

## *Cultural Differences in Psychological Reactance: Responding to Censorship*

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### **Abstract**

We examined cultural differences in psychological reactance in response to a threat of social media censorship among Iranian Canadians, European Canadians, and East Asian Canadians. Results indicated that Iranian Canadians (vs. European Canadians and East Asian Canadians) exhibited psychological reactance to a greater degree when the threat came from the government, and this cultural difference was mediated by direct and indirect experience with censorship. When the threat came from a student, however, there were no cultural differences in psychological reactance. These results are consistent with the notion that Iranians have more experience with restriction of information access and repression of freedom, and thus have a heightened sensitivity to freedom threat when it came from a powerful source.

Keywords: cross-cultural differences; reactance; resistance; persuasion; Iranian

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## **Introduction**

People believe that they are free to engage in reasonable behaviors. Research conducted mostly in Western countries suggest that when this freedom to act is taken away from an individual, an individual would experience psychological reactance (Brehm & Brehm, 1981). Conceived of as a “motivational state directed toward the re-establishment of the free behaviors which have been eliminated or threatened with elimination” (Brehm, 1966, p. 9), psychological reactance leads to an increased likelihood to engage in the forbidden behavior (boomerang effect; Brehm & Brehm, 1981) or associate with someone who engages in the forbidden behavior (vicarious boomerang effect; Quick & Stephenson, 2007a). Psychological reactance can also be manifested in increased positive attitude toward the prohibited behavior as well as accentuated anger toward the source of threat (Brehm, 1966; Wicklund, 1974). Furthermore, people are more likely to experience psychological reactance if the concerned freedom is considered important and the source of the threat has the authority to impose the behavioral restriction or interference (Brehm & Brehm, 1981; Pennebaker & Sanders, 1976).

Censorship can be considered as a form of restriction of freedom to fully access information and hence should result in psychological reactance. In an earlier study on censorship and attitude change, it was found that when participants were told that an upcoming speech was censored (vs. not censored), they changed their attitude in line with the censored speech to a higher degree before hearing it, presumably because censorship threatened participants’ freedom to access the information in its entirety (Worchel & Arnold, 1973). Additional studies have also found evidence for the boomerang effect following attempted censorship of TV programs (Bushman & Stack, 1996) and music (Simmons, 1992).

Brehm (1966) initially claimed that psychological reactance cannot be directly measured and thus can only be inferred. Subsequent research, however, conceptualized psychological reactance as a measurable motivational state that is characterized by a combination of negative emotional and cognitive responses. These responses would in turn lead to the above-mentioned psychological consequences (Dillard & Shen, 2005). For example, participants who read a high (vs. low) threat message were less likely to agree with the position advocated by the source and this effect was mediated by a composite index of anger and negative thoughts (Dillard & Shen, 2005; see Quick & Stephenson, 2007b for similar findings).

## **Culture and Psychological Reactance**

One dimension of culture that receives a substantial amount of research attention from social scientists is individualism versus collectivism. People from individualistic cultures, such as those from Western Europe and North America, have a prominent independent self-view, emphasizing individual autonomy and uniqueness, whereas people from collectivistic cultures, such as those from Asia and Africa, have a prominent interdependent self-view, emphasizing group harmony and social hierarchy (Markus & Kitayama, 1991; Triandis, 1995).

Consistent with the idea that maintaining autonomy is a prioritized goal in individualistic cultural settings, it has been found that people from such cultures tend to experience more psychological reactance, compared with those from collectivistic cultures, such as East and South Asian cultures (Jonas, Graupmann, Kayser, Zanna, Traut-Mattausch & Frey, 2009; Savani, Markus & Conner, 2008, Study 5).

Whether attenuated tendency to exhibit psychological reactance in collectivistic cultures generalize to the Iranians, however, is currently unknown. The Iranian culture is considered relatively collectivistic, emphasizing respect for tradition and social hierarchy, as well as commitment to family and community (Bierbrauer, Meyer, & Wolfradt, 1994; Hofstede, 2010). Indeed, according to Hofstede's (1980, 2010), on a scale from 0 (highly collectivistic) to 100 (highly individualistic), the U.S. (90) and Canada (80) were found to be relatively individualistic whereas Iran (40), China (20), and South Korea (18) were found to be relatively collectivistic. Despite the general similarities between the Iranian culture and other collectivistic cultures, however, many Iranians have experienced and/or witnessed censorship (Mollanazar, 2011). This direct or indirect experience with censorship might make them especially sensitive to issues around repression of freedom to access information and exhibit a heightened level of psychological reactance in response to censorship, despite the general collectivistic characteristics of the Iranian culture.

### The Present Study

The purpose of the present study was to examine cultural variations in psychological reactance, focusing on the Iranian culture. Due to their recent experience with censorship, we expected that Iranians would be especially likely to experience psychological reactance in response to a threat of social media censorship, particularly when this threat came from a powerful source. We included two cultural groups to which to compare the Iranian cultural group – people from European and East Asian cultural backgrounds. Consistent with the literature (e.g., Jonas et al., 2009), we expected that individuals from European North American (vs. East Asian) cultural backgrounds would exhibit a higher degree of psychological reactance because of higher level of individualistic orientation. Taken together, we expected that participants from Iranian cultural background would exhibit more psychological reactance than would participants from European cultural backgrounds, who in turn would exhibit more psychological reactance than would participants from East Asian cultural backgrounds when encountering a social media censorship threat that came from a powerful source (i.e., high threat). On the other hand, no cultural differences in psychological reactance were anticipated when encountering a social media censorship threat that came from a non-powerful source (i.e., low threat).

## **METHOD**

This study was conducted in Canada and culture was operationalized as self-identified cultural background.

## Participants

Seventy-five Iranian Canadians (49 female, 22 male, 4 did not report gender;  $M_{\text{age}} = 20.6$ ,  $SD_{\text{age}} = 3.44$ ), 132 European Canadians (91 female, 38 male, 3 did not report gender;  $M_{\text{age}} = 20.0$ ,  $SD_{\text{age}} = 3.93$ ), and 87 East Asian Canadians (69 female, 16 male, 2 did not report gender;  $M_{\text{age}} = 20.2$ ,  $SD_{\text{age}} = 3.32$ ) completed this study. Of the 75 self-identified Iranian Canadian participants, 14 (19%) were born in Canada, 54 (72%) were born in Iran, and 7 (9%) were born in another country (e.g., Norway). Of the 132 self-identified European Canadian participants, 116 (88%) were born in Canada, 16 (12%) were born in the United States or a European country (e.g., Bulgaria). Of the 87 self-identified East Asian Canadian participants, 50 (57%) were born in Canada, 37 (43%) were born in an East Asian country (e.g., China, South Korea). Both gender proportion,  $\chi^2(2, N = 285) = 3.87, p = .15$ , and age<sup>1</sup>,  $F(2, 278) = 0.49, p = .62$ , did not differ among the three cultural groups. Participants were recruited from a psychology undergraduate participant pool.

## Procedure and Measures

This study was conducted online. Consenting participants first answered a few demographic questions (e.g., gender, age, ethnicity). Following this, they were randomly assigned to either the *low* threat or the *high* threat condition in which they read a passage on social media censorship. The passage was purportedly written by a first-year student (low threat condition) or the Canadian Government (high threat condition), promoting social media censorship (see Appendix A). After reading the passage, participants completed the following measures in the order presented and were subsequently debriefed.

### State reactance.

Similar to Dillard and Shen (2005), state reactance in response to the passage on social media censorship was conceptualized as negative affective and cognitive responses, and was measured using nine items created for this experimental context (Iranian Canadians:  $\alpha = .77$ ; European Canadians:  $\alpha = .78$ ; East Asian Canadians:  $\alpha = .64$ ) (e.g., “The writing irritated me”; “The writing aggravated me”; “I think people should have the right to information”; “I think that every individual has the right to take part in social protests”). These items were rated on a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree).

### Trait reactance.

Trait reactance was assessed using the Hong Reactance Scale (HRS; Hong & Faedda, 1996). This measure consists of 11 items (Iranian Canadians:  $\alpha = .83$ ; European Canadians:  $\alpha = .79$ ; East Asian Canadians:  $\alpha = .68$ ), rated on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). A sample item is “I become angry when my freedom of choice is restricted”.

### Attitude toward censorship.

Attitude toward censorship was measured using nine items (Iranian Canadians:  $\alpha = .75$ ; European Canadians:  $\alpha = .84$ ; East Asian Canadians:  $\alpha = .74$ ) from the General

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<sup>1</sup> Thirteen participants did not report their age.

Censorship (GC) subscale<sup>2</sup> of the Attitude Toward Censorship Questionnaire (ATCQ; Hense & Wright, 1992), rated on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). A sample item is “College officials have the right to ban persons with extreme views from speaking on campus”.

#### Self-Construal.

Independence and interdependence were measured using the Self Construal Scale (SCS; Singelis, 1994). This scale contains 12 items to measure independence (Iranian Canadians:  $\alpha = .81$ ; European Canadians:  $\alpha = .72$ ; East Asian Canadians:  $\alpha = .79$ ) and 12 items to measure interdependence (Iranian Canadians:  $\alpha = .79$ ; European Canadians:  $\alpha = .78$ ; East Asian Canadians:  $\alpha = .71$ ), assessed with a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). Sample items include: “I enjoy being unique and different from others in many respects” (independence) and “It is important for me to maintain harmony with my group” (interdependence).

#### Censorship experience.

We used two questions to probe participants’ experience of censorship. The first question was “Have you or anyone that you personally know experienced any type of social media censorship?” The second question was “Have you ever read a book or watched a movie with the knowledge that it was censored in some form?” Participants who answered “yes” to either question were scored as having direct or indirect censorship experience whereas participants who answered “no” to both questions were scored as not having any direct or indirect censorship experience.

#### Results

##### State Reactance

A 3 (Culture: Iranian vs. European vs. East Asian)  $\times$  2 (Threat: Low vs. High) between-subjects ANOVA indicated that there was no main effect of Culture,  $F(2, 288) = 0.29, p = .75, \eta_p^2 < .01$ , or Threat,  $F(1, 288) = 1.46, p = .23, \eta_p^2 = .01$ . As anticipated, the interaction effect between Culture and Threat emerged,  $F(2, 288) = 4.46, p = .01, \eta_p^2 = .03$ . Simple main effect analyses revealed that the effect of Culture was significant in the high threat condition,  $F(2, 288) = 4.42, p = .01, \eta_p^2 = .03$ . As hypothesized, Iranian Canadians ( $M = 4.95, SD = 0.93$ ) experienced psychological reactance to a higher degree<sup>3</sup>, compared with European Canadians ( $M = 4.52, SD = 0.98$ ),  $p = .04$ , and East Asian Canadians ( $M = 4.45, SD = 0.76$ ),  $p = .03$ . Contrary to previous research, however, the latter two groups did not differ from each other,  $p = .97$ . In the low threat condition, the effect of Culture was not significant,  $F(2, 288) = 1.03, p = .36, \eta_p^2 = .01$  (Iranian Canadians:  $M = 4.32, SD = 0.86$ ; European Canadians:  $M = 4.58, SD = 0.98$ ; East Asian Canadians:  $M = 4.62, SD = 0.65$ ), consistent with our expectation. From another angle, while state reactance was higher in the high (vs.

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<sup>2</sup> The original subscale has 11 items but we eliminated two outdated items (e.g., “Homosexual relationships should not be depicted in television shows”).

<sup>3</sup> All post-hoc analyses were conducted with Sidak correction; presented p-values are adjusted p-values.

low) threat condition for Iranian Canadians,  $p < .01$ , there was no difference in state reactance between the two conditions for European Canadians,  $p = .69$ , and East Asian Canadians,  $p = .38$  (see Figure 1).

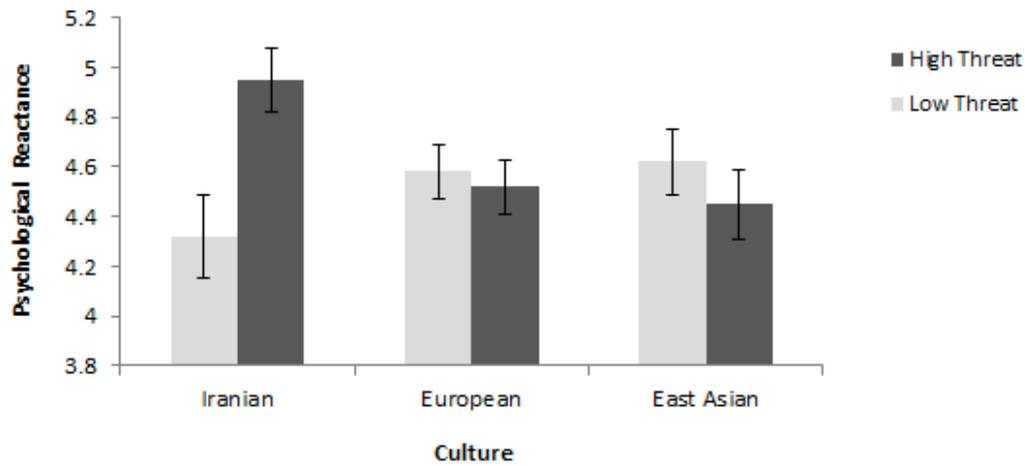


Figure 1: Psychological reactance as a function of culture and threat. Error bars indicate standard errors.

#### Trait Reactance

A one-way (Culture: Iranian vs. European vs. East Asian) between-subjects ANOVA revealed a significant effect of Culture on trait reactance,<sup>4</sup>  $F(2, 289) = 3.69$ ,  $p = .03$ ,  $\eta_p^2 = .03$ . Iranian Canadians ( $M = 3.31$ ,  $SD = 0.57$ ) exhibited higher levels of trait reactance than did European Canadians ( $M = 3.11$ ,  $SD = 0.56$ ),  $p = .03$ , and marginally higher levels of trait reactance than did East Asian Canadians ( $M = 3.13$ ,  $SD = 0.39$ ),  $p = .10$ , while the difference between the latter two groups was not significant,  $p = .99$ .

#### Attitude toward Censorship

A one-way (Culture: Iranian vs. European vs. East Asian) between-subjects ANOVA revealed a significant effect of Culture on attitude toward censorship,  $F(2, 291) = 5.42$ ,  $p = .01$ ,  $\eta_p^2 = .04$ . East Asian Canadians ( $M = 2.50$ ,  $SD = 0.53$ ) had less negative attitudes toward censorship, compared with Iranian Canadians ( $M = 2.18$ ,  $SD = 0.62$ ),  $p = .01$ , and European Canadians ( $M = 2.29$ ,  $SD = 0.70$ ),  $p < .05$ , while the latter two groups did not differ from each other,  $p = .59$ .

#### Self-Construal

<sup>4</sup> Data from one Iranian Canadian participant and one East Asian Canadian participant were removed because they were 3 SDs below the mean of their respective cultural group.

Following previous research (e.g., Holland, Roeder, van Baaren, Brandt, & Hannover, 2004; Jonas et al., 2009), we first z-standardized the scores for independent and interdependent self-construals and took the difference between them with higher scores indicating relatively more independence (or less interdependence). A one-way (Culture: Iranian vs. European vs. East Asian) between-subjects ANOVA revealed a significant effect of Culture on self-construal,  $F(2, 291) = 3.78, p = .02, \eta_p^2 = .03$ .

European Canadians ( $M = 0.22, SD = 1.28$ ) were more independent (or less interdependent) than East Asian Canadians ( $M = -0.21, SD = 0.90$ ),  $p = .04$ , but not Iranian Canadians ( $M = -0.13, SD = 1.46$ ),  $p = .14$ , while the latter two groups did not differ from each other,  $p = .97$ . Although the difference between European Canadians and Iranian Canadians fell short of statistical significance, the overall result pattern was consistent to Hofstede (2010).

Moreover, as results indicated that Iranian Canadians and East Asian Canadians were similarly independent (or interdependent), the enhanced state reactance among Iranian Canadians in response to social media censorship purportedly advocated by the Canadian government (i.e., the high threat condition) should not be attributed to self-construal. Indeed, when self-construal was controlled for, our main finding regarding state reactance remained virtually the same,  $F(2, 287) = 4.49, p = .01, \eta_p^2 = .03$ .

In addition, we tested whether self-construal was related to trait reactance. There indeed was a significant association between self-construal and trait reactance,  $r(292) = .14, p = .02$ , such that participants who were more independent (or less interdependent) reported higher levels of trait reactance.<sup>5</sup> As European Canadians (scored as 1) were more independent (or less interdependent) than East Asian Canadians (scored as 0), we used bootstrapping technique with 5,000 resamples to test the indirect effect of culture on trait reactance, through the effect of self-construal. This indirect effect was significant (point estimate = .06; 95% confidence interval of .02 to .12), conceptually replicating Jonas and colleagues (2009) using a trait measure of reactance.

### **Censorship Experience**

As expected, there was a cultural difference in censorship experience. Iranian Canadians (54.67%) were more likely to report having direct or indirect censorship experience, compared with European Canadians (35.61%) and East Asian Canadians (22.99%),  $\chi^2(2, N = 294) = 17.52, p < .001$ , Cramer's  $V = .24$ .

### **Mediational Role of Censorship Experience on the Relationship between Culture and State Reactance**

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<sup>5</sup> Using this composite measure of independence/interdependence allows for a direct comparison between the present results and that of Jonas and colleagues (2009). If analyzed separately, trait reactance was positively correlated with independence,  $r(292) = .12, p = .049$ , but not with interdependence,  $r(292) = -.05, p = .36$ .

As Iranian Canadians (vs. European Canadians and East Asian Canadians) had more psychological reactance toward social media censorship in the high threat condition as well as past censorship experience, we conducted mediational analyses to examine whether past censorship experience could explain the relationship between culture and state reactance using a bootstrapping technique with 5,000 resamples. Culture (Iranian = 1 vs. European and East Asian = 0) was the independent variable; censorship experience (presence = 1 vs. absence = 0) was the mediator; state reactance was the dependent variable. Censorship experience was a significant predictor of psychological reactance,  $t(156) = 3.72, p < .001$ . Moreover, the indirect effect of culture on psychological reactance, mediated through the effect of censorship experience was significant (point estimate = .22; 95% confidence interval of .08 to .47).

## Discussion

In the current research, we examined psychological reactance across cultures and found that Canadians of Iranian (vs. European and East Asian) cultural background experienced more psychological reactance when faced with a censorship threat that came from the government, but not when the same threat came from a student. In addition, Iranian Canadians and East Asian Canadians were similarly independent (or interdependent) and our main finding held when self-construal was statistically controlled for, suggesting that the enhanced reactance among Iranian Canadians in the high threat condition could not be explained by self-construal. Instead, through mediational analyses, we found that prior experience with censorship among our Iranian Canadian participants contributed to their heightened levels of psychological reactance. Paralleling our main finding, Iranian Canadians reported higher levels of trait reactance than did European Canadians and East Asian Canadians. This pattern of results suggests that the heightened level of psychological reactance among people of Iranian cultural background generalizes across domains and situations and does not seem to be related to self-construal.

Our basic findings regarding self-construal are generally consistent with the literature (e.g., Hofstede, 2010). European Canadians scored higher on independence (or lower on interdependence) than did East Asian Canadians, with Iranian Canadians scoring nominally closer to East Asian Canadians than European Canadians. Yet, there were no differences in state or trait reactance between European Canadians and East Asian Canadians. These findings, on the surface, seem to be at odds with some previous research which suggests a link between independence and increased psychological reactance (e.g., Jonas et al., 2009).

With regard to state reactance in response to the threat of social media censorship from the government, one possibility is that our experimental manipulation was not strong enough to induce reactance for both European Canadians and East Asian Canadians. Although the passage advocating social media censorship was purportedly obtained from a government website, participants from these two cultural groups might still perceive the message as merely a suggestion that is not likely to actually happen. In other words, the threat to freedom was still believed to be extremely low or practically non-existent. If this is the case, then the motivational state of psychological reactance was not likely to be induced in the first place and thus it should not be moderated by independent orientation. Supporting this possibility, there was no

difference in state reactance between the high threat (i.e., government) and the low threat (i.e., student) conditions for both European Canadians and East Asian Canadians. Assuming that the student passage did not induce any freedom threat in our participants (i.e., the low threat condition is practically a no threat condition), the current results imply that our Iranian (vs. European and East Asian) Canadian participants exhibited more psychological reactance in the high threat condition probably because they perceived higher levels of threat.

This raises an interesting issue in interpreting cultural differences in psychological reactance. When a between-condition difference in reactance is observed within each culture, it is reasonable to assume that the threat to freedom induced by the experimental (high threat) condition is perceived to be higher than that induced by the control condition (low or no threat) across cultures. When a between-culture difference in reactance is also observed in the experimental condition, but not the control condition, there exist at least two possibilities. The first possibility is that the level of *perceived threat* in the experimental condition is higher in one culture than the other. The second possibility is that the level of *psychological reactance* in response to the same perceived level of threat is higher in one culture than the other. These two possibilities certainly are not mutually exclusive. Extant research in culture and psychological reactance, however, does not seem to distinguish these two processes. In future research, it is worthwhile to include a no threat control condition and measure perceived level of threat to test the contribution of each of the two processes separately.

Trait reactance, on the other hand, was found to be associated with more independence (or less interdependence). In addition, an indirect effect of culture on trait reactance, through the effect of self-construal, was observed in the current study, consistent to previous research (Jonas et al., 2009). Unlike Jonas et al., however, there was no overall difference in trait reactance between our European Canadian and East Asian Canadian participants. This lack of direct effect, when combined with the significant indirect effect, suggests that there might be an opposing indirect effect involving an unmeasured variable operating in the current sample (Rucker, Preacher, Tormala, & Petty, 2011).

One limitation of the current study is that we tested participants who were primarily first-generation Iranian Canadians (mean percentage of life spent in Iran = 48%) instead of Iranian nationals. The likelihood of experiencing censorship in the past should be lower for our Iranian Canadian sample than for people who have lived in Iran for their entire lives. From this perspective, we might expect a stronger effect when we examine cross-national differences. On the other hand, some of our Iranian Canadian participants might have deliberately chosen to migrate to Canada because of lack of freedom in their home country. From this perspective, our Iranian sample might be biased toward a strong desire for freedom and thus accentuating the cultural effect. In future research, it would be desirable to collect data in Iran to see how psychological reactance might differ between Iranians living in Iran and Iranians living in North America.

## **Conclusion**

The current study contributes to our understanding of psychological reactance by showing how it varies across an individualistic culture and two collectivistic cultures that are explained by their members' prior experiences in restriction to information access in the form of censorship. Overall, our results suggest some differences in psychological reactance between two Asian cultures and highlight the importance of going beyond the broad dimension of individualism versus collectivism when analyzing cultural variations in psychological reactance.

## References

- Bierbrauer, G., Meyer, H., & Wolfradt, U. (1994). Measurement of normative and evaluative aspects in individualistic and collectivistic orientations: The cultural orientation scale (COS). *Individualism and collectivism: Theory, method, and applications*. (pp. 189-199) Sage Publications, Inc, Thousand Oaks, CA.
- Brehm, J. W. (1966). A theory of psychological reactance. New York, NY: Academic Press.
- Brehm, S. S., & Brehm, J. W. (1981). *Psychological reactance: A theory of freedom and control*. New York, NY: Academic Press.
- Bushman, B. J., & Stack, A. D. (1996). Forbidden fruit versus tainted fruit: Effects of warning labels on attraction to television violence. *Journal of Experimental Psychology: Applied*, 2, 207-226.
- Dillard, J. P., & Shen, L. (2005). On the nature of reactance and its role in persuasive health communication. *Communication Monographs*, 72, 144-168. doi: 10.1080/03637750500111815
- Hense, R., & Wright, C. (1992). The development of the attitudes toward censorship questionnaire. *Journal of Applied Social Psychology*, 22, 1666-1675.
- Hofstede, G. H. (2010). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Holland, R. W., Roeder, U., van Baaren, R. B., Brandt, A. C., & Hannover, B. (2004). Don't stand so close to me: The effects of self-construal on interpersonal closeness. *Psychological Science*, 15, 237-242. doi: 10.1111/j.0956-7976.2004.00658.x
- Hong, S., & Faedda, S. (1996). Refinement of the hong psychological reactance scale. *Educational and Psychological Measurement*, 56, 173-182.
- Jonas, E., Graupmann, V., Kayser, D. N., Zanna, M., Traut-Mattausch, E., & Frey, D. (2009). Culture, self, and the emergence of reactance: Is there a "universal" freedom? *Journal of Experimental Social Psychology*, 45, 1068-1080. doi: 10.1016/j.jesp.2009.06.005
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.
- Mollanazar, H. (2011). Text Screening (Censorship) in Iran: A Historical Perspective. *Iranian Journal of Applied Language Studies*, 3, 159-186.
- Pennebaker, J. W., & Sanders, D. Y. (1976). American graffiti: Effects of authority and reactance arousal. *Personality and Social Psychology Bulletin*, 2, 264-267.

Quick, B. L., & Stephenson, M. T. (2007a). The Reactance Restoration Scale (RRS): A measure of direct and indirect restoration. *Communication Research Reports*, 24, 131-138.

Quick, B. L., & Stephenson, M. T. (2007b). Further evidence that psychological reactance can be modeled as a combination of anger and negative cognitions. *Communication Research*, 34, 255-276. doi:10.1177/0093650207300427

Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. *Social and Personality Psychology Compass*, 5, 359-371. doi: 10.1111/j.1751-9004.2011.00355.x

Savani, K., Markus, H. R., & Conner, A. L. (2008). Let your preference be your guide? Preferences and choices are more tightly linked for North Americans than for Indians. *Journal of personality and social psychology*, 95, 861-876. doi: 10.1037/a0011618

Simmons, B. K. (1992). The effect of censorship on attitudes toward popular music. *Popular Music & Society*, 16, 61-67.

Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, 20, 580-591.

Triandis, H. C. (1995). *Individualism and Collectivism*. Boulder, CO: Westview Press.

Wicklund, R. A. (1974). *Freedom and reactance*. Potomac, MD: Lawrence Erlbaum.

Worchel, S., & Arnold, S. E. (1973). The effects of censorship and attractiveness of the censor on attitude change. *Journal of Experimental Social Psychology*, 9, 365-377.

## **Appendix A**

### **The Social Media Censorship Passage**

The wide spread use of social media has led to tremendous changes in how people communicate and share information. The advantages of social media are endless but unfortunately social media has also become a medium for ill-intentioned individuals wanting to harm others. This misuse of social media is not an uncommon phenomenon in Canada as witnessed in the various protests across the nation (e.g. G20 riots, Vancouver Stanley Cup riots, Occupy movement and Quebec student protests), in which certain groups and individuals used social media to organize and encourage violence.

A solution that can decrease the negative impacts of social media is for the government to actively monitor and sometimes censor social media networks to prevent violence and hate speech, and to identify individuals who may pose a threat to public security. This strategy has proved to be effective in England, where in the 2011 riots the BlackBerry Messenger (BBM), an internet based instant messenger, was used to organize riots across England. The government eventually intervened by temporarily shutting down the BBM network to prevent the rioters from organizing mass gatherings and putting a stop to what came to be known as the “BlackBerry riots”.

Censoring social media can be helpful in protecting our society from groups and individuals intent on anarchy who have caused millions of dollars in damages to cities across Canada. The Prime Minister of the UK, David Cameron, speaking during the “BlackBerry” riots said “Everyone watching these horrific actions will be struck by how they were organized via social media. Free flow of information can be used for good. But it can also be used for ill. And when people are using social media for violence we need to stop them.”