used to test for the interaction between identification and repression threat. Repression threat, identification and the interaction term (identification x repression threat) were entered in one step. The dependent variable was willingness to engage in collective action. The assumptions of regression were checked before the test.

Influential Cases

To find influential cases, DFBetas of all variables were found. DFBeta is defined as "the difference between a parameter estimated using all cases and estimated when one case is excluded" (Field, 2013, p: 308). This value helps us detect influential cases by checking the unique contribution each case gives to the analysis. The examination of these values showed that there are no influential cases since none of the absolute values was greater than 1.

Sample Size

Tabachnick and Fidell (p.123-124, 2007) recommend the following rule of thumb for a medium size relationship between the independent variables and the dependent variable: When examining multiple correlations/ regression, then the sample size should be $N \geq 50 + 8m$ (m = number of IVs). For this test, the sample size should be $N \geq 50+8(3) = 74$. Accordingly, a sample size of 129 seems reasonable.

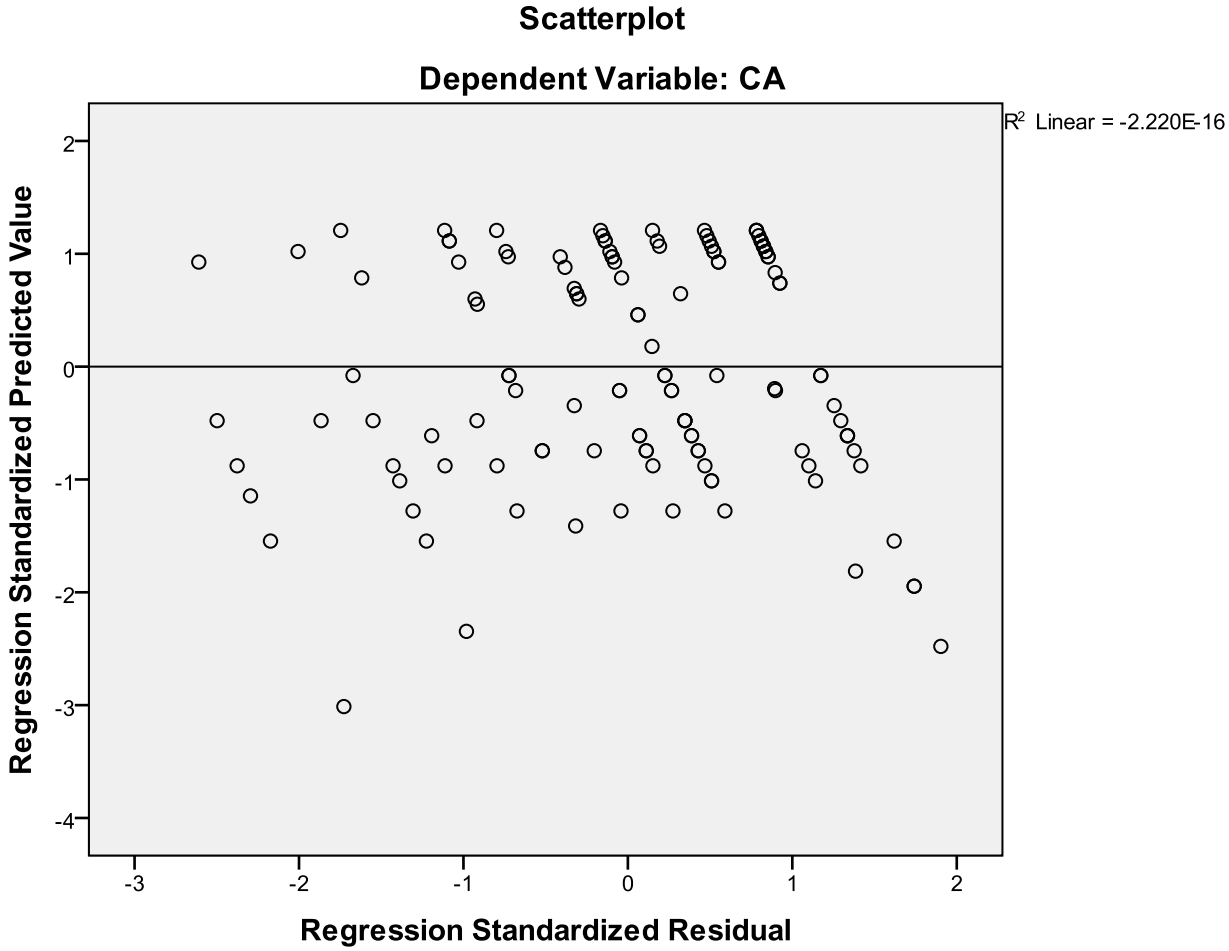
Assumption of Normality

Z-skewness and z-kurtosis statistics were used to test for the normality of the dependent variable (collective action) across the two levels of the independent variable (repression condition). The test showed that the dependent variable was normally distributed in both conditions because the values were lower than ±3.29 (z-skewness was +3.15 in control group and +2.05 in experimental group; z-kurtosis was +1.13 in control group and -.96).

Assumption of Homoscedasticity

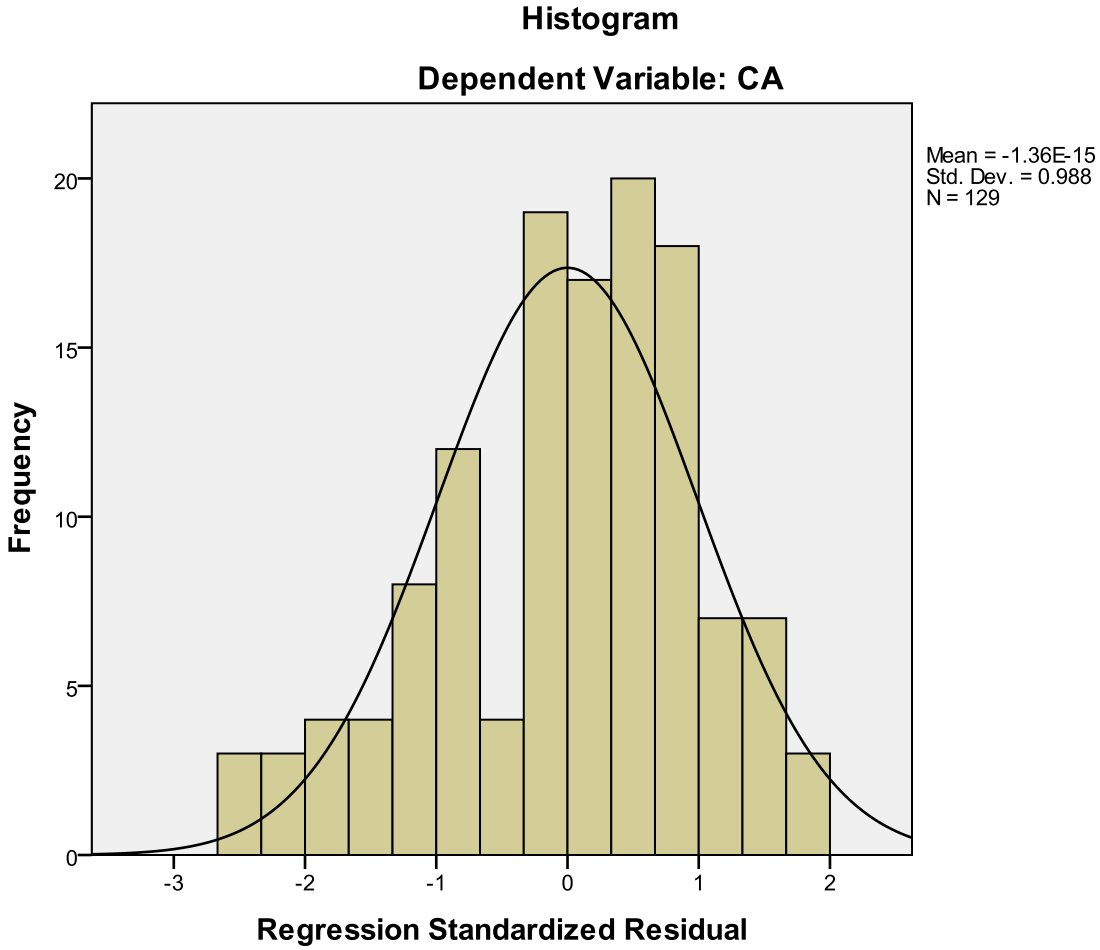
The assumption of homoscedasticity was tested by examining the scatterplot of Z-PRED Vs. Z-RESID.

The residuals scatterplot does not show an oval shape or an even scatter around all scores. This is a violation of homoscedasticity, and the data are said to be heteroscedastic.



Normality of Errors

To inspect the normality of errors assumptions, we looked at the graph of the normality distribution of errors. The graph does not show a normal distribution. Therefore, the assumption of normality of errors is not met.



Independence of Errors

An important assumption of multiple regression is that errors of prediction are independent of one another. This assumption is tested by using the Durbin-Watson statistic (appearing in the model summary table) which varies usually between 0 and 4. A good value for this statistic is 2, however values between 1 and 3 are considered acceptable. In our case the Durbin-Watson value was 2.05 suggesting the assumption is met meaning that there seems to be an independence of errors.

Multicollinearity

None of our tolerance values are below .2 or .1, none of our VIF values is >10 and all our obtained VIF scores are around 1. This information indicates that the assumption of multicollinearity is met.