

2020

Perceived Islamophobia and Psychological Distress Among Muslim Immigrants in Canada: The Moderating Role of Group Identification

Riffat Ali
Walden University

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Walden University

College of Social and Behavioral Sciences

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Riffat Ali

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Review Committee

Dr. Brandon Cosley, Committee Chairperson, Psychology Faculty

Dr. Peggy Gallaher, Committee Member, Psychology Faculty

Dr. Stephen Rice, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2020

Abstract

Perceived Islamophobia and Psychological Distress Among Muslim Immigrants in

Canada: The Moderating Role of Group Identification

by

Riffat Ali

M.Phil, Psychology

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Social Psychology

Walden University

August, 2020

Abstract

The purpose of this quantitative correlational study with moderation was to examine the differing moderating roles of centrality and in-group superiority in the relationship between perceived Islamophobia and psychological distress. Perceived Islamophobia, group centrality, in-group superiority, and psychological distress were measured using Perceived Islamophobia Scale, the shorter version of the Identity Centrality Scale, Perceived In-Group Superiority Scale, and Kessler Psychological Distress Scale. In this study, a convenience sample ($N = 113$) of Muslim males and females above 18 years old was used. An online survey tool, SurveyMonkey, was used to collect data from Muslim immigrants living in Calgary, Canada. The analytical strategy was to conduct 2 separate hierarchical moderated regression analyses (1 for identity centrality and 1 for in-group superiority) to examine the moderating role group identity. Social identity theory provided the theoretical foundation to answer the question of how perceived Islamophobia impacts the psychological distress of Muslim immigrants in Canada. The findings indicated that perceived Islamophobia significantly predicts psychological distress among Muslim immigrants in Canada, and identity centrality significantly moderates the relationship between perceived Islamophobia and psychological distress by buffering against the negative effects of perceived group discrimination. However, in-group superiority was not a significant moderator in the relationship between perceived Islamophobia and psychological distress. The findings will be beneficial for the practitioners and policy makers to devise better intervention strategies for the well-being of muslim immigrants in Canada to bring a positive social change in society.

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Dedication

This dissertation is dedicated to all the victims of Islamophobia who are being killed, discriminated against, and labeled based on their group identity.

Acknowledgments

I am grateful to almighty Allah, the most beneficent, the most gracious, who blessed me with the strength and energy to complete this dissertation.

I would like to express my deepest gratitude to my dissertation committee members, Dr. Brandon Cosley, Dr. Peggy Gallaher, and Dr. Stephen Rice; with your expertise in methodology and guidance in structuring the study, I was able to complete this study. I am deeply obliged to Dr. Cosley and Dr. Gallaher for their guidance, kindness, and cooperation throughout the dissertation process. This study would have been impossible without their valuable advice and skillful supervision.

I am thankful for the assistance of the Muslim organizations and participants in this research for their cooperation in data collection. Without the kindness and generosity of this assistance, this study would not have been possible. My special thanks are for my brothers Ali Asif and Muhammad Khalid, for all efforts that they have made during data collection.

Words cannot explain my feelings of thanks for ever-strengthening prayers, moral support, and emotional support of my beloved family during my whole study period. I pay special gratitude to my father (who always motivated me to attain this degree), husband, and sons for always being there with me when I needed them.

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Chapter 1: Introduction to the Study

The topic of the present study is perceived Islamophobia and psychological distress among Muslim immigrants in Canada, with a focus on the moderating role of group identification. Through the present research, I aimed to investigate the impact of perceived Islamophobia and its contributing role in psychological distress by considering the moderating role of group identification (identity centrality and in-group superiority) among Muslim immigrants living in Canada.

After 9/11, Muslim immigrants to Canada faced a rise in hate crimes (Perry, 2015), caused in large part by prejudice and discrimination in Canada. According to Leber (2017), police reported a 65% increase in hate crimes against Muslims in Canada from 2016 to 2017. Arguably, much of the rise in such discriminatory treatment was due to increased stereotypical thinking, including the idea that all Muslims are terrorists, fanatics, and fundamentalists (King & Ahmad, 2010). According to Statistics Canada (2017), between 2010 and 2015, 50% of Muslims reported violent hate crimes, 14% reported an injury, and 53% of Muslim women reported being victims of hate crimes. Moreover, 83% of Muslims reported discrimination in the workplace due to religious identity (EnviroNics Institute, 2016). After 9/11, the stigma associated with Muslim identity left Muslims at greater risk for psychological distress, low self-esteem, and anxiety (Abu-Ras & Suarez, 2009; Amer & Hovey, 2012). As a result of increased Islamophobia and discrimination based on stigmatized religious identity, Muslims faced psychological and adjustment problems in Canadian culture (Closson et al., 2013; Yogasingam, 2017). In Canada, Muslims are 3.2% of the total population, and Islam is

the second largest religion (National Household Survey, 2011). However, little attention is paid to how Muslims' feelings of being discriminated against by others affect their well-being (Amer & Bagasra, 2013; Kalek, Mak, & Khawaja, 2010). The findings of this study may be helpful in bringing positive social change by providing information on new intervention strategies to support the well-being of Canadian Muslims. A better understanding of the moderating role of the importance of group identity and in-group superiority may provide better insight to inform the design of new policies and laws for the betterment of Muslims, which may result in positive social reforms and new laws on a national and international level.

In this chapter, I describe previous research findings to aid in understanding the background of the research and the nature of the problem, providing a foundation for the need and purpose of research in this area. Further, the research questions, hypotheses, nature of the study, theoretical framework for the study, and analytical strategy are discussed in this chapter. Additionally, the scope, limitations, delimitations, and significance of the study are included in this chapter, which concludes with a chapter summary.

Background of the Study

Feelings of discrimination against one's own social group by other people, a concept commonly referred to as *perceived Islamophobia* in the context of Muslims, can be defined as Muslims' own perception of societal fear toward their religious group (Kunst, Tajamal, Sam, & Ulleberg, 2012). Past research has demonstrated that among Muslim immigrants, the perception of negative attitudes or treatment associated with

their group identity from other people in society is related to higher levels of depression and anxiety (Al Wekhian, 2016; Awad, 2010). Other researchers have found similar results concerning parallel concepts of perceived Islamophobia such as metastereotypes (i.e., the perception of the majority's negative stereotypes toward one's own group) and perceived group discrimination (i.e., discrimination against one's group as a whole; McCoy & Major, 2003; Vorauer, 2000).

Recent research illustrates that constructs of perceived group discrimination, metastereotypes, and perceived Islamophobia are conceptually and empirically parallel to each other in that they have to do with the perception of negative attitudes or treatment toward one's own group (Goforth et al., 2014; Kunst, Sadeghi, Tahir, Sam, & Thomsen, 2016; Rodriguez Mosquera, Khan, & Selya, 2017). Moreover, each construct has demonstrated a negative relationship with well-being (Branscombe et al., 1999; Kim & Oe, 2009; McCoy & Major, 2003; Vorauer, 2000). For example, previous studies have demonstrated that those who perceive greater levels of discrimination against their group also tend to have more negative well-being (Schmitt, Branscombe, Postmes, & Garcia, 2014). In a similar vein, perceiving that others hold more stereotypical views of one's social group, a concept referred to as *metastereotypes*, has been associated with more negative well-being (Imai, 2017; Suleiman, 2017). Consistent with the conceptual similarities among perceived Islamophobia, metastereotypes, and perceived group discrimination discussed above, recent research findings indicate that Islamophobia has a negative impact on the well-being of Muslim immigrants in western countries (Cherney

& Murphy, 2016; Friedman & Clack, 2009; Gordijn, 2010; Ghaffari & Çiftçi, 2010; Kunst et al., 2012).

Although much of the existing research in this area has demonstrated a consistent negative association between perception of group discrimination, stereotyping, and well-being (e.g., McCoy & Major, 2003; Schmitt et al., 2014), other studies have also demonstrated the importance of group identification in this relationship (Cohen, Garcia & Geoffrey, 2005; Cronin et al., 2012). Group identification can be defined as the extent that identity is considered central and important to one's self-definition (Tajfel & Turner, 1986). For example, previous studies have demonstrated that the importance of group identity moderates the relationship between group discrimination and well-being, such that higher group identification is associated with an even stronger positive relationship between group discrimination and psychological distress (Carnaghi, 2007; Gordijn, 2010; Yzerbyt & Friedman & Saroglou, 2010). Conversely, other studies have indicated that group discrimination may cause higher levels of in-group identification by activating a sense of belonging, which may provide a shield against the negative consequences of perceived group discrimination (Bourguignon et al., 2006; Cronin et al., 2012; Greenaway et al., 2015; Martinovic & Verkuyten, 2012; Stronge et al., 2016). Therefore, existing literature about the moderating role of group identification is less consistent (Suleiman, 2017).

Problem Statement

Despite decades of research, debate persists among scholars regarding whether stronger group identification is protective or harmful for well-being in the presence of

pervasive group discrimination (e.g., Branscombe et al., 1999; McCoy & Major, 2003). A few research findings indicate that stronger group identity protects against the negative outcomes of group discrimination (e.g., Bourguignon et al., 2006; Branscombe et al., 1999; Jasperse, Ward, & Jose, 2012; Kunst, Sam, & Ulleberg, 2013), whereas other studies have shown that this is not always the case and that stronger group identification can result in higher levels of psychological distress (McCoy & Major, 2003). Recent research has also illustrated that members of stigmatized groups who are highly identified with their group can have more psychological distress than members of stigmatized groups who have low in-group identification (Friedman & Saroglou, 2010; Verkuyten & Yildiz, 2007). Thus, the less central that a group is to the self for an individual, the less that perceiving discrimination against the group will have negative effects on the well-being of that individual (Crocker & Major, 2003). This previous research provides evidence that there is an indirect relationship between perceived group discrimination and psychological distress, and this relationship can be understood in a better way by considering the importance of group identification (Friedman & Saroglou, 2010; Goforth et al., 2014; Jasperse et al., 2012; Major & McCoy, 2003; Twenge & Crocker, 2002).

Despite only a few studies examining the moderating role of group identity in the relationship between perceived Islamophobia and well-being among Muslim immigrants, the findings of these studies have reflected what was seen in the other social groups described above (Goforth et al., 2014; Kunst et al., 2016; Rodriguez Mosquera et al., 2017). In some instances, group identity has been found to protect well-being (e.g., Kunst et al., 2013; Schaafsma, 2011; Stuart, 2012; Verkuyten & Yildiz, 2007), whereas other

studies have shown either a negative relationship (Jasperse et al., 2012) or no relationship (Kunst et al., 2013).

Most of these research findings illustrate an ambiguous and indirect relation between perceived Islamophobia and psychological distress concerning group identification. However, the findings of these studies also suggest that the relationship between discrimination and psychological distress varies depending on the source and importance of group identification, which can be different for varied Muslim groups in Canadian social contexts (Jasperse et al., 2012; Kunst et al., 2012; Phalet, Fleischmann, & Hillekens, 2018; Phinney et al., 2001; Schaafsma, 2011). Still, it remains unclear that strong Muslim identity either increases or buffers the negative influences of group discrimination among Muslim immigrants in the Canadian context (Jasperse et al., 2012; Kunst et al., 2012; Schaafsma, 2011).

One reason that there exists so much inconsistency may be differences in meaning surrounding social group identification. In previous literature, group identification was treated as a unidimensional construct. However, a growing body of literature emphasizes that a multidimensional conceptualization is appropriate because it better captures Tajfel's (1978) original conceptualization of social identity as made up of multiple dimensions such as evaluative, cognitive, and affective components (e.g., Cameron, 2004; Cameron & Lalonde, 2001; Leach et al., 2008). Consistent with Tajfel's original ideas, one common distinction found in the recent literature on group identity has to do with the distinction between centrality and superiority (Roccas, Klar, & Livitain, 2006). Centrality refers to the extent to which group membership is considered important to a

person's self-concept (Leach et al., 2008; Luhtanen & Crocker, 1992), whereas in-group superiority refers to the belief that the in-group is better than other groups (Roccas et al., 2008). The difference between these two dimensions of group identification (e.g., identity centrality and group superiority) may lead to different emotional and psychological consequences, which can be harmful or protective for the well-being of the victimized group in the presence of pervasive discrimination (Bilali, 2013). Most of the research showing a negative relationship tends to focus on centrality (e.g., Jasperse et al., 2012; Stuart, 2012), but there are a few studies that show that stronger group identity is also protective (e.g., Kunst et al., 2012; Schaafsma, 2011). However, it is less clear which dimension of group identity is protective (Jasperse et al., 2012; Schaafsma, 2011). Group superiority (the belief that the in-group is better than other groups) may actually be protective because believing that one's group is better (i.e., sense of pride) can alleviate the negative consequences of group discrimination (Iqbal & Bilali, 2018; Leidner et al., 2010). Therefore, in the present study, I examined the different roles that the dimensions of group identity play in moderating the relationship between perceived discrimination and psychological distress of Muslim immigrants in Canada.

Purpose Statement

The purpose of this quantitative correlational study with moderation was to examine the differing moderating roles of centrality and in-group superiority in the relationship between perceived Islamophobia and psychological distress. Perceived Islamophobia, identity centrality, in-group superiority, and psychological distress were measured by using a Perceived Islamophobia Scale (Kunst et al., 2013), the shorter

version of the Identity Centrality Scale (Verkuyten & Yildiz, 2007), Perceived In-Group Superiority Scale (Doosje, Bos, & Loseman, 2013), and Kessler Psychological Distress Scale (Kessler et al., 2002), respectively.

Research Questions and Hypotheses

Research Question 1

Does perceived Islamophobia predict psychological distress among Muslim immigrants in Canada?

Hypothesis 1

Null Hypothesis 1 (H01): Perceived Islamophobia will not be a significant predictor of psychological distress among Muslim immigrants in Canada.

Alternative Hypothesis 1 (HA1): Perceived Islamophobia will be a significant predictor of psychological distress among Muslim immigrants in Canada.

Research Question 2

Is identity centrality a significant moderator of the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada?

Hypothesis 2

Null Hypothesis 2 (H02): Identity centrality will not be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

Alternative Hypothesis 2 (HA2): Identity centrality will be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

Research Question 3

Is in-group superiority a significant moderator of the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada?

Hypothesis 3

Null Hypothesis 3 (H03): In-group superiority will not be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

Alternative Hypothesis 3 (HA3): In-group superiority will be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

Theoretical Framework

The theoretical basis for this study was social identity theory (Tajfel & Turner, 1979), which addresses how people evaluate and define themselves on the basis of the group to which they belong. Social identity theory indicates that increased prejudice against one's own group makes membership identity more salient, which results in in-group favoritism (Tajfel & Turner, 1986). According to Tajfel (1981), social identity provides people with a collective self-concept that has a strong emotional value for the members of the group. Prejudice from the dominant group, however, may harm individuals' self-esteem and perceptions about their own group (Tajfel & Turner, 1986). According to Tajfel and Turner (1979), social categorization plays an important role in forming perceptions and actions against threats related to social identity.

Research findings support social identity theory's assertions that exclusion and prejudice are related to anxiety, distress, and low self-esteem (Baumeister & Tice, 1990; ; Cozzarelli & Karafa, 1998; Frable, 1993). However, social identity theory also predicts that the importance of social identity (i.e., the extent to which group identity is considered central/core to one's self-definition) and belief in group superiority can lead toward different social actions and emotional responses due to higher or lower levels of identification with a minority group (Stryker & Serpe, 1994; Tajfel & Turner, 1986). The research findings support the prediction that increased centrality of identity results in less psychological distress in groups with stigmatized religious identity (e.g., Friedman & Saroglou, 2010; Jasperse et al., 2012). However, few research findings show a positive relation between distress and centrality of religious identity, and few research findings show negative or no relationship (Phalet et al., 2018).

Similarly, according to the rejection identification model (Branscombe et al., 1999), stable and pervasive prejudice across situations by the dominant group results in strong feelings of rejection and increased identification with a minority group. This theory provides a foundation for the suggestion that the magnitude of the relation between perceived Islamophobia and psychological distress may vary due to weak or strong group identification. Social identity theory (Tajfel & Turner, 1979) and the rejection identification model (Branscombe et al., 1999) provide theoretical foundations to answer the question of how perceived Islamophobia impacts the well-being of Muslim immigrants in Canada. On the basis of social identity theory (Tajfel & Turner, 1979) and the rejection identification model (Branscombe et al., 1999), it was assumed in the

present research that perceived Islamophobia would have a direct impact on psychological distress and the importance of group identification, and in-group superiority would predict the relation between perceived Islamophobia and psychological distress in a different way among Muslim immigrants in Canada.

Nature of the Study

The design of this quantitative study involved the use of a cross-sectional survey (predictive correlation research design with moderation) to examine the impact of perceived Islamophobia on psychological distress by considering the moderating role of group identification. It was assumed that different levels of importance for group identification to self (centrality) and in-group superiority would have different impacts on perceived Islamophobia and psychological distress among Muslim immigrants. This design was suitable to answer the research questions because the focus of the study was making predictions regarding relationships rather than making causal inferences. Perceived Islamophobia and group identification (centrality & in-group superiority) were independent variables in this study. The psychological distress of Muslim immigrants living in Canada was the dependent variable.

In this study, the target population was Muslim immigrants in Canada above 18 years old. The inclusion criteria for the final sample encompassed both male and female Muslim immigrants above 18 years of age. Individuals under 18 years of age and individuals with non-Muslim religious identities were not included in the sample. A nonprobability sampling strategy (convenience sampling) was used in the present study. The sample consisted of Muslim immigrants living in Canada. The questionnaire was

administered only to those participants who agreed to participate in the research and who understood English. The participants were recruited through Muslim organizations and religious institutions with strong links to the Muslim community.

The Perceived Islamophobia Scale (PIS) by Kunst et al. (2013) was used to measure Muslims' own perceptions of societal fear toward their own religious group. The PIS is based on 12 items with three subscales (i.e., general fear of Islam and Muslims, fear of Islamization, and Islamophobia in media). Identity centrality was measured by using a shorter version of Identity Centrality Scale developed by Verkuyten and Yildiz (2007). The scale measures the importance of group identity to the self by indicating agreement with three items from 1-6 points on a Likert scale. Higher scores on all of these items indicate higher levels of identification with the group. Perceived in-group superiority was measured using Perceived In-group Superiority scale, a four-item instrument developed by Doosje et al. (2013), which measures in-group superiority on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). Higher scores on all of these items indicate higher levels of in-group superiority. The degree to which Muslim immigrants experienced psychological distress was measured with the 10-item version of Kessler's Psychological Distress Scale (Kessler et al., 2002), which assesses symptoms of nervousness, anxiety, and depression on a 5-point Likert-type scale ranging from 1 (*none of the time*) to 5 (*all of the time*). The highest scores on all 10 items represent a higher level of psychological distress.

The analytical strategy was to conduct two separate hierarchical moderated regression analyses, one for identity centrality and one for in-group superiority. In the

first step, the main effects of group identity (centrality or superiority) and perceived Islamophobia were entered to determine the main effect relationships with psychological distress. At the second step, the interaction between group identity and perceived Islamophobia was entered to examine the moderating role of group identity in the relationship between perceived Islamophobia and psychological distress.

Definitions of Theoretical Constructs

In the present study, the independent variable, *perceived Islamophobia*, was defined as Muslims' own perception of societal fear toward their religious group (Kunst et al., 2012). The construct of *group identification* was defined as the extent that identity is considered central and important to one's self-definition (Tajfel & Turner, 1981). The construct of *centrality* was defined as the extent to which group membership is considered important to a person's self-concept (Leach et al., 2008; Luhtanen & Crocker, 1992). *In-group superiority* was defined as the belief that the in-group is better than other groups (Roccas et al., 2008). The dependent variable, *psychological distress*, was defined as feelings of anxiety and depression (Kessler et al., 2002).

Definitions of Key Terms

Metastereotype: The perception of the majority's negative stereotypes toward one's own group (Vorauer, 2000).

Perceived group discrimination: Discrimination against one's group as a whole (McCoy & Major, 2003).

Social identity: Individuals' sense of who they are based on their group membership (Tajfel, 1979).

Rejection identification model: Suggests that rejection by an out-group can lead minority group members to identify more with their in-group, by buffering them from the negative effects of discrimination.

Assumptions

It was assumed that the voluntary nature of the study would not bias the research results. Participants were not forced to answer the questions, and they could quit the study at any time. It was also assumed that participants in this research would answer the questionnaire in an honest way without any pressure or biases. Additionally, it was presumed that measures used in the research, Perceived Islamophobia Scale (Kunst et al., 2013), the shorter version of the Identity Centrality Scale (Verkuyten & Yildiz, 2007), a scale of Perceived In-Group Superiority (Doosje et al., 2013), and Kessler Psychological Distress scale (Kessler et al., 2002), would be appropriate means to measure the relevant variables. It was also assumed that the sample would appropriately represent the target population to generalize findings.

Moreover, it was assumed that all of the assumptions of using hierarchical moderated regression would be satisfied. First, multiple/hierarchical regression requires a linear relationship between the outcome variable and the independent variables, which was tested by creating scatterplots (Warner, 2013). Second, multiple/hierarchical regression requires that the errors between observed and predicted values (i.e., the residuals of the regression) are normally distributed (Warner, 2013). The residuals plots (e.g., histograms or Q-Q plots) were generated to see the normality requirements for the distribution of the residuals. Third, multiple linear regression involves an assumption that

there is no multicollinearity in the data, and this assumption was checked by creating a correlation matrix (Warner, 2013). Lastly, a scatterplot of residuals versus predicted values was created to check for homoscedasticity (Warner, 2013).

Scope and Delimitations

The results of this study may be generalized only to Muslim immigrants (above 18 years of age) living in Calgary, Canada, belonging to any ethnicity. The sample consisted only of participants who understood English; participants who did not understand English were not included in the final sample. The focus of the study was making predictions regarding relationships rather than making causal inferences. Moreover, the study was focused on experiences related to group discrimination rather than personal experiences of discrimination. Only two dimensions of group identification (centrality & in-group superiority) were used as moderating variables in the study. Social identity theory and the rejection identification model provided the theoretical foundations for the study.

This study contributes to the long debate in social psychology concerning which dimensions of group identity are protective or harmful. Moreover, the findings of this research can be helpful in devising appropriate intervention strategies to promote the well-being of Muslim immigrants living in Calgary, Canada. The findings of the study may provide insight into the effects of perceived Islamophobia on the well-being of Muslim immigrants living in Canada.

Limitations

- Due to the cross-sectional and correlational nature of the study, causation could not be assessed.
- Due to lack of resources (time, money), the results cannot be generalized to all Muslims living in Canada.
- The findings of the research are applicable only to those Muslim immigrants living in Calgary (Canada) who understand English.
- Due to the convenience sampling strategy, the findings of the research cannot be applied to a larger population.
- Internal validity may be weak because of the lack of control in cross-sectional research methods.

Significance

The findings of this research fill a gap in understanding the impact of perceived Islamophobia on, and the moderating role of group identification in, psychological distress among Muslim immigrants in Canada who are victims of prejudice and discrimination due to increased Islamophobia (Perry, 2015). This study fills an important gap in the literature by testing the difference between centrality and superiority as a moderator of group identification and its impact on the well-being of Muslim immigrants in Canada (Kunst et al., 2012). The findings of this research provide the insight that not only does perceived Islamophobia have a direct negative impact on well-being, but also the reaction can vary due to the distinction between different dimensions of group identification.

Moreover, the findings of this research may be helpful to those developing intervention programs for the well-being of Muslim immigrants living in Canada by addressing the moderating role of group identification. These findings may help therapists and counselors to consider group identity as a significant element of the well-being of Muslim immigrants as they conduct counseling and therapeutic sessions with members of this population. Similarly, the findings of this research may be very beneficial in supporting social reforms to promote peace, economic development, better policies, and positive relationships on a national and international level by reducing stereotyping, prejudice, and discrimination associated with the Muslims' religious identity.

Summary

Previous studies have shown that the link between perceived group discrimination and psychological well-being may vary depending on the moderating role of group identification (Asvat & Malcarne, 2008; McCoy & Major, 2003; Schmitt, Branscombe, & Postmes, 2003). There are two principal perspectives in the previous literature regarding the role of group identification. According to the rejection identification model, long-term discrimination received from the dominant group results in increased identification with the in-group, which buffers the negative effects of discrimination (Branscombe et al., 1999). Another perspective on the moderating role of group identification indicates that perceived group discrimination can have a negative impact on psychological well-being (Major & McCoy, 2003). Social identity theory posits that prejudice and

discrimination from the dominant group harm individuals' self-esteem and perceptions about their own group.

However, there are mixed research findings regarding the role of group identification in the relationship between perceived Islamophobia and psychological distress (Jasperse et al., 2012; Kunst et al., 2012; Schaafsma, 2011). One possible reason for these mixed and inconsistent findings is that most of the previous research has focused only on the unidimensional aspect of group identity, whereas the multidimensional approach can provide a better explanation of which dimensions of group identity are protective or harmful. Different dimensions of group identity (centrality & in-group superiority) may lead toward different emotional outcomes, which can be protective or harmful for the well-being of Muslim immigrants living in Canada. Against this background, I sought in the present research to determine the differing moderating roles of centrality and in-group superiority in the relationship between perceived Islamophobia and psychological distress.

Chapter 2 provides a review of the main theoretical frameworks of this study, social identity theory and the rejection identification model, concerning the importance of group identity and belief in in-group superiority. Additionally, historical and recent research related to perceived Islamophobia, the moderating role of group identity, and psychological distress is presented. The chapter also contains a review of research literature that challenges findings in the field, which clarifies the limitations and gaps in the previous research. This chapter ends with implications of past research and its influence on the present study.

Chapter 2: Literature Review

Introduction

In the present research, I aimed to find the relationship between perceived Islamophobia and the psychological distress of Muslim immigrants living in Canada by considering the moderating role of group identification. Although the majority of Muslims consider Canada a safe place compared to other western countries (Adams, 2009), Islamophobia still exists in Canada. In the present research, I examined how perceptions of Islamophobia are related to psychological distress among Muslim immigrants, and how this experience is further influenced by group identity.

Previous research findings indicate that the relationship between group discrimination and psychological well-being is influenced by group identity (Litchmore & Safadar, 2014). However, group identity is not a single unitary construct, and other dimensions of group identity can predict the relationship between group discrimination and psychological well-being in a better way (Branscombe et al., 1999; McCoy & Major, 200). In this study, I assumed that two dimensions of group identity (e.g., identity centrality & in-group superiority) would predict the relationship between perceived Islamophobia and psychological distress differently. I examined the different moderating roles of identity centrality and in-group superiority to determine which dimension of group identification is protective or harmful for the well-being of Muslim immigrants in Canada.

The Problem Statement

In the scenario of increased Islamophobia (i.e., fear toward Muslims and Islam), examination of the relationship between perceived Islamophobia and psychological distress is not new, but findings have been inconsistent (e.g., Jasperse et al., 2012; Kunst et al., 2013). A few research findings indicate that group identification is protective (e.g., Kunst et al., 2013; Schaafsma, 2011; Verkuyten & Yildiz, 2007), whereas others indicate that it can be harmful to well-being (e.g., Friedman & Saroglou, 2010; Jasperse et al., 2012; Kunst et al., 2012). The findings may be inconsistent because group identity has multiple dimensions, and it has not always been treated in the same manner in past research. The multidimensional approach can be helpful in determining the moderating role of group identity in the relationship between group discrimination and psychological distress among Canadian Muslims.

Moreover, the multidimensional approach can provide a better explanation of the protective or harmful role of group identity (Roccas et al., 2008). In the present study, I sought a better understanding of how different dimensions of group identity can affect psychological distress. The difference in two aspects of group identity (centrality & in-group superiority) may lead to different emotional and psychological consequences as a result of perceived Islamophobia among Canadian Muslims.

Against this background, I aimed in the present research to determine the effects of perceived Islamophobia among Muslim immigrants in Canada by considering the moderating role of different dimensions of group identification (e.g., centrality & in-group superiority). It was assumed that the various aspects of group identity would

predict psychological distress differently, which would be measured using the Perceived Islamophobia Scale (Kunst et al., 2013), shorter version of the Identity Centrality Scale (Verkuyten & Yildiz, 2007), Perceived In-Group Superiority Scale (Doosje et al., 2013), and Kessler Psychological Distress Scale (Kessler et al., 2002).

Research Strategy

I used the Walden University library to identify and retrieve peer-reviewed articles using electronic databases. I used databases such as PsycARTICLES, PsycINFO, Science Direct, JSTOR, and Google Scholar to find recent and seminal work on Islamophobia. Many books and dissertations, spanning decades of research and related to social identity theory, were reviewed as well. The list of search terms I used included *perceived Islamophobia*, *perceived group discrimination*, *metastereotypes*, *stigma*, and *stigmatized religious identity*. Further, I searched with potential moderating variables such as *group identification*, *centrality*, and *in-group superiority*. Last, I searched using the following combinations of terms: *perceived Islamophobia and psychological distress*; *the centrality of group identity and psychological distress*; and *in-group superiority and psychological distress*.

In this chapter, I first provide a review of the main theoretical frameworks of this study, social identity theory and the rejection-identification model, to ensure that I address the concepts of group identity and belief regarding in-group superiority. Then, I shift my focus to research related to perceived Islamophobia, the moderating role of group identity, and psychological distress. Moreover, I include research findings related to protective or harmful effects of group identification in this literature, to provide a

foundation for the related research questions and hypotheses. Additionally, I incorporate in this chapter research literature that addresses challenges, issues, gaps, and limitations related to this field. This information is helpful in discussing the results of the research. Overall, in this chapter, I provide an overview of the previous research, its influence on the present study, and what remains to explore.

Theoretical Foundation

Social Identity Theory

The theoretical basis for this study was social identity theory (SIT; Tajfel & Turner, 1979). SIT starts with the assumption that people evaluate and define themselves by the group to which they belong. According to SIT, a social group is composed of people who see themselves as members of the same social category and share the same social identity based on common characteristics, ideologies, and goals (Ellemers et al., 1999; Ellemers & Haslam, 2011; Hogg & Turner, 1987; Tajfel & Turner, 1979). According to SIT, these social identities become more salient when groups interact with each other based on specific social categories such as region, religion, ethnicity, and profession (Tajfel & Turner, 1979; Turner & Reynolds, 2011).

According to Tajfel (1981), social identity provides people with a collective self-concept, which has a strong emotional value for the members of a group. However, prejudice from the dominant group may harm individuals' self-esteem and their perceptions about their own group (Tajfel & Turner, 1986). The perception of social degradation against the group to which a person belongs can result in negative consequences for well-being. Previous research findings support a relationship between

the stigma associated with a person's group and increased psychological distress among the members of stigmatized groups (Friedman & Saroglou, 2010). Further, the findings of previous research support the notion of SIT that people define themselves based on the group to which they belong, and that awareness that a group to which a person belongs is a target of prejudice can result in negative emotional outcomes for the members of the group (Jasperse et al., 2012; Kunst et al., 2012).

Social identity theorists also explain that social categorization plays an important role in forming an individual's perception of and actions against threats related to social identity. According to SIT, self-categorization plays a significant role in interpreting the social world in terms of the in-group (i.e., the social group to which the individual belongs) and out-group (i.e., the social group to which the person does not belong; Tajfel et al., 1971; Turner et al., 1987). When people categorize themselves as a part of an in-group, the in-group becomes the core part of self-definition, and people realize the characteristics of the in-group as representing part of themselves (Tropp & Wright, 2001). Thus, group identity becomes the source of self-definition rather than the individual traits and characteristics of the person.

Further, SIT posits that group identity is an integral part of a person's self and provides people with a sense of social support. However, there can be variation in the level of group identification due to differences in cognitive, affective, and evaluative dimensions that make group identity a central part of people's social life (Ellemers et al., 1999). Previous research findings in the field of social psychology reveal that people with high in-group identification are more likely to perceive themselves as in-group members

(e.g., Jetten, Spears, & Manstead, 1997), showing more commitment to the in-group in adverse conditions (e.g., Ellemers et al., 1999), and to be more anxious about how out-groups treat their group (e.g., Tropp & Wright, 2001). Recent research findings support assertions from social identity theorists that experiences of exclusion and prejudice lead to increased anxiety, low self-esteem, and distress (Baumeister & Tice, 1990; ; Cozzarelli & Karafa, 1998; Frable, 1993). Based on this theoretical background, I assumed in the present study that perceived Islamophobia would have a direct negative impact on psychological distress among Canadian Muslims.

SIT also predicts that differences in the importance of social identity can lead to different social actions and emotional responses (Stryker & Serpe, 1994; Tajfel & Turner, 1986). The degree of identification with a particular group can direct a person's behavior and perceptions. A higher degree of identification is associated with a greater likelihood of perceiving oneself as a member of the in-group than lower identification with the group (Jetten et al., 1997). The research findings support the prediction that the increased centrality of group identity results in higher psychological distress among people with stigmatized group identity (e.g., Friedman & Saroglou, 2010; Jasperse et al., 2012). However, other research findings show a positive relation between distress and centrality of the religious identity, or a negative or no relationship between the two variables (Burrow, 2010; Phalet et al., 2018).

One possible reason for these inconsistent findings is the other dimension of social identity that is called *in-group superiority*. According to SIT, a multidimensional approach toward group identity can provide a better picture of its role in determining the

relationship between perceived group discrimination and psychological distress. Another dimension of group identity is a belief in group superiority, which can be protective in the presence of pervasive discrimination (Tajfel & Turner, 1979). The research findings support the assertion that a stronger belief in group superiority can lead to different psychological consequences in the presence of pervasive group discrimination (Iqbal & Bilali, 2018). Thus, SIT provided a theoretical foundation for this study to test the possible moderating role of centrality and in-group superiority in determining the relationship between perceived Islamophobia and psychological distress.

Literature Review Related to Key Variables

Perceived Group Discrimination and Psychological Distress

Perceived discrimination can be defined as “the level or frequency of discriminatory incidents to which people perceive they (or members of their group) have been exposed” (Major & Sawyer, 2009, p. 90). Previous research findings indicate a consistent positive relationship between group discrimination and psychological distress among people belonging to different stigmatized groups (Schmitt et al., 2014). According to Tajfel and Turner (1986), the social group provides a collective self-concept to people, which has strong emotional value for the members of groups. When people recognize that their in-group faces pervasive discrimination from the dominant culture, their psychological well-being declines because the fundamental need for inclusion is thwarted by discrimination. Previous research findings provide strong evidence that more perceived discrimination against one’s group is associated with more psychological distress (Klonoff, Landrine, & Campbell, 2000).

Other correlational, longitudinal, and experimental research findings also indicate that perceived group discrimination has a negative effect on the well-being of disadvantaged groups (e.g., Barnes et al., 2004; Kessler, Mickelson, & Williams, 1999; Noh et al., 1999; Williams, Yu, Jackson, & Anderson, 1997). According to research findings, factors such as age, gender, ethnic, racial, and religious identity can provide a foundation for group discrimination. Whatever the cause of discrimination, perceived discrimination against one's group contributes to a higher level of psychological distress among the members of socially disadvantaged groups (Kessler et al., 1999; Thoits, 1983).

Recent studies have also demonstrated that increased perception of group discrimination is related to decreased psychological well-being among the members of stigmatized groups. Jang, Chiriboga, and Small (2008) conducted research to determine the effects of perceived discrimination on the psychological well-being of people. The sample ($N = 1,554$; age range = 45 to 74) provided supportive evidence that there is a negative relationship between perceived group discrimination and psychological well-being. The increased perception of group discrimination was related to decreased well-being. However, the relationship between perceived group discrimination and psychological distress was moderated by sense of control. The findings of the study indicate that in examining the negative or positive effects of perceived discrimination on psychological well-being, the role of other moderating variables should be considered.

Similarly, Thijs, Hornstra, and Charki (2018) investigated the associations between perceived group discrimination and psychological well-being among 354 Moroccan-Dutch adolescents. Results indicate that minority group members can be

negatively affected by discrimination, even if they do not experience it firsthand. Higher perceived group discrimination was associated with low self-esteem. However, this relationship was moderated by stronger in-group identification. A positive relationship was found among higher identifiers and self-esteem. The findings of this research suggest that group identification can be an important moderator of the relationship between perceived group discrimination and psychological distress.

Islamophobia and Psychological Distress

In the scenario of increased Islamophobia, research findings indicate a similar relationship between perceived group discrimination and psychological well-being as seen in other social groups (Goforth et al., 2014; Jang et al., 2008; Kunst et al., 2016; Rodriguez Mosquera et al., 2017; Thijs et al., 2018). Recent research findings indicate that stigmatized religious identity has a negative impact on the well-being of Muslim immigrants in western countries due to increased islamophobia (Cherney & Murphy, 2016; Friedman & Saroglou; 2010; Gordijn, 2010; Kunst et al., 2011). Internationally, there has been a rise in negative attitudes against Muslims, especially in the years since 9/11 (Perry, 2015). Possible reasons for these negative attitudes include lack of awareness about Muslims and Islam, as well as the perception of Muslims as a homogeneous group (Macdonald, 2015). According to research findings, negative stereotypes propagated through media in the western world have played a significant role in promoting negative attitudes toward Muslims by presenting them as one homogeneous group. Muslim cultural practices and rituals have been portrayed negatively in media, causing more fear

and anxiety concerning Muslims in the western countries, ultimately leading toward more discrimination and psychological distress (Allen & Nielsen, 2002, Saeed, 2007).

Increasingly negative attitudes against Muslims have been described in different ways in the literature, using concepts such as social anxiety, xenophobia, stereotypes, racism, and discrimination. In most of these studies, Islamophobia has been treated as anti-Muslim hostility, fear, and discrimination against Muslims on a personal or group level (Lee et al., 2013). Previous research has shown that there is disagreement regarding the definition of the term *Islamophobia* and the way it should be studied (Amer & Bagasra, 2013; Bleich, 2011; Elchardus & Spruyt, 2013; Lee et al., 2013). In the present research, a definition adopted from Gottschalk and Greenberg (2008) is used, which defines Islamophobia as irrational fear against Islam and Muslims. Kunst et al. (2012) used this definition, arguing that Islamophobia is an “affective part of social stigma towards Islam and Muslims based in fear,” which can occur on a personal or group level (Kunst et al., 2012, p. 2). However, Islamophobia occurs (personal vs. group) can have different effects on the psychological well-being of an individual and stigmatized group (Kunst et al., 2012). The experience of Islamophobia on a personal level may result in low self-esteem and less identification with the group, whereas group-level experiences of Islamophobia may result in increased self-esteem and strong group identification (Armenta & Hunt, 2009). The social context, personal versus group-level experiences of discrimination, and the importance of group identity can lead toward differences in the perception of discrimination and its effects on psychological well-being (Armenta & Hunt, 2009; Bilali et al., 2016; McCoy & Major, 2003).

However, the problem is that most of the previous research literature is focused on that how the fear of Islam and Muslims affects the perception and well-being of other people, and less attention is paid on that how the Muslim's own perception of this social anxiety affects their well-being. According to research findings, perception of negative attitude towards one's stigmatized religious identity can lead to different reactions such as avoidance from the dominant group, depression, psychological distress, anxiety and less identification with the national identity (Kunst et al., 2012). There are many studies so far, which aimed to investigate the growing rate of Islamophobia and increased discriminatory acts against Muslims, such as getting a job, traveling, and hiring (Creighton & Jamal, 2015). However, there are few research findings concerning perceived Islamophobia, to examine how perception about one's derogated position in the society affect the well-being of Muslims. So, the present research aims to investigate the relationship between group discrimination and psychological distress of Muslim immigrants in Canada by using the newly developed construct "Perceived Islamophobia" (Kunst et al., 2012).

Perceived Islamophobia

Perceived Islamophobia has defined as "Muslim minorities" own perception of Islamophobia [at the group level] in their societies of settlement" (Kunst et al., 2012). The present research will use the term of perceived Islamophobia and its effects on Muslim's psychological well-being. Previous studies indicate a lot of ambiguities in measuring and operationalizing the perception of Islamophobia among Muslim Immigrants. These studies focused on ethnic discrimination and Islamophobia to measure

the religious-based maltreatment, which does not align with the definition of perceived Islamophobia (Kunst et al., 2012; King et al., 2014; Verkuyten & Yildiz, 2007). Thus, most of the measures and operational definitions used in the previous research to measure Muslim's own perception of Islamophobia do not capture the construct of perceived islamophobia fully, which is a big problem to understand its impact on the psychological well-being of Muslims immigrants objectively.

Previous research literature illustrates that constructs of perceived group discrimination, meta stereotypes, and perceived Islamophobia are conceptually and empirically parallel to each other in that they have to do with the perception of negative attitudes or treatment towards one's own group (Goforth et al., 2014; Kunst et al., 2016; Rodriguez Mosquera et al., 2017). Moreover, each construct has demonstrated a negative relationship with well-being (Branscombe et al., 1999; Kim & Oe, 2009; McCoy & Major, 2003; Vorauer, 2000). For example, previous studies have demonstrated that those who perceive greater levels of discrimination against their group also tend to have more negative well-being (Schmitt et al., 2014). In a similar vein, perceiving that others hold more stereotypical views of one's social group, a concept referred to as meta stereotypes, has also been associated with more negative well-being (Imai, 2017; Suleiman, 2017). Consistent with the conceptual similarities among perceived Islamophobia, meta-stereotypes, and perceived group discrimination discussed above, recent research findings indicate that Islamophobia has a negative impact on the well-being of Muslim immigrants in western countries (Cherney & Murphy, 2016; Friedman & Clack, 2009; Gordijn, 2010; Ghaffari & Çiftçi, 2010; Kunst et al., 2012). Similarly, other researchers have found

similar results by conducting the research on parallel concepts of perceived Islamophobia such as meta stereotypes (the perception of the majority's negative stereotypes towards one's own group) and perceived group discriminations (discrimination against one's group as a whole) (McCoy & Major, 2003; Vorauer, 2000).

The recent research illustrates that perceived Islamophobia has negative effects on the well-being of the Muslims immigrants living in western countries. After 9/11, negative portrayal of Muslims in media played an important role in perceiving all Muslims as one homogenous group, which result in increased surveillance, social exclusion, and rejection on the national and international level. The perception of all these negative attitudes towards one's religious group results in negative consequences such as anxiety, identity confusions, and depression among Muslim immigrants regardless of personal experiences of discrimination (Mac an Ghail & Haywood, 2015).

The perceived group rejection and realization that a person belongs to a socially degraded groups result in an increased perception of discrimination, feelings of depression, and anxiety among Muslim immigrants in western countries. Gaffari and Citific (2010) 's research findings indicate that the perception of negative attitudes towards Muslim identity is positively related to distress in Muslim immigrants. Furthermore, it is also found that perceived discrimination plays a moderating role in determining the level of self-esteem, anxiety, and depression among Muslim immigrants (Ghaffari & Ciftci, 2010; King et al., 2014; Verkuyten & Yildiz, 2007). These findings suggest that there is a direct relationship between perceived Islamophobia and psychological distress. However, these findings also suggest that the role of other

moderating variables should be considered while determining the relationship between these two variables.

Previous research findings illustrate a consistent negative relationship between perceived Islamophobia, group discrimination, metastereotypes, and psychological well-being (e.g., Branscombe et al., 2014; McCoy & Major, 2003). However, there are other research findings which indicate that there is an indirect relationship between perceived Islamophobia and well-being, which should be investigated by considering the moderating role of group identification (Cronin et al., 2012; Cohen & Garcia, 2005). So, there is a need to consider the importance of group identification in determining the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada.

Moderating Role of Group Identification

Group identification can be defined as the extent that identity is considered central and important to one's self-definition (Tajfel & Turner, 1981). According to social identity theory, group identification plays a vital role in determining the emotional consequences of perceived discrimination against one's group (Tajfel & Turner, 1981). Rejection identification model (RIM) has been developed out of SIT to explain how group identity should explain perceived discrimination. According to rejection identification model (Branscombe et al., 1999), a stable and pervasive prejudice across the situations by the dominant group results in intense feelings of rejection and increased identification with minority group by making minority status more salient which has a buffering effect to protect against negative emotional outcomes (Branscombe et al., 1999). Previous studies

have shown support for RIM and provide evidence that the link between perceived group discrimination and psychological well-being may vary depending on the moderating role of group identification (Asvat & Malcarne, 2008; Schmitt, Branscombe, & Postmes, 2003; McCoy & Major, 2003) RIM model provides a foundation that the magnitude of the relation between perceived Islamophobia and psychological distress can vary due to the weak or strong group identification.

Rejection identification model explains that members of minority groups cope with the group discrimination by increasing their identification with their in-group. The group provides a sense of support and belongingness, which further protects against the negative consequences of group discrimination (Redersdorff, Martinot, & Branscombe, 2004; Schmitt, Spears, & Branscombe, 2003). Previous research findings provide strong evidence that perceived discrimination results in increased identification with the in-group and that group identification, in turn, promotes psychological well-being among immigrants (Giamo, Schmitt, & Outten, 2012). Thus, group identification moderates the relationship between perceived discrimination and well-being by reducing the negative effects of perceived discrimination among a multiracial group of immigrants. The RIM has also received some support with Muslim minorities groups. However, the findings of these studies are inconsistent. For example, Verkuyten and Yildiz (2007) found that perceived discrimination predicts strong group identification among Muslim Dutch-Turks, while in a study conducted by Kunst et al. (2012), RIM was supported only for a sample of German Turks and no such relation was found among Norwegian Pakistanis. Based on this model's assumption, the present research assumes that people with a higher

level of group identification will be less affected by the negative effects of group discrimination, and there will be a negative relationship between perceived group discrimination and psychological well-being.

However, according to McCoy and Major (2003), stronger group identification is harmful to well-being because the realization that a person belongs to a stigmatized group can lead to psychological distress. Previous research findings indicate that more central the identity is to self, the higher will be psychological distress, and the less importance of the group identity results in lower psychological distress (McCoy & Major, 2003). Recent research also supports this notion that there is a positive relationship between higher centrality of group identity and psychological distress (Mcoy & Major, 2003; Jasperse et al., 2012). Thus, previous research findings suggest that examining the direct relationship between perceived Islamophobia and psychological distress does not provide a clear explanation of who is more susceptible to distress. Instead, this relationship can be better understood by considering the moderating role of importance of the group (Friedman & Brownell, 1995; Friedman & Saroglou, 2010; Goforth et al., 2014; Jasperse et al., 2012; Mcoy & Major, 2003; Twenge & Crocker, 2002).

Despite decades of research, there is a debate among scholars; either group identification is protective or harmful for the well-being of stigmatized groups. There are two different perspectives in the previous literature regarding the role of group identification. For example, according to the rejection identification model (Branscombe et al., 1999), long-term discrimination from the dominant group results in increased identification with the in-group, which buffers the adverse effects of discrimination.

There are many research findings which support the notion of Branscombe et al. (1999) and provides evidence that stronger group identification protects against the negative consequences of group discrimination (e.g., Brondolo et al., 2009; Kunst et al., 2013; Schaafsma, 2011; Stuart, 2012; Verkuyten & Yildiz, 2007). One possible explanation for this notion is that stronger identification with the group provides a sense of belonging to a homogenous group where a person fits, and this sense of belonging provides a psychological shield against the negative emotional outcomes of group discrimination (Giamo, Schmitt, & Outten, 2012).

Previous research findings also provide evidence that effects of perceived group discrimination can vary depending on the importance of group identification and experiences of discrimination (Armenta & Hunt, 2009; Huynh, Devos & Goldberg, 2014). According to recent research findings, the stronger group identification protects against the negative emotional outcomes of group discrimination by activating the increased sense of belongingness and control whereas less importance of group identity results in negative consequences for the well-being (Cruwys et al., 2014; Cruwys, South, Greenaway, & Haslam, 2015; Jetten, Haslam, & Haslam, 2012; Khan et al., 2014; Sani et al., 2012; Ysseldyk, Haslam, & Haslam, 2013).

However, there is another perspective regarding the moderating role of group identification, which postulates that perceived group discrimination is harmful to the well-being of a socially stigmatized group. This perspective suggests that the realization about the devalued position of the group in a society to which a person belongs can cause more psychological distress (Major & O'Brien, 2005). The previous research findings

also support this notion that stronger identification to a devalued social group can lead towards the increased perception of discrimination which can be harmful to well-being (Friedman & Saroglou, 2010; Goforth et al., 2014; Jasperse et al., 2012; McCoy & Major, 2003; Twenge & Crocker, 2002).

However, the perception of these negative consequences may vary depending on the degree of group identification (McCoy & Major, 2003). McCoy and Major (2003) found that a higher level of group identification results in a low level of emotional well-being because perceiving that one's group is the target of prejudice can hurt self-esteem. These findings suggest that the less central is the group to self, the less perceiving discrimination against the group will have negative consequences for the well-being of people. In contrast, the more central the group is to self, the more perceiving discrimination against the group will have negative effects on self-esteem and well-being (McCoy & Major, 2003). These findings suggest that difference in the importance of group identity can lead to different emotional outcomes, which can be harmful or protective for the well-being of the stigmatized group.

However, there are inconsistent findings regarding the moderating role of group identification. Few research findings support that higher group identification protects against the negative emotional outcomes of perceived group discrimination (Branscombe et al., 1999), while other supports that higher group identification is harmful to the well-being of people (McCoy & Major, 2003). One reason for these inconsistent findings can be that most of the previous research is focused on the unitary concept of group identification. However, the consideration of the multidimensional approach can provide

a better explanation of the moderating role of group identification. Another dimension of group identification is in-group superiority, which can actually be protective (Iqbal & Bilali, 2018). Based on the SIT assumption, this study assumes that two different dimensions of group identification (e.g., identity centrality & in-group superiority) will predict the relationship between perceived group discrimination and psychological distress differently.

The social identity theory (Tajfel & Turner, 1979) provides the theoretical foundations to answer the question that how perceived Islamophobia impacts the well-being of Muslim immigrants in Canada. Based on social identity theory (Tajfel & Turner, 1979), it was assumed in the present research that perceived Islamophobia would have a direct impact on psychological distress, and the difference in the importance of group identification and in-group superiority will predict the relationship between perceived Islamophobia and psychological distress in a different way among Muslim immigrants in Canada. Based on this theoretical framework, the present study assumed that level of identity centrality would moderate the relationship between perceived Islamophobia and psychological distress. It was also assumed that the relationship between perceived Islamophobia and psychological distress would vary depending on the higher or lower level identity centrality. For those higher in identity, centrality will have lower psychological distress as compared to those who are low in identity centrality.

Moderating Role of Group Identity Between PIS and Psychological Distress

Although a lot of research has investigated the relationship between Perceived group discrimination and the psychological well-being of Muslim immigrants in western

countries by considering the moderating role of group identity. These studies have mixed and conflicting findings, as few studies have demonstrated that stronger group identification protects against the negative outcomes of group discrimination among Muslim immigrants whereas others indicate that stronger group identification can result in a higher level of psychological distress among Muslim immigrants (e.g., Friedman & Saroglou, 2010; Jasperse et al., 2012; Kunst et al., 2012). Previous research findings illustrate the relationship between perceived Islamophobia and psychological distress in an ambiguous way, and still, it remains unclear that either the group identity is protective or harmful for the well-being of Muslim immigrants. For example, previous literature suggests that stronger identification with religious group prevents from psychological distress by increasing a sense of trust and social supports among group members. Consequently, in the presence of social rejection and exclusion, the religious group becomes the source of social support for the group members, which ultimately results in reduced psychological distress and anxiety (Ahmed et al., 2011; Gervais et al., 2011).

On the opposite side, the research findings also exhibit that strong identification with the religious group might not work positively for the well-being of people belonging to that group (Cronin et al., 2012). For example, research findings indicate that stronger identification with the religious group can play an essential role in enhancing the perception of discrimination against one's own group, which can be harmful to the well-being of people belonging to that group (Cronin et al., 2012). The previous literature also shows that perception of prejudice against one's group does not predict psychological distress directly; instead, its effects can vary due to differences in the importance or

centrality of group identification (Friedman & Saroglou, 2010; Kalek, Mak & Khawaja, 2010). Therefore, in the light of contradictory findings related to PIS and psychological distress in conjunction with the moderating factor, the present study sought to investigate this relationship among Canadian Muslims by considering the moderating role of group identification.

Kunst et al. (2012) researched to investigate how religious stigma and religious identity affect the well-being of Muslims in western culture. In this research, Kunst et al. (2012) divided religious stigma into three constructs, such as perceived Islamophobia, negative representation in the media, and religious discrimination. The research was conducted on a sample of 426 Muslims (210 Norwegian Pakistanis & 216 German-Turks). For the Norwegian Pakistani sample, religious discrimination was found to have no direct or indirect effects on national identification in public and private life. For the German Pakistani group, discrimination was not linked to any increase and decrease of the religious identity. However, in German-Turks' group, a negative relation was found between religious identity and national identification. A positive relationship was found between negative media representations of Muslims and increased religious identity. Religious discrimination was the only religious stigma variable which had a direct and several indirect negative effects for the German-Turk sample. These findings suggest that Religious discrimination was linked to a strengthened religious identity and decreased national identity only for the German Turks (Kunst et al., 2012).

Similarly, another research was conducted by Kunst et al. (2013) to see the validation of a scale of perceived Islamophobia and its impact on psychological distress

among 262 German-Turks, 277 French-Maghrebi, and 249 British-Pakistani Muslims (Kunst et al., 2013). The findings support the notion of rejection identification model partially that perceived Islamophobia could increase group identification among Muslim minorities in the presence of stigma associated with their group. The religious stigma was found to be a significant predictor of an increase in group identification than discrimination. In all three samples, the perceived Islamophobia in media and social context were found significant factors in perceived Islamophobia. These findings reflect that stigma associated with Muslim identity can lead towards the increased identification with a group, which ultimately results in the increased perception of group discrimination and negative emotional outcomes for the well-being of Muslim Immigrants.

However, other research findings also explain that there is a negative relationship between increased group identification and the well-being of Muslims immigrants. Ghaffari and Çiftçi (2010) conducted a study on 225 Muslim American immigrants to see the relationship between perceived discrimination, religiosity, and self-esteem. The attitudinal and behavioral measures were used to assess religious adherence, whereas perceived discrimination was assessed by using the ethnic discrimination scale. The findings indicate that perceived discrimination moderates the relationship between religiosity and self-esteem. Ghaffari and Çiftçi (2010) found that Muslims who faced a higher level of discrimination had lower self-esteem and increased identification with their religious groups. These findings suggest that discrimination can result in increased identification with the religious group among Muslim immigrants. However, findings of this study also suggest that increased identification with religious identity can lead to the

increased perception of discrimination, which can be harmful to the well-being of Muslim Immigrants.

However, the previous research literature also illustrates that variation in the importance of group identification can have a different impact on the perception of discrimination and the well-being of Muslim immigrants. Verkuyten and Martinovic (2014) conducted a three parts research to investigate the importance of religious identity as compared to ethnic identity, and national identity among three samples ($N = 131, 204, 249$) of Dutch Sunni Muslims. As a result of the comparison between three studies, the findings indicate that religious identity was more central for Muslim immigrants than the ethnic and national identity. Moreover, the higher centrality of Muslim identity was related to more adherence to Islam than to the national identity. These findings suggest that difference in the importance of religious identity plays a significant role in adherence to one's own group or staying away from the dominant culture. Also, the finding indicates that the higher centrality of the Muslim identity predicts increased identification with the religious group than the ethnic and national identity. Thus, the increased or decreases identification with the group may lead to different psychological outcomes for the well-being of the stigmatized group.

Previous research findings indicate that the importance of religious identity plays an influential role in determining the perception of discrimination and possible emotional outcomes. Friedman and Saroglou (2010) researched to see the impact of religiosity and acculturation experiences between stigmatized and nonstigmatized groups in Belgium by using the samples of 273 Muslims and 155 non-Muslims. The findings indicate that a

higher level of religious identity was related to low self-esteem and increased symptoms of depression among the Muslim group, which was mediated by religious tolerance and feelings of anger towards the host culture. However, no difference was found between stigmatized and non-stigmatized groups in acculturation, whereas religious affiliation was found influential in-group identification. The findings of this study suggest that there is a positive link between higher centrality of Muslims identity and symptoms of depression, which should be further explored by considering the other aspects of Muslim identity.

However, recent research findings describe that different aspects of Muslims identity moderates the relationship between perceived Islamophobia and psychological well-being differently. Jasperse et al. (2011) conducted a study on 153 Muslim women in New Zealand to see the relationship between three facets of Muslims identity (psychological, behavioral, & visible) and psychological well-being. The Muslim identity scale, perceived discrimination scale, life satisfaction scale, and psychological symptoms scale were used to measure the target variables. The findings indicate a complex moderating role of Muslim identity between perceived discrimination and its effects on well-being. The psychological (pride, belongingness, & centrality) and behavioral (engaging in Islamic practices) aspects of Muslim identity moderated the relationship in a different way. The strong identification with Islam intensified the negative relationship between perceived discrimination and well-being, whereas engaging in Islamic practices protected against the negative effects of perceived discrimination.

Similarly, Stuart (2012) conducted a study to investigate the effects of group discrimination and the role of religious identity in adaptation among the first and second

generation of Muslim immigrant youth ($n = 155$) in New Zealand. The results indicate that religious identity and practices were fundamental elements in the successful adjustment of Muslim youth, even in the adverse situations of discrimination. The religious identity moderated the relationship between discrimination and well-being by protecting against the negative effects of discrimination. According to Stuart (2012), religious identity protected the well-being by considering the prejudice and negative attitudes as unjustifiable acts against their group, which ultimately lead towards higher self-esteem and well-being. Another notable finding was that the social context and attitude of host culture towards Muslims could have a significant influence on the well-being and perception of discrimination.

Verkuyten and Yildiz (2007) conducted three studies among Turkish-Dutch Muslim participants to investigate the moderating role of ethnic, religious, and national identification. The sample consisted of 104 Turkish-Dutch participants. The findings indicate a positive relationship between perceived group rejection and religious identification. Group rejection was associated with increased group identification and decrease Dutch national identification among Turkish-Dutch Muslim. These findings provide strong evidence that perceived group rejection is associated with strong in-group identification among Turkish-Dutch Muslim via ethnic identification and increased disidentification from the Dutch identity.

Similarly, Schaafsma (2011) researched to investigate the role of identification with the heritage group and the majority group in the relationship between perceived discrimination and well-being. The sample consisted of 320 ethnic Turks and Moroccans

in the Netherlands. Discrimination scale and well-being scale were used to measure the related variables. The findings indicate that group identification plays a role of moderator between group discrimination and well-being. The people who were highly identified with their heritage group reported more discrimination than the low identifiers. However, higher identifiers were less likely to be affected by the negative effects of discrimination. The results indicate that the stronger identification with the religious group shields against the negative emotional outcomes among Muslim immigrants even in the presence of increased perception of discrimination.

Most of these research findings illustrate an ambiguous and indirect relation between perceived Islamophobia and psychological distress concerning the moderating role of group identification. For instance, Verkuyten and Yildiz (2007) found that group discrimination predicts a higher level of group identification among Muslim Dutch-Turks, which protects against negative emotional outcomes. Kunst et al. (2013) found that perceived Islamophobia predicts increased religious identification and well-being only for German-Turks, and no relation was found among a sample of Norwegian-Pakistanis. Similarly, Schaafsma (2011) found that stronger group identification defends against the harmful effects of discrimination among Muslim immigrants in the Netherlands, even in the presence of increased perception of discrimination.

On the opposite side, a few research findings have shown that stronger group identification can increase the negative effects of group discrimination among Muslim immigrants. For example, Jasperse et al. (2012) found that strong psychological identification with the Muslim identity (e.g., centrality, belongingness, and pride) can

increase the negative effects of perceived religious discrimination. The previous studies show that there has been a great deal of confusion in the literature regarding the moderating role of group identity in determining the relationship between perceived Islamophobia and psychological well-being among Muslim minorities (Friedman & Saroglou, 2010; Kalek et al., 2010; Kunst et al., 2012; Jasperse et al., 2012; Kunst et al., 2016).

However, findings of previous studies also suggest that the relationship between discrimination and well-being can vary depending on the source and strength of the people's group identification which can be different for varied Muslim groups in different social contexts (Kunst et al., 2012; Schaafsma, 2011). Previous research findings indicate that the relationship between perceived group discrimination and psychological distress can be understood in a better way by considering the importance of religious identity among varied groups of Muslim immigrants in a specific social context (Phinney et al., 2001; Phalet et al., 2018). The previous literature shows that differences in the social context and importance of religious identity among varied groups of Muslims can lead towards different emotional outcomes in the presence of group discrimination (Jasperse et al., 2012; Schaafsma, 2011).

Previous studies have mixed and conflicting findings, as few studies have demonstrated that stronger group identification protects against the negative outcomes of group discrimination among Muslim immigrants (e.g., Kunst et al., 2013; Schaafsma, 2011; Verkuyten & Yildiz, 2007). On the opposite side, other research findings have also indicated that stronger group identification can result in a higher level of psychological

distress among Muslim immigrants (e.g., Friedman & Saroglou, 2010; Jasperse et al., 2012; Kunst et al., 2012). However, it remains unclear that either the identity centrality increases or buffer the negative influences of group discrimination among Muslim immigrants in a Canadian context (Jasperse et al., 2012; Kunst et al., 2012; Schaafsma, 2011). Against this background, the present study seeks a better understanding of how perceived Islamophobia and difference in the importance of group identity might influence Muslim's psychological well-being in the Canadian context.

One reason for these unclear or mixed findings can be the multidimensional nature of the Group Identity. Previous research seemed to focus on a few elements of group identification by ignoring the other important dimensions (e.g., In group Superiority). According to research findings, the multidimensional approach can provide a better picture of the moderating role of Group identification. According to Tajfel (1979), group identity is comprised of many cognitive, social, and emotional components, and consideration of the multidimensional approach can explain the moderating role of Group identity in a better way. Identity centrality is a critical dimension of Group identity, which has been investigated in many previous studies. However, the consideration of another dimension of group identity (i.e., group superiority) may provide a better picture of the moderating role of group identity. Group superiority (the belief that in-group is better than other groups) may actually be protective because believing that one's group is better (sense of pride) can alleviate the negative consequences of group discrimination (Iqbal & Bilali, 2018; Leidner et al., 2010). The difference between these two dimensions of group identity (e.g., identity centrality and

in-group superiority) will predict the effects of perceived group discrimination in a different way which will be helpful to resolve the old debate that which aspects of Group identity are protective or harmful (Ahmed, Kia-Keating & Tsai, 2011; Ghaffari & Çiftçi, 2010, Perry, 2015). Against this background, the present research hypothesized that the importance of group identity to self and belief in in-group superiority would moderate the relationship between perceived Islamophobia and psychological distress differently.

Identity Centrality and Psychological Distress

Various studies show a link between identity centrality (a cognitive aspect of the group identification) and the perception of discrimination. According to research findings, the impact of discrimination could be determined in relation to the centrality of group identification to a person's self (Cokley et al., 2011). The higher identity centrality predicts more perception of discrimination against the in-group (Bilali, 2013). However, this relationship works in two different directions. In one way, higher identity centrality led towards increased identification with the group and decreased psychological distress (e.g., Branscombe et al., 1999; Jetten et al., 1997). On the other way, It might result in an increased perception of discrimination and decreased psychological well-being (e.g., Major, Quinton, & Schmader, 2003). In both ways, the centrality of group identification might have differential effects on the well-being of the people. The variations in the importance of group identity can lead towards increased or decreased perception of discrimination against one's own group, which can be protective or harmful for the well-being of group members (Branscombe et al., 1999; Major, Quinton, & Schmader, 2003).

However, the difference in the importance of group identity can affect the perception of external threats. The increased or decreased perception of external threats can lead to different social responses, which can be threatening or protective for the well-being (Branscombe, Ellemers, Spears, & Doosje, 1999; Haslam & Reicher, 2006; Tajfel & Turner, 1979, 1986). Recent research findings also support this notion that differences in the importance of social identity may result in an increased or decreased perception of threats against one's group which can determine the nature of psychological responses (; Jasperse et al., 2012; Wright & Young, 2017). Similarly, Schasfma et al., (2011)'s research findings also indicate that stronger group identification predicts increased perception of discrimination and lower psychological distress among Muslim immigrants. These findings suggest that difference in the importance of Muslim's identity can determine differences in the perception of discrimination and psychological reaction, which can be protective or harmful for the well-being of this social group.

The threat to ones' religious identity can result in an increased perception of these external hazards, ultimately leading towards more negative consequences for the well-being of Muslims (Fischer, Haslam, & Smith, 2010; Ysseldyk, Matheson, & Anisman, 2011). Previous research findings indicate a consistent positive relation between Muslim identity and psychological distress (Kalek et al., 2010). Many of these research findings also exhibit that the relationship between perceived Islamophobia and psychological well-being among Muslim can vary due to the higher commitment and centrality of Muslims ideology to oneself (Ysseldyk et al., 2011). Thus, the difference in the

importance of group identification can shape the perception of external threats about one's social identity differently (Friedman & Saroglu, 2011).

Similarly, Perceived Islamophobia can have a greater impact on how Muslims identified with their own group. According to research findings as a result of perceived Islamophobia, the strength of group identification can be increased or decreased by realizing religious groups as a source of harm or positive social support (Mac an Ghail & Haywood, 2015; Moosavi, 2015). In the context of increased Islamophobia against Muslims in western countries, Muslims faced a constant threat to their religious identity. The pressure of assimilation and increased efforts (e.g., educating about Islam, knowledge about Islam, and increased contact with Muslim peers) to change the negative portrayal associated with Muslim identity result in increased religious group identification among Muslims (Peek, 2005). These findings indicate a positive relationship between perceived discrimination and strengthened group identification among American Muslims because most American Muslims preferred Muslim identity over the American identity (Peek, 2005).

However, there are mixed findings regarding the impact of perceived Islamophobia on the strength of the group identification. The research findings indicate that Perceived group discrimination from the dominant culture results in decreased identification with the central culture and increased psychological distress (Kunst et al., 2016). On the other side, the research found that a high level of identification with the Muslim identity can be helpful for the positive adaption depending on the social context (Phalet et al., 2018). In view of the Muslims identity, the greater body of research

indicates that Muslim have a higher level of depression, internalization problems and lower level of self-esteem (Fassaert et al., 2011; Khawaja, 2016; Oppedal & Røysamb, 2007; Stuart, Ward, & Adam, 2010). However, the previous literature also informs that the variation in the importance of Muslims identity and social context can lead to different emotional consequences as a result of perceived Islamophobia.

The recent research findings also indicate that the difference in the level of group identification can determine the psychological consequences of perceived Islamophobia on Muslim's well-being differently (Jasperse et al., 2012; Kunst et al., 2012; Schaafsma, 2011). According to Verkuyten and Yildiz (2007), people with a higher level of in-group identification are more likely to show group level responses as compared to the low identifier. Moreover, the difference in the level of psychological commitment to in-group can lead to different psychological responses, which can be protective or harmful to the well-being of people.

However, the problem is that there are mixed and intriguing research findings concerning the moderating role of group identification and its effects on psychological distress among Muslim immigrants. Few research findings indicate that the stronger identification with religious identity protects against the negative outcomes of discrimination among Muslim immigrants (Stuart, 2012) whereas Kunst et al. (2012) found that perceived discrimination in group form predicts increased religious identification and well-being only for German-Turk and no relation was found among a sample of Norwegian-Pakistanis. Similarly, Jasperse et al. (2012) found that higher centrality of religious identity to self predicts negative influences on the well-being of

Muslim women in New Zealand whereas Schaafsma (2011) found that people who were highly identified with their group reported more discrimination but less likely to be affected by the negative consequences of group discrimination. However, research findings also indicate that Muslim peer's high level of identification with their religious group can play a positive role in their well-being based on the social context (Phalet et al., 2018). Most of these research findings illustrate an ambiguous and indirect relation between perceived Islamophobia and psychological distress concerning group identification.

The previous research indicates a great variation among Muslims about the perception of discrimination and its effects on psychological well-being (Kalek et al., 2010). The rates of perceived discrimination were different in different regions, from lower to high among Muslim Immigrants. For example, in Canada, 35% of Muslims between the ages of 18 to 29 perceived discrimination, exclusions, and rejection (Adams, 2009). Thus, Muslims faced a different rate of discrimination and negative attitudes in a different region, which exhibits the importance of the local environment and centrality of Muslims identity to one's self to determine the effects of perceived Islamophobia on the psychological well-being of this social group. However, most of the research related to the psychological consequences of the perceived Islamophobia and well-being has taken place in the American context. There is a need to investigate this relationship in the Canadian context by keeping in view the moderating role of identity centrality (Rousseau, Hassan, Moreau, & Thombs, 2011). In light of the previous research, I have assumed that the more central the group identity to self, the more the member of the

victimized group will perceive the discrimination. Eventually, this perception can lead to different consequences such as increased or decreased identification with the group, which can be protective or harmful for the well-being of the people.

In-Group Superiority and Psychological Distress

According to Roccas et al. (2006), individuals identify with social groups in different ways. For example, some believe social groups are more important to core definitions of the self; a concept often referred to as group centrality. For some social group helps to maintain a positive and moral self-image which provides a sense of pride and superiority over other outer groups, and this concept is often referred to as In- group superiority (Leidner et al. 2010). The recent research exhibits that group identification works as a coping source in the presence of derogation by the outside group (Smith & Silva, 2011). The difference between two dimensions of group identification (i.e., identity centrality & in-group superiority) can result in a different impact of perceived discrimination on psychological well-being among Muslim Immigrants in Canada.

The research findings indicate that both dimensions of group identity predict psychological distress differently. According to Bilali (2013), the conceptual distinctions between in-group superiority and identity centrality may lead to different psychological outcomes for the well-being of the stigmatized group. Believing that one's group is good (sense of pride) can alleviate the negative consequences of group discrimination. Thus, the other dimensions of group identity that is a belief in in-group superiority can provide a better explanation of the protective role of the group identity in the presence of pervasive discrimination (Bilali, 2013).

However, there are mixed research findings concerning the moderating role of group identification in the relationship between perceived Islamophobia and psychological distress. Few research findings are of the view that higher importance of group identity results in increased identification with the group, which protects from the negative consequences of perceived discrimination (Branscombe et al., 1999). On the opposite side, the research findings also indicate that higher importance of group identity to self results in negative consequences for the well-being of people by realizing that person belongs to a devalued group in the society (McCoy and Major, 2003). Thus, previous research findings show an ambiguous and inconsistent relationship between group identification and psychological well-being.

Recent literature suggests that one reason there exists so much inconsistency may be due to the differences in meaning surrounding social group identification (Iqbal & Bilali, 2018). In the previous literature, the group identity is treated as a unidimensional construct. However, the growing body of literature emphasizes that multidimensional conceptualization is appropriate because it includes Tajfel's (1978) original conceptualization of social identity theory such as evaluative, cognitive and affective components (e.g., Cameron & Lalonde 2001; Cameron 2004; Ellemers, Kortekaas, & Ouwerkerk 1999; Jackson, 2002; Leach et al. 2008). Roccas, Klar, and Livitan (2006) identified that two dimensions of group identification, such as glorification and attachment, are different from each other. The attachment is related to cognitive and emotional attachment to the group (e.g., centrality, the core definition of the self, commitment to the group), whereas glorification is related to the evaluative component

(e.g., believe in group superiority). The difference between these two dimensions of group identity (e.g., identity centrality & group superiority) may lead to different responses and reactions from the victimized group in the presence of persuasive discrimination.

Most of the previous research tends to focus on centrality to determine the relationship between perceived Islamophobia and psychological well-being of Muslim immigrants in western countries (e.g., Jasperse et al., 2012; Kunst et al., 2013; Stuart, 2012; Schaafsma, 2011; Verkuyten & Yildiz, 2007). However, less attention is paid to another significant dimension of group identity (i.e., In-group superiority). Another dimension of group identity is group superiority, which may be protective and can provide a better explanation for these inconsistent findings. According to research findings, believing that one's group is good (sense of pride) can alleviate the negative consequences of group discrimination (Bilali et al., 2016). Based on the previous research findings, the present research has assumed that the conceptual difference between identity centrality and in-group superiority may lead to differences in the relationship between perceived discrimination and psychological distress.

Literature Relating to Differing Methodologies

In the past few decades, most studies in the field of perceived Islamophobia and Psychological distress have been Correlation because of the difficulty in manipulating the independent variables (perceived discrimination) in lab conditions, and possible psychological harm associated with it. Many researchers used the correlational method by employing regression analyses to determine the effects of perceived group discrimination

on psychological distress and the moderating role of group identity. The previous studies (e.g., Bilali, 2013; Jasperse et al., 2012; Kunst et al., 2013; Stuart, 2012; Schaafsma, 2011; Verkuyten & Yildiz, 2007) have opened the doors for other researchers to predict the association between perceived Islamophobia and Psychological distress by considering the moderating role of group identity. In few studies (e.g., Greenway et al., 2015; Kalek et al., 2010), other methods such as experimental, longitudinal, and qualitative research (case study) were also used to see the influence of group discrimination on well-being. However, for this quantitative study, It was difficult to manipulate perceived Islamophobia, identity centrality, and in-group superiority in lab conditions. Therefore, a correlational approach employing the different psychological measures was considered the appropriate research method to use.

Moreover, the present research aimed to collect the data from a single group of the population at one point. The data was collected on multiple variables from each participant in the sample (Convenient Sampling) by using the self-administrative questionnaires, which make this design more suitable for the present study. According to Setia (2016), in a cross-sectional study, the outcomes and exposures are measured at a single time point from the participants and mostly used to see the prevalence of phenomena in a relevant population. In this study, the data were analyzed in terms of prediction by using two separate hierarchical moderated regression analyses; one for identity centrality and one for in-group superiority regression.

Summary

The current review explored the previous research in the area of perceived Islamophobia, psychological distress, moderating role of group identity, application of social identity theory, and rejection identification according to the nature of the study. The previous literature review reflects that perceived Islamophobia has adverse effects on the well-being of Muslim immigrants in western countries. (Al Wekhian, 2016; Awad, 2010). The previous research literature also revealed that the relationship between perceived Islamophobia and psychological well-being could vary due to the importance of the group identity (Friedman & Saroglou, 2010; Gordijn, 2010; Yzerbyt, 2007). The higher the identity is central to the self, the higher will be psychological distress (Jasperse et al., 2012; Friedman & Saroglou, 2010; Goforth et al., 2014; McCoy & Major, 2003; Twenge & Crocker, 2002).

However, the research literature shows an ambiguous and unclear picture of the moderating role of Group identity. For example, few research findings indicate that group identification protects against the negative impact of perceived Islamophobia (e.g., Kunst et al., 2013; Schaafsma, 2011; Stuart, 2012; Verkuyten & Yildiz, 2007), and on the other side, the findings indicate that importance of group identity can lead towards negative consequences for the well-being of the stigmatized group (Jasperse et al., 2012; Kunst et al., 2013). The research literature revealed that one possible reason for these inconsistent findings could be that most of the previous research is focused on the unidimensional aspect of the Group identity (Roccas, Klar, & Livitan, 2006). However, the consideration of a multidimensional aspect which is closer to Tajfel's original concept of group identity

can provide a better explanation about the relationship between perceived Islamophobia and psychological distress. The consideration of another dimension of group identity (in-group superiority), might provide a better explanation about the protective role of group identification.

Based on inconsistencies found in the previous research reviewed above, the present work seeks to examine the role of group identification in the relationship between perceived Islamophobia and psychological distress in a previously unstudied group of Muslims in Canada. The first gap in the literature is found that there is an indirect relationship between perceived Islamophobia and psychological distress, which needs to be investigated by considering the moderating role of group identification (Friedman & Saroglou; 2010; Kalek et al., 2010). The second gap in the literature is found that either stronger Muslim identity is protective or harmful for the well-being of Muslims immigrants in the presence of perceived Islamophobia. One possible explanation of these inconsistent findings is that many important additional sources of variations, such as multiple dimensions of group identity and social context, are neglected. The previous literature shows a gap in the literature regarding the role of other dimensions of group identity (e.g., in-group superiority) to determine the relationship between Perceived Islamophobia and psychological distress (Bilali, 2013; Friedman & Saroglou, 2010; Jasperse et al., 2012; Kalek et al., 2010; Kunst et al., 2012). By focusing on the multidimensional aspect of group identity, this study will fill the gap in the literature that which aspect of group identity is protective or harmful.

Moreover, many studies conducted so far on perceived Islamophobia and psychological distress have methodological and sample issues. Most of these studies apply only to specific cultures and cannot be generalized to all social contexts (Phalet et al., 2018; Phinney et al., 2001). There is a need to investigate the effect of perceived Islamophobia on psychological distress in Canadian social context by including more diverse Muslim sample to determine the moderating role of group identification (Friedman & Saroglou, 2010; Goforth et al., 2014; Phalet, Baysu, & Verkuyten, 2010; Verkuyten, 2007). Despite an increase in Islamophobia and its negative impact on the well-being of Muslim immigrants, a little research has been conducted on perceived Islamophobia by considering the multidimensional approach of Group identity. There is a need to investigate the impact of Perceived Islamophobia on Psychological Distress among Muslim immigrants in Canada by considering the moderating role of identity centrality and in-group superiority.

So, in light of previous research literature, the present research aimed to see the relationship between perceived Islamophobia and psychological distress by considering the moderating role of centrality and in-group superiority. The difference between these two dimensions of group identity can lead to different emotional and psychological consequences in the presence of pervasive group discrimination, which can be protective or harmful for the well-being of Muslim immigrants living in Canada. The next chapter discusses the methodology, setting, sample, instrumentation, and analysis that will be used to conduct the study.

Chapter 3: Methodology

Introduction

Purpose of the Study

The purpose of this quantitative correlational study with moderation was to examine the differing moderating roles of centrality and in-group superiority in the relationship between perceived Islamophobia and psychological distress. Perceived Islamophobia, group centrality, in-group superiority, and psychological distress were measured by using the Perceived Islamophobia Scale (Kunst et al., 2013), the shorter version of the Identity Centrality Scale (Verkuyten & Yildiz, 2007), a scale of Perceived In-Group Superiority (Doosje et al., 2013), and Psychological Distress Scale (Kessler et al., 2002), respectively.

This chapter includes a description of this study's design, the rationale for the selected research design, the sample, sample size, characteristics of the sample, procedures for selecting the sample, instrumentation, definitions of the main variables of the study with operational definitions, procedures for data collection, data analysis strategy, and details about the ethical procedures followed in conducting the research.

Research Design and Rationale

The design of this quantitative study was a cross-sectional survey (predictive correlation research design with moderation) to examine the relationship between perceived Islamophobia and psychological distress by considering the moderating role of group identification. It was assumed that differences in the importance of group identification to the self (centrality) and in-group superiority would have different

impacts on perceived Islamophobia and psychological distress among Muslim immigrants in Canada. This design was suitable to answer the research questions because the focus of the study was making predictions regarding relationships rather than causal inferences. Perceived Islamophobia and group identification (centrality & in-group superiority) were independent variables in this study. The psychological distress of Muslim immigrants living in Canada was the dependent variable.

The rationale behind choosing this quantitative method was that in this study, the participants reported their perception of group discrimination retrospectively. There was no manipulation of independent variables (i.e., perceived Islamophobia) in controlled lab conditions; instead, the scores of participants on the PIS reflected the level of perceived Islamophobia that they had already experienced (Kunst et al., 2012). Many previous research findings provide evidence for the effective use of this method to assess the effect of perceived Islamophobia on psychological distress by considering the moderating role of different variables (e.g., Iqbal & Bilali, 2018; Jasperse et al., 2012; Kunst et al., 2012; McCoy & Major, 2003).

Moreover, in the present research, I aimed to collect data from a single group of the population at one time point, and data were collected on multiple variables from each participant in the sample using self-administrated questionnaires, which made this design suitable for the present study. According to Setia (2016), in a cross-sectional study, outcomes and exposures are measured at a single time point from the participants and are mostly used to assess the prevalence of particular phenomena in a relevant population. The data were analyzed in terms of prediction by using hierarchical regression.

Methodology

Population

In this study, the target population was Muslim immigrants in Canada above 18 years of age (both males & females). The final sample consisted of adult (above 18 years old) Muslim immigrants living in Calgary. The nonprobability sampling strategy (convenience sampling) was used in the present study to draw the final sample.

Participants

A power analysis was conducted to determine the size of the sample to run the appropriate statistical tests to answer the research question using a website (<https://stats.idre.ucla.edu/other/gpower/>). The numbers of predictors were two. The power analysis indicated that a total of 107 participants would be needed to detect a medium effect ($f^2 = 0.15$) with 95% power using the multiple regression. The power analysis estimated 107, but data were collected from 125 respondents in order to avoid any problems during data collection, such as incomplete data or response errors.

The participants in this study were a convenience sample of 125 Muslim males and females above 18 years old. After initial data screening and cleaning, the sample consisted of 113 participants. The demographics and psychometric analysis were conducted with the sample size of $N = 113$. However, at the stage of assumption checking for multiple regression, four outliers were removed from the final analysis of hierarchical multiple regression with moderation. The sample of $N = 109$ was used for the hierarchical multiple regression with moderation in this study. The participants were selected from Calgary, Canada. The inclusion criteria for the final sample encompassed

Muslim immigrants above 18 years old, both males and females. Participants under 18 years of age and of different religious identities were included in the sample. Moreover, participants needed to understand the English language in order to participate in the research. Participants who did not understand the English language were not eligible to participate in this study.

The strategy of convenience sampling was selected for the following reasons. First, this strategy is easy to use, and participants are easily accessible. Second, data may be collected from the target population at any point or time. Third, convenience sampling is helpful in collecting data from a target population without the complications of randomized sampling, which can lead to forced participation in research and violation of ethical standards. Fourth, convenience sampling is time- and cost-effective, which was important given the time and budget constraints of the present research.

Procedures

Approval was acquired from Walden's Institutional Review Board (IRB) to collect data by following all ethical requirements. The participants were recruited through the Muslim Immigrant Society, religious institutions that had strong links with the Muslim community, and personal contacts. Participants were recruited through digital and face-to-face means to obtain a sample of Muslims that would be diverse in age, ethnicity, and so forth.

Participants were recruited digitally through the social media pages of various organizations (Appendix I), as well as through fliers (Appendix I) sent to different Muslim organizations. Participants were also recruited by face-to-face means (e.g., at

community events in mosques and religious/social gatherings). Notices about the study were posted in Muslim communities, mosques, and organizations to recruit the final sample.

Further, detailed letters (Appendix G) were written to the authorities of relevant organizations with proof of IRB approval (i.e., the IRB approval number) to collect the data. Proof of IRB approval was delivered to the authorities via email. A formal meeting was conducted with the relevant organization in which aims, objectives, procedures, and implications of the current study were explained to get permission to conduct the study. An e-mail address was provided to the participants so that they could ask further questions of me as the researcher regarding participation in the study. The sample was accessed through gateway organizations that focus on social welfare, justice, and advocacy for Muslim immigrants in Calgary: Calgary Islamic Centre (CIC), Muslim Association of Canada (MAC), Muslim Council of Calgary, Islamic International Society of Calgary, Akram Jomaa Islamic Center (MCFC), and Islamic Circle of North America (ICNA).

After reaching out to the community contact and getting permission from Muslim organizations, data were collected from the target population. This study utilized an online survey tool, SurveyMonkey, to collect data from Muslim immigrants living in Calgary, Canada. This online survey consisted of a demographic questionnaire (which collected data on religious identity, age, gender, education, and ethnicity; see Appendix A), the Perceived Islamophobia Scale (Appendix B; Kunst et al., 2013), the shorter version of the Identity Centrality Scale (Appendix D; Verkuyten & Yildiz, 2007), a scale

of Perceived In-Group Superiority (Appendix C; Doosje et al., 2013), and Kessler Psychological Distress scale (Appendix E; Kessler et al., 2002). The organizations displayed the online survey link through their social media sites. Moreover, the digital survey link was sent to Muslim leaders and organizations to share the questionnaire with their networks in Calgary, Canada. The participants were requested to complete an online survey that took up to 15 minutes. The informed consent at the beginning of the survey indicated that by entering the survey, the participants agreed to the terms of the study. The informed consent form included brief background information on the study, the procedures for participation, inclusion criteria, a discussion of confidentiality, a statement of the voluntary nature of the study, and ethical concerns. Participants who agreed to participate in the research after reading the informed consent were advanced to the survey. Respondents were not advanced to the survey questions if they did not meet the inclusion criteria. Those who did not consent and those not meeting criteria were skipped to a thank-you page. My contact information was also provided to the participants for any questions. The findings of the study will be shared with the community through organizations.

At the end of the survey, it was noted that participants who wanted to know the results of the study could indicate that by checking a box, with the results shared when available.

Instrumentation and Operationalization of the Construct

Perceived Islamophobia Scale (PIS; Kunst, Sam, & Ulleberg, 2012). The PIS by Kunst et al. (2013) was used to measure Muslims' perception of societal fear toward

their religious group. The PIS is a 12-item, 6-point Likert scale ranging from 1 (*totally disagree*) to 6 (*totally agree*). It is divided into three subscales pertaining to (a) general fear of Islam and Muslims (four items; e.g., “Many U.S. Americans avoid Muslims”), (b) fear of Islamization (four items; e.g., “A lot of Americans are afraid Muslims are going to take over the United States”), and (c) Islamophobia in the media (four items; e.g., “U.S. media spread a lot of fear of Muslims and Islam”). Higher scores on the PIS show higher levels of perceived Islamophobia among Muslim immigrants in Canada. The lowest score on the scale represents the lowest level of perception of perceived group discrimination.

The PIS was selected to measure perceived Islamophobia among Canadian Muslims because it is the only, structured, reliable, and valid tool to measure Muslim minorities’ perceptions of group-level Islamophobia in the countries in which they have settled. Moreover, this scale can be used in many western countries with diverse Muslim populations (Kunst et al., 2012a). The word *Germans* was used in the original scale; each question was modified by replacing *Germans* with *Canadians* with permission from the developers of the scale.

A sample of 167 German-Arabs, 184 German-Turks, and 205 British-Pakistanis was used for the development of this scale. The reliability coefficient score was .85 for the German-Arab sample, .83 for the German-Turk sample, and .92 for the British-Pakistani sample. The PIS was validated with a sample consisting of 262 German-Turks, 277 French-Maghrebi, and 249 British-Pakistani. The cumulative reliability coefficient scores were .90 for German-Turks, .89 for French-Maghrebis, and .92 for British-Pakistani.

Identity Centrality Scale (Verkuyten & Yildiz, 2007). Centrality was defined in terms of the extent that identity is considered central and important to one's self-definition (Tajfel & Turner, 1981), and this construct was measured using a short version of the religious identity importance subscale developed by Verkuyten and Yildiz (2007). The scale measures the importance of group identity to the self by indicating agreement with six items (e.g., "I identify strongly with Muslims," "I feel a strong attachment to Muslims," "Being a Muslim is a very important part of how I see myself," "I am proud of my Islamic background," "I feel a strong sense of belonging to Islam") on a Likert scale from 1 to 7 points. The highest scores on all items indicate a high centrality of identity to the self. The scale was validated on 262 German-Turks, $\alpha = .92$; 277 French-Maghrebi, $\alpha = .92$; 249 British-Pakistanis, $\alpha = .93$; and 217 Turkish Dutch, $\alpha = .96$).

Perceived In-Group Superiority Scale (Doosje et al., 2013). In-group superiority was defined as the extent to which a person believes that the in-group is better than other groups, and this construct was measured by using the four-item scale of perceived in-group superiority developed by Doosje et al. (2013). The scale measures in-group superiority on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). Higher scores on the four items (i.e., "I believe that Muslims are better people than people who endorse another religion," "I think everyone should be a Muslim," "I think Muslims are very special people. They are destined to change things in the world," and "Islam is better than other faiths") indicate a higher level of in-group superiority. The four items of in-group superiority form a composite measure averaged to ($\alpha = .71$). Reliability scores for the scale were .67 for Dutch-Turkish and .73 for Moroccan-Dutch participants.

Kessler Psychological Distress Scale (Kessler et al., 2002). The degree to which Muslim immigrants experienced psychological distress was measured with the 10-item version of the Kessler Psychological Distress Scale (Kessler et al., 2002), which assesses symptoms of nervousness, anxiety, and depression on a 5-point Likert-type scale ranging from 1 (*none of the time*) to 5 (*all of the time*). Higher scores on the 10 items (e.g., “During the last 30 days, about how often did you feel depressed”) represent higher levels of psychological distress. The reliability coefficient score of the scale was sound across all samples (German Arabs: $\alpha = .92$; German Turks: $\alpha = .88$; British Pakistanis: $\alpha = .91$).

Data Analysis Plan

The data were analyzed using the Statistical Package for Social Sciences (SPSS) software. The results were organized and analyzed according to the purpose of the study, method, research questions, and hypotheses. At the initial stages, the data were screened to examine the distribution of the scores. At the first stage, incomplete questionnaires were excluded from the data analysis. Similarly, participants who did not satisfy the inclusion/exclusion criteria were excluded from the final data analysis. Further, the data were cleaned by using different imputation strategies to treat missing values. For example, mean imputations were used to approach the missing data.

The outliers were handled using various methods depending on the situation and nature of the data set. For example, in the case of a true outlier, the record of a particular person/event was completely removed from the dataset to avoid skewness in the data analysis. Similarly, in case of a mistake in data, different imputation strategies such as

using the mean of a variable, substitution, and the regression model were applied. After this initial data screening, the data were analyzed to fulfill the assumption of conducting multiple/hierarchical regression. First, multiple/hierarchical regression requires a linear relationship between the outcome variable and the independent variables, which is tested by creating scatterplots (Warner, 2013). Second, multiple/hierarchical regression requires that the errors between observed and predicted values (i.e., the residuals of the regression) are normally distributed (Warner, 2013). Residual plots (e.g., histogram or Q-Q plot) were generated to see the normality requirements for the distribution of the residuals. Third, multiple linear regression assumes that there is no multicollinearity in the data; this was checked by creating a correlation matrix (Warner, 2013). Lastly, scatterplots of residuals versus predicted values were created to check for homoscedasticity (Warner, 2013). It was planned that in case of violation of any key assumption, the Hayes bootstrapping method would be applied to each moderated analysis. However, the assumption checking analysis showed that key assumptions of multiple regression were not violated.

After running all the screening processes and fulfillment of required assumptions for multiple/Hierarchical regression, the data were analyzed by using two hierarchical moderated regression analyses according to research questions and hypotheses with the sample size of $N = 109$.

Research Questions and Hypotheses

The design of this quantitative study was a cross-sectional survey (predictive correlation research design with moderation) to examine the relationship between

perceived Islamophobia and psychological distress by considering the moderating role of group identification. The research questions, hypotheses, and scales used to measure independent and dependent variables allow for the data to be analyzed through two separate hierarchical moderated regression. The research questions and hypotheses for the present study are listed again for the review.

Research Question 1

Does perceived Islamophobia predict psychological distress among Muslim immigrants in Canada?

Hypothesis 1

Null Hypothesis 1 (H01): Perceived Islamophobia will not be a significant predictor of psychological distress among Muslim immigrants in Canada.

Alternative Hypothesis 1 (HA1): Perceived Islamophobia will be a significant predictor of psychological distress among Muslim immigrants in Canada.

Research Question 2

Is identity centrality a significant moderator of the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada?

Hypothesis 2

Null Hypothesis 2 (H02): Identity centrality will not be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

Alternative Hypothesis 2 (HA2): Identity centrality will be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

Research Question 3

Is in-group superiority a significant moderator of the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada?

Hypothesis 3

Null Hypothesis 3 (H03): In-group superiority will not be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

Alternative Hypothesis 3 (HA3): In-group superiority will be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

The analytical strategy was to conduct two separate hierarchical moderated regression analyses; one for identity centrality and one for in-group superiority. In the first step, the main effects of group identity (centrality or superiority) and perceived Islamophobia were entered to determine main effect relationships with psychological distress. At the second step, the interaction between group identity and perceived Islamophobia were entered to examine the moderating role of group identity in the relationship between perceived Islamophobia and psychological distress. Two separate analyses were conducted to identify whether one conceptualization of identity proves to be different in the relationship than the other.

Further, the psychometric properties of the scales were determined for the present study by analyzing the internal reliability of the scales for the present sample. Descriptive statistics were used to calculate demographic variables such as frequencies of gender

(males, females), the average mean age of the sample, and the socioeconomic status of the participants. The hypotheses were tested at the significance level of .05.

Descriptive statistics were used to understand the sample's mean age level, numbers of males and females, socioeconomic status, types of ethnicity (e.g., Turkish Muslims, Pakistani Muslims, etc.). Further, tables were created to show the demographic variables related to the study (e.g., the mean age of the sample, educational level, ethnicity, etc.).

The results are described by explaining the purpose of research and its findings concerning utility statements and implications. The theoretical background is used to explain either a particular theory is successful in predicting particular variables and their relation. Further, the findings of the present research are compared with the previous research to see the evidence that the findings are consistent with the previous literature or have contrary results in term of relationship and implications.

Threats to Validity

Threats to External Validity

The external validity refers to the extent to which results of a study can be generalized to a larger population (Campbell & Stanley, 1963). The possible threats to external validity in this study can be overgeneralization (population validity) of findings to all Muslim immigrants in Canada. This threat was mitigated by selecting a larger and more representative sample (Frankfort-Nachmias & Nachmias, 2014). Moreover, convenience sampling can also influence the external validity of the current study. To deal with this issue, in the current research, a power analysis was used to calculate the

appropriate sample size to make sure that the sample size is representative of the target population and appropriate to generalize. Also, inclusion and exclusions criteria were mentioned in the study to increase the external validity and reliability of the research findings (Patino & Ferreira, 2018). Moreover, it was mentioned in the limitation section that the findings of this research can be applied only to Muslim immigrants living in Calgary, Canada.

Threats to Internal Validity

The concept of internal validity refers the extent to which the results obtained in a study is a function of the variables that were systematically manipulated, measured, and observed in the study (Fraenkel & Wallen, 2003). To make sure the internal validity of the study, a researcher should answer the question of whether changes in the dependent variable is due to the changes in the independent variable (Frankfort-Nachmias & Nachmias, 2014). The use of correlational research design can be the biggest threat to the internal validity in this study because of the lack of control in cross-sectional research methods. This threat was mitigated in this study by documenting the limitations of the study.

The threats to internal validity in this study can be selection interaction. The selection interaction can impact the study because of selecting the participants with desired characteristics such as age, religion, language, and ethnicity, which can result in biased sampling. This threat was reduced by using the random sampling technique to select respondents from the population in which people have an equal chance of inclusion

(Frankfort-Nachmias & Nachmias, 2014). Moreover, the online data collection method reduced the selection biases in the present study.

Statistical regression is another internal validity threat that can affect the findings of the research. Statistical regression refers to selecting the participant with extreme scores, and this issue was resolved by using data screening techniques (Creswell, 2014). Moreover, the Instrumentation threat can also affect the validity of the current study findings. Instrumentation occurs when an independent and dependent variable is measured by using different ways (Creswell, 2014). This issue was mitigated by using standardized procedures, conditions, and questionnaires to collect data from the sample.

Confounding can also affect the internal validity of the research (Creswell, 2014). The researcher needs to prove that observed changes in the dependent variable are due to the changes in the independent variable rather than due to the interference of other variables (Salkind, 2010). To avoid this possibility in the current study, the moderation analysis was used to determine the relationship between perceived Islamophobia and psychological distress by considering the effects of moderating variables (i.e., Identity centrality & in-group superiority).

Moreover, social desirability can be a threat to the validity of research findings because people desire to respond in a socially desirable manner (Creswell, 2014). This issue is mitigated in the present research by using the anonymous online survey. Anonymous and voluntary nature of the study results in a more genuine response without any threat of tracking the respondents.

Threats to Construct Validity

Construct validity refers to the extent to which measuring instruments are logically and empirically related to the concepts and theoretical assumptions (Frankfort-Nachmias & Nachmias, 2014). The lack of construct validity can result in measuring what a researcher does not want to measure. To increase the construct validity in the current research, valid, objective, and standardized scales such as PIS scale, Kessler's Distress scale, in-group superiority scale, and identity centrality scale were used to measure the independent variable (Perceived discrimination), moderating variables (i.e., identity centrality & in-group superiority), and dependent variable (psychological distress).

Moreover, it is made sure that there should be an alignment between all the measuring instruments, theoretical framework, and constructs of interest in the study. As presented in chapter 1, 2, and 3, the theoretical framework of social identity (SIT) assumes that increased perception of discrimination against in-group can result in more anxiety and depression among a targeted group, which can be moderated further due to identity centrality and in-group superiority. All the constructs used in the current research are operationally defined to make sure that the theoretical framework, main construct, and measuring scales are well aligned. Moreover, the statistical proprieties (e.g., validity, coefficient alpha) of all scales are described in the current research to make sure that a particular scale measures the same construct which it purports to measure (Frankfort-Nachmias & Nachmias, 2014).

Ethical Procedures

First of all, the approval was taken from the Institutional Research Review Board (IRRB) to conduct the study. Secondly, permission was obtained from the relevant institutions to collect the data by explaining the purpose of research and Informed Consent. Thirdly, the informed consent form was distributed to all the expected participants discussing the procedures involved in the study, issues related to confidentiality, privacy, risk, and benefit ratio in participating in the present research. Moreover, the contact number of the researcher and relevant services were also provided in informed consent to ask further questions and help related to research.

Also, it was clearly stated in the informed consent that all records in the study would be kept confidential, and only the researcher will have access to that data. The participants were also informed that they could withdraw from the research at any time without any consequences. There are were physical risks or benefits in the study. However, reporting about the perceived Islamophobia could result in potential emotional upsets. The participants were informed that they are not bound to complete any part of the questionnaire, which is not comfortable for them. If the participants agreed to participate in the research after reading informed consent, they were advanced to the survey research. Entering in the survey was considered that participants agree and understand with all the conditions related to the study. The respondent who did not meet the inclusion criteria were not advanced to the survey question. Non concentrers and those not meeting criteria were skipped to a thank you page. However, the participants were

also informed that they could withdraw from the survey at any time if they do not feel comfortable.

Summary

The design of this quantitative study was a cross-sectional survey (predictive correlation research design) to examine the impact of perceived Islamophobia on psychological distress by considering the moderating role of group identification. It was assumed that identity centrality and in-group superiority would moderate the relationship between perceived Islamophobia and psychological distress among Muslims immigrants in Canada. The social identity theory (Tajfel & Turner, 1979) provided the theoretical foundations to answer the question of how group identification moderates the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada.

The nonprobability sampling strategy (Convenience sampling) was used in the present study. The final sample was consisted of Muslim immigrants in Canada above 18 years old, both males and females. Perceived Islamophobia, identity centrality, in-group superiority, and psychological distress were measured by using the standardized scales of perceived Islamophobia (Kunst et al., 2013), the shorter version of the religious identity importance subscale (Verkuyten & Yildiz 2007), a scale of perceived in-group superiority (Doosje et al., 2013), and psychological distress (Kessler et al., 2002).

This study utilized an online survey tool, SurveyMonkey, to collect the data from Muslim immigrants living in Calgary, Canada. The data was collected after getting IRB approval. The questionnaire was administered only to those participants who agreed to

participate in the research and understand English. The participants were recruited through Muslim Immigrant Society and religious institutions that have stronger links with the Muslim community. The analytical strategy was to conduct two separate hierarchical moderated regression analyses; one for identity centrality and one for in-group superiority to examine the moderating role of group identity in the relationship between perceived Islamophobia and psychological distress.

Chapter four is based on the findings of the research. The data were analyzed with SPSS by applying appropriate Statistical Strategies like Multiple Hierarchical Regression. The time frame for data collection, as well as actual recruitment and response rate, is described. Psychometric properties for the measures used in the present research are determined for the sample. Tables showing demographic characteristics of the sample are included. Also, it is described how representative the sample is of the population of interest (external validity). The findings are elaborated with supportive statistical tables, figures, and diagrams. The results are discussed according to hypotheses, research questions, supportive/unsupportive evidence from previous studies, and theoretical framework of the study.

Chapter 4: Results

Introduction

The purpose of this quantitative correlational study with moderation was to examine the differing moderating roles of centrality and in-group superiority in the relationship between perceived Islamophobia and psychological distress. It was hypothesized that perceived Islamophobia would be a significant predictor of psychological distress among Muslim immigrants in Canada, and that identity centrality and in-group superiority would be significant moderators of the relationship between perceived Islamophobia and psychological distress.

This chapter addresses the process related to data collection, recruitment, and the response rate. Further, I discuss the demographic characteristics of the sample and its representativeness with reference to the general population as well as any discrepancies from the planned procedures mentioned in Chapter 3. I organized the study results by addressing the three research questions and hypotheses of the study. These results include probability value, confidence interval, correlations, and regression. The results of the study are presented in this chapter in relation to each research question. The results are described with tables and figures to illustrate the findings. Lastly, the answers to the research questions are summarized and connected to the conclusion of the study.

Data Collection

Time Frame and Recruitment

To comply with the federal, local, and institutional laws, I sought IRB permission to conduct this research on October 7, 2019. This process also entailed the successful

completion of human research protections training under the National Institutes of Health Office of Extramural Research. Permission to collect data was granted on November 11, 2019, with the IRB approval number of 11-14-19-0608415 and an expiration date of November 13, 2020. Data were collected from a total of $N=125$ individuals. Once the data collection process was complete, I input the raw data into SPSS.

For recruitment purposes, I sent a letter for flyer distribution and announcement requests in the form of e-mail to the community partners, who were requested to display study links on their websites, their social media pages, and the notice boards of their organizations. I started to contact potential organizations to display the flyer and announcement of the study on October 25, 2019. Face-to-face and phone meetings were arranged with the Muslim organizations to explain the purpose of the study and the nature of the organizations' contribution in displaying and announcing the study link. After these meetings, the organizations' representatives agreed to display the study flyer and link. After obtaining permission from the IRB and potential partner organizations, the link to the study (<https://www.surveymonkey.com/r/GHR3FJN>) was activated and posted to the Survey Monkey site.

Further, the survey was made available by using Survey Monkey via Muslim organizations' social media pages and online groups. Moreover, flyers were placed in community locations and distributed at religious gatherings (as listed in Appendix C). Data collection began on November 11, 2019 and was completed on January 7, 2020.

Response Rates

Initial data cleaning, screening, and analysis were completed using SPSS version 25 and Microsoft Windows 10 OS. As described in Chapter 3, initially, data were screened for missing values, incomplete responses, set response patterns, the identification of outliers, normality testing, multicollinearity, and homoscedasticity. The total number of responses collected in this study was 125. The desired sample was 125, but after screening and cleaning, 113 participants were kept in the dataset. The descriptive and demographic statistics were analyzed with 113 participants. However, at the assumption-checking stage, after the identification of four outliers, the final analysis of hierarchical multiple regression was conducted with a sample size of 109. The final sample for hierarchical regression with moderation was $N = 109$, and the percentage of the valid cases of those who participated was 96%.

Data Quality Screening

Meade and Craig (2012) stated that before performing primary analysis, data should be screened to eliminate poor-quality data, especially when survey data are collected using internet surveys. In the present study, data were first screened to ensure that all participants satisfied the criteria for inclusion. For this, records were checked to verify that all participants met the criteria for inclusion in this study (i.e., they needed to be Muslims above the age of 18 years and living in Calgary). People who did not meet these criteria were excluded from the final sample. After that, data were screened for excessive missing values.

Further, to meet the requirements of analysis, missing values were checked in the data by running a process of mean imputation. The series mean method was used to replace each response's missing values for each variable. Mean imputation was required for two participants because their responses were missing on one item of the scale. According to Meyers, Gamst, and Guarino (2017), using the mean as a replacement value is the most common, efficient, and simple form of imputation. Records were also screened for excessive missing data to address the requirement of the study questions; data were required on all three key independent and dependent variables. Respondents who failed to answer any of the items on the Perceived Islamophobia scale, Identity Centrality Scale, In-Group Superiority Scale, and Kessler Psychological Distress Scale were deleted from the data file. Two additional cases were also removed from the data file because the participants responded on identity centrality and in-group superiority but did not respond on any item of the PIS and distress scale.

After that, I addressed the issues of univariate outliers and multivariate outliers. Cook's distance value was calculated to check the outliers, and it was not greater than 1. Multivariate outliers were screened by calculating the Mahalanobis distance statistic (D), and four outliers were detected, which were later removed from the final hierarchical multiple regression analysis with moderation. Afterward, the assumptions of multicollinearity and homoscedasticity were addressed by conducting Z tests, including skewness and kurtosis and normal probability plot of regression and histograms. The desired sample was 125, but after screening and cleaning, 113 participants were kept in the dataset initially. After removing four multivariate outliers, 109 participants were kept

in the final analysis of hierarchical multiple regression with moderation. The final sample for hierarchical multiple regression with moderation was $N = 109$, with a response rate of 96%.

Discrepancies in Data Collection

There were no discrepancies from the planned data collection procedures outlined in Chapter 3. Participants were recruited according to the plan by displaying study flyers and links on websites, social media forums, and notice boards. Data were collected online by using Survey Monkey, as indicated in Chapter 3.

Descriptive and Demographic Characteristics of Sample

The survey was completed by 113 respondents who self-reported as Muslim (above 18 years of age) and lived in Calgary, Canada. I examined descriptive statistics for gender, level of education, level of religiosity, religious practice within Islam, wearing visible Islamic markers both for men and women, heritage, country of origin, and generation status by using data for 113 participants. All demographic variables were nominal. The demographic characteristics of the sample included in this research are shown in Table 1.

Table 1

Demographic Characteristics of the Sample (N = 113)

Characteristics	<i>N</i>	%
Gender		
Men	68	60.2
Women	45	39.8
Sect affiliation		
Sunni	105	92.9
Shia	1	.9
Other affiliations	7	6.2
Level of education		
High school diploma	14	12.4
Some college	5	4.4
Associate's degree	3	2.7
Bachelor's degree	34	30.1
Master's degree	39	34.50
Professional degree	14	12.4
Doctoral degree	3	2.7
Other	1	.9
Visible Islamic identity		
Yes (women)	33	29.25
No (women)	12	21.2
Yes (men)	17	15
No (men)	51	45.1

For gender, Table 1 shows that this sample consisted of 45 women (39.8%) and 68 men (60.2%). The sample consisted of 14 respondents with a high school diploma (12.4%), five respondents with some college (4.4%), three respondents with an associate's degree (2.7%), 34 with a bachelor's degree (30.1%), 39 with a master's degree (34.5%), 14 with a professional degree (12.4), three with a doctoral degree (2.7%), and one participant who responded "other" (.9%). Regarding sect affiliation, 105 reported Sunni (92.9%), one indicated Shia (.9%), and seven did not report an affiliation (6.2%). Of the sample, 17 males reported "yes" to the question of whether they had visible Muslim identity markers (15%), whereas 51 males reported "no" (45.1%). Among the women in the same, 33 reported that they wore visible Muslim identity markers (29.25%) and 12 reported that they did not (11%). The sample consisted of 84 Pakistanis (74%), with Pakistan representing the country of origin with the most participants in the study. Table 2 illustrates the percentages of participants by country of origin.

Table 2

Percentages of Participants by Country of Origin (N = 113)

Country of origin	<i>N</i>	%
Algeria	1	.9
Azad Kashmir	1	.9
Bahrain	3	2.7
Bangladesh	3	2.7
Canada	1	.9
Egypt	1	.9
Eritrea	1	.9
Ethiopia	2	1.8
Ghana	1	.9
India	2	1.8
Iraq	1	.9
Kashmir	1	.9
Missing	7	6.2
Nigeria	2	1.8
Pakistan	84	74.3
UAE	2	1.8

In response to an item on generation status, 94 respondents indicated that they were members of the first generation, having been born outside Canada (83.2%); 11 respondents chose 1.5 generation, meaning that they were born outside Canada but arrived in Canada in early or middle childhood; six reported that they were of the second generation, having been born in Canada (5.3%), and one reported third generation (.9%). One respondent did not report generation status (.9%). Results are shown in Table 3.

Table 3

Percentages of Participants by Generation Status (N= 113)

Generation status	<i>N</i>	%
1st generation (you were born outside of Canada and moved to Canada when you were an adult 15 years or older)	94	83.2
1.5 generation (you were born outside of Canada but arrived in Canada in early or middle childhood, i.e., 6–14)	11	9.7
2nd generation (you were born in Canada, and one or both parents were born outside of Canada, or you moved to Canada)	6	5.3
3rd generation (you and both of your parents were born in Canada)	1	.9
Other	1	.9

Moreover, in this sample, approximately 70% of respondents were South Asian, 26% were East Asian, 10% were Middle Eastern, and 5% were Black, Afro-Caribbean, or African American. One person was Hispanic White or Euro American (.9%), and one participant did not respond. Results are shown in Table 4.

Table 4

Percentages of Participants by Heritage (N = 113)

Heritage	N	%
Non-Hispanic White or Euro American	1	.9
Black, Afro Caribbean, or African American	5	4.4
East Asian	26	23.0
South Asian	70	61.9
Middle Eastern	10	8.8
Other	1	.9

Descriptive and Psychometric Properties of the Measures

Table 5 provides the psychometric properties of the measures used in the present study with the means, standard deviations with 95% confidence interval, and alpha levels. The PIS (measuring perceived Islamophobia) showed lower internal consistency ($\alpha = .67$), which was largely driven by the low reliability of the general fear subscale. The alpha for identity centrality ($\alpha = .93$), in-group superiority ($\alpha = .78$), and distress ($\alpha = .92$) showed excellent and acceptable internal consistency reliability (Miller & Lovler, 2016). The results are illustrated in Table 5.

Table 5

Descriptive Statistics With 95% Confidence Intervals and Cronbach's Alpha for Measures of Perceived Islamophobia, Identity Centrality, In-Group Superiority, and Psychological Distress

Variable	<i>N</i>	Min	Max	<i>M</i>	<i>SD</i>	95% CI	Item no.	Cronbach's α
PIS	113	20.00	59.00	42.14	7.18	[40.80, 43.48]	12	.667
Id-centrality	113	6.00	42.00	36.05	7.09	[34.7, 37.35]	6	.937
In-group super	113	4.00	20.00	13.42	3.67	[12.73, 14.10]	4	.780
Distress	113	10.00	50.00	18.87	8.06	[17.37, 20.37]	10	.924

Note. *N* = 113. PIS = perceived Islamophobia. Id-centrality = identity centrality. In-group super = In-group superiority. CI = confidence interval.

The results in Table 6 indicate that overall, a significant relationship was found between perceived Islamophobia and psychological distress ($r = .249, p < .01$). However, no significant relationship was found between identity centrality and psychological distress ($r = .101, p = .289$). Similarly, the relationship between superiority and psychological distress was also nonsignificant.

Table 6

Intercorrelation Between PIS, Identity Centrality, In-Group Superiority, and Psychological Distress (N = 113)

Scales	GF	FIslam	IPM	PIS	Idcentrality	Superiority	Distress
GF	-	.121	.222*	.652**	.475**	.187*	.227*
FIslam	-	-	.390**	.684**	.067	.051	.299**
IPM	-	-	-	.775**	.241**	.328**	.018
PIS	-	-	-	-	.382**	.277**	.249**
Idcentrality	-	-	-	-	-	.506**	.101
Superiority	-	-	-	-	-	-	.026
Distress	-	-	-	-	-	-	-

Note. GF = general fear; FIsalm = fear of Islam; IPM = Islamophobia in media; PIS = perceived Islamophobia; Id-Centrality = identity centrality; Superiority = perceived in-group superiority.

** $p < .01$. * $p < .05$.

Study Results

Hierarchical Multiple Regression Analysis

Tests of the statistical assumptions. Before performing the hierarchical multiple regression analysis, the data was analyzed for the statistical assumptions to perform multiple regression. The first assumption of hierarchical multiple regression analysis is that the dependent variable should be continuous (Warner, 2013). The continuous dependent variable in this study was psychological distress measured by using the Kessler distress scale (Kessler et al., 2002). Second, multiple regression requires two or more than two continuous or dichotomous predictors to run the analysis (Warner, 2013).

In this study, there were three predictors:(a) PIS, (b) identity centrality, and (c) in-group superiority. However, two separate hierarchical moderated regression analyses were conducted to examine the relationship between perceived Islamophobia and psychological distress by considering the moderating role of group identification. All these three variables were continuous and measured by Perceived Islamophobia scale, identity centrality scale, and perceived in-group superiority scales. The third assumption of multiple regression is that the observation for each case should be independent, and the responses in one case should not be effected by the other cases (Warner, 2013). In this study, all the participants recorded their responses individually and independently. The survey was conducted online anonymously and did not violate any assumptions to run hierarchical multiple regression analysis. Further, different tests were used to evaluate the remaining statistical assumptions.

The linearity of relationships between continuous predictors and dependent variable. To conduct hierarchical multiple regression analysis, the dependent variables and continuous predicting variables should be linearly related with each other (Warner, 2013). However, multiple regression assumes that the relationship between variables should not be strongly linear, and it should not be strongly nonlinear (Warner, 2013).

To check the linearity of the relationship between PIS, identity centrality, in-group superiority, and psychological distress, scatter plots were created. A linear and quadratic curve was fitted, and the goodness of fit was measured by R^2 . For the relationship between PIS and psychological distress, line $R^2 = 0.062$; for the curve, $R^2 = 0.074$. For the relationship between identity centrality and psychological distress, line $R^2 =$

= 0.010; for the curve, $R^2 = 0.017$. Similarly, for in-group superiority and psychological distress, line $R^2 = 6.842$; for the curve, $R^2 = 0.002$. The results indicated a linear relationship between three continuous variables and dependent variables. Although the relationship of identity centrality and in-group superiority with psychological distress was not strongly linear, it was also not strongly nonlinear. It was concluded that the assumption of linearity (the absence of nonlinearity) was met. The results are illustrated in Figure 1, 2, 3, and 4 for all variables through simple scatter plots and scatter matrix showing the relationship between PIS, identity centrality, in-group superiority, and psychological distress.

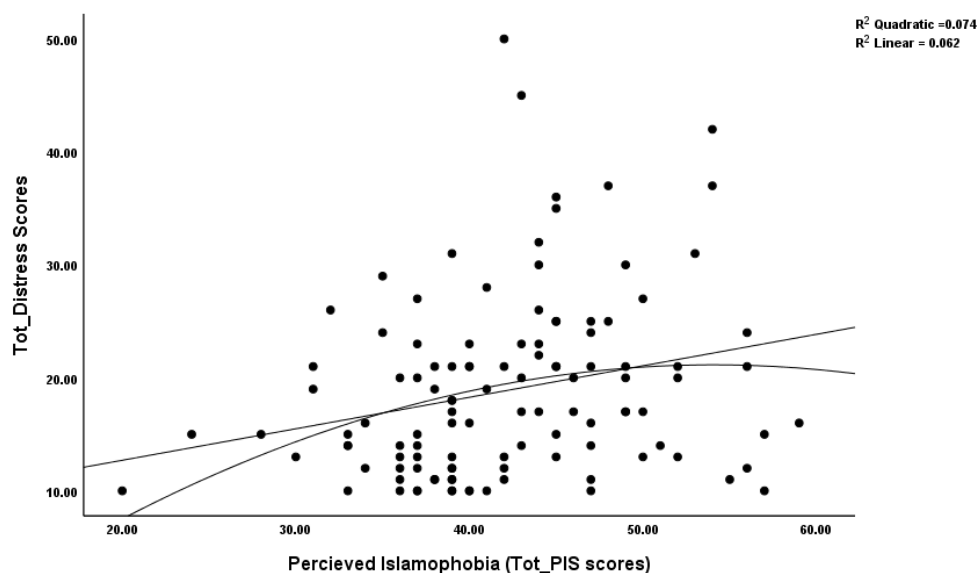


Figure 1. Scatterplot depicting the relationship between perceived Islamophobia and psychological distress.

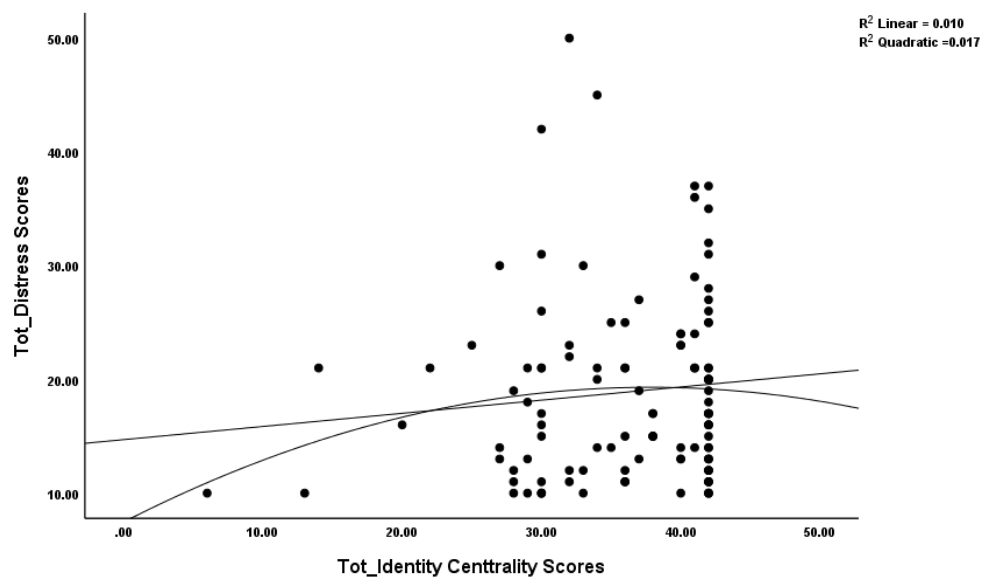


Figure 2. Scatterplot depicting the relationship between identity centrality and psychological distress.

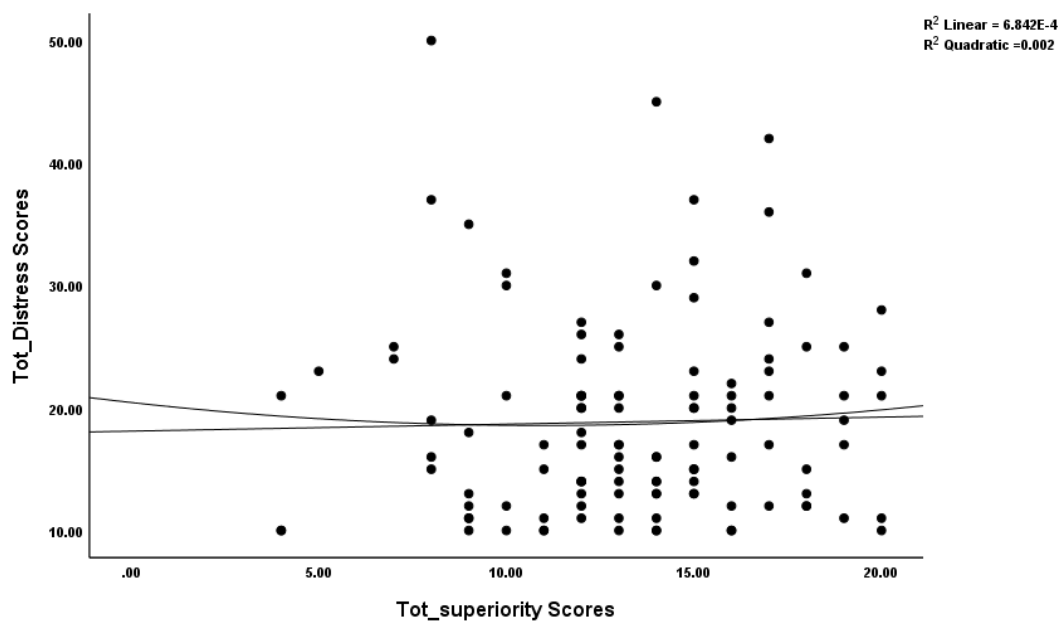


Figure 3. Scatterplot depicting the relationship between in-group superiority and psychological distress.

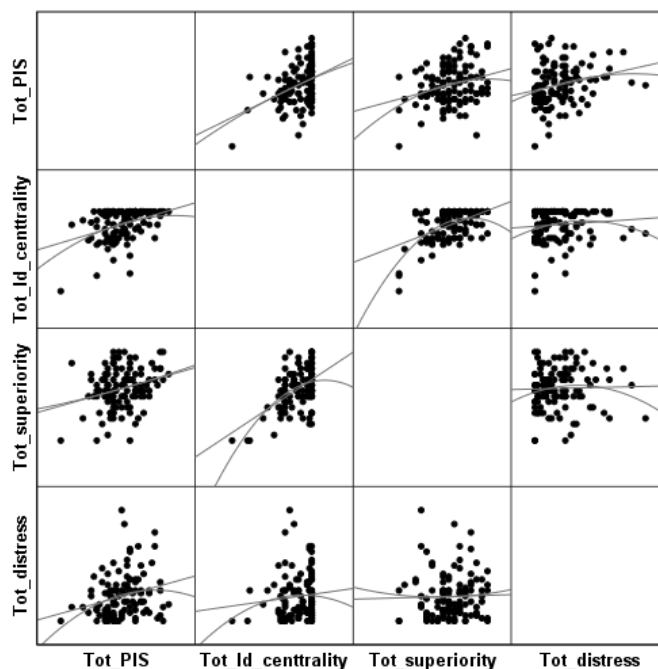


Figure 4. Scatterplot matrix depicting the relationship between perceived Islamophobia, identity centrality, in-group superiority, and psychological distress.

Absence of multicollinearity. Multiple regression assumes that independent and dependent variables should not be highly correlated with each other (Warner, 2013). Multicollinearity was evaluated in this study by calculating the correlation between predictor variables. According to Aiken and West (1991), If the correlation value is greater than .7, then it can be concluded that those variables are multicollinear. All the values in the analysis were less than .7. For PIS, $r = .249$, for identity centrality $r = .101$, and for in-group superiority $r = .026$, which shows that none of these predictors are multicollinear. Moreover, in this study, to check the multicollinearity, tolerance values were evaluated for all predictors. The rationale behind checking the tolerance level was that it informs about the degree of variance in each predictor that is increased due to multicollinearity. Tolerance values less than .10 were considered high multicollinearity

(Tabachnick & Fidell, 2013). Tolerance values for the predictors in this study ranged from .68 (for the identity centrality) to .845 for (PIS). The tolerance value for in-group superiority was .736. It was concluded that no multicollinearity found in the data.

Normally distributed residuals. Further, multiple regression analysis assumes that the errors between actual scores and predicted scores (i.e., residuals in regression) should be normally distributed. Figure 5 shows a frequency histogram of the residuals from the multiple regression analysis. That plot provides a reasonably good visual approximation to the normal curve, which is flat at the end and showing deviation and little skewness in the normal distribution of scores.

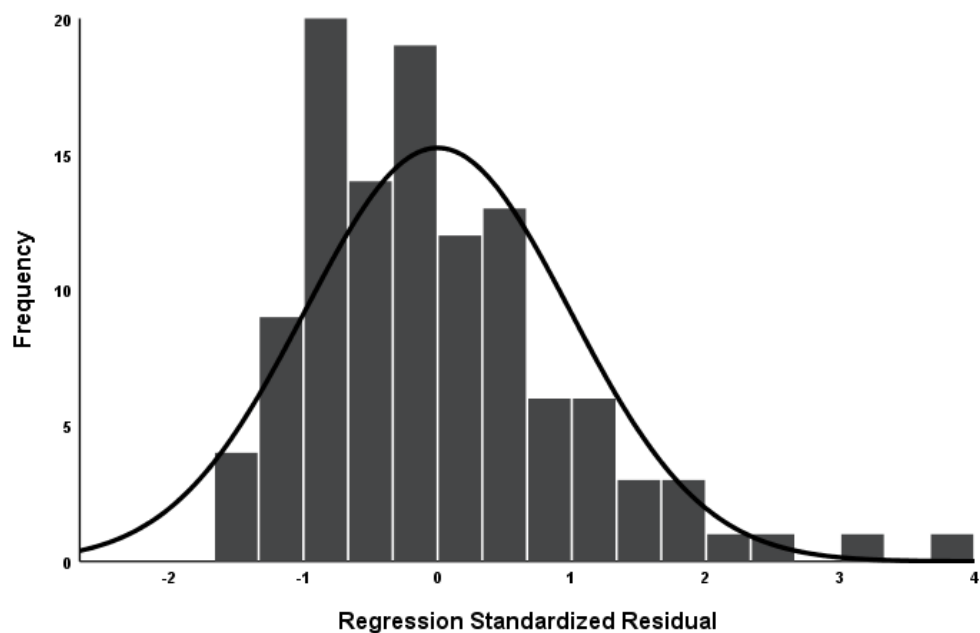


Figure 5. Frequency histogram of residuals from the hierarchical multiple regression analysis.

Homoscedasticity of residuals. The assumption of homoscedasticity of residuals refers that the variance of predicted errors should be approximately the same for all

predicted values. In a scatter plot, there should be approximately equal scattering points around the fitted line of regression (Schützenmeister, Jensen, & Piepho, 2012). In multiple regression analysis, the homoscedasticity of residuals assumption is tested by examining a plot of standardized residuals against standardized predicted values, as seen in Figure 6. The points in that scatter plot show almost equal scattering points around the horizontal fitted line of regression, which indicates nearly similar variability of residuals for all predicted values. It was concluded from this observation that the assumption of homoscedasticity of residuals was satisfied (Tabachnick & Fidell, 2013).

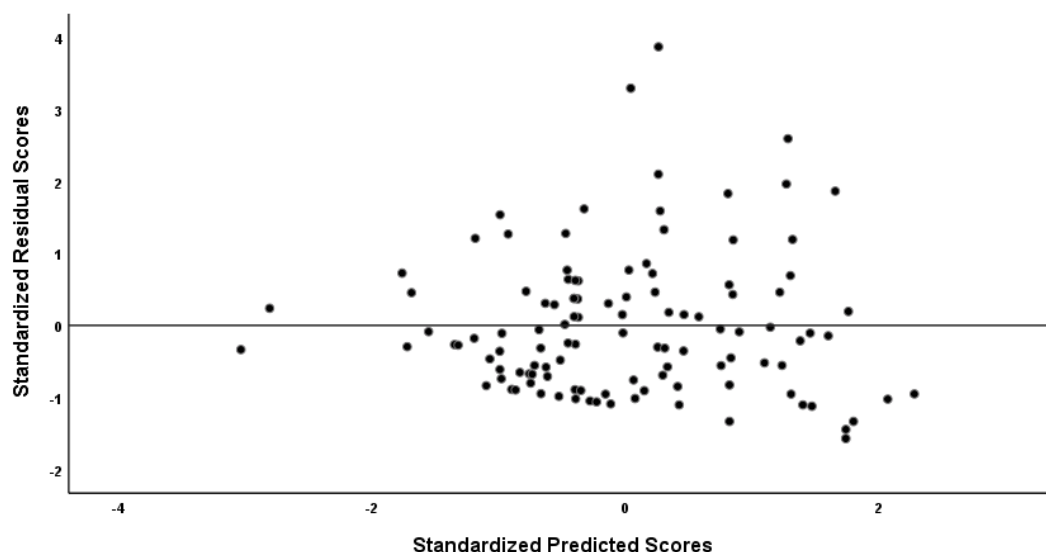


Figure 6. A plot of standardized residuals against standardized predicted scores.

Absence of outliers. Outliers in regression are the extreme values or observation which falls from the cloud points. Bivariate outliers and multivariate outliers can have severe effect on the bivariate regression line which can lead to illogical influence on the results of multiple regression analysis (Warner, 2013). The data was screened for

bivariate and Multivariate outliers by using the casewise diagnostics tool, and by calculating the Mahalanobis distance statistic through running the multiple regression. The value of D was calculated to see the deviation of each case's scores from the average scores of the sample. Further, the significance of D values was assessed against the chi-square distribution using $df = 3$ (the number of variables used to calculate D) and significance level of $p < .05$ (Meyers et al., 2017). Four cases were found extremely varied from the mean values of the variables, and these four cases were excluded from the data file for the hierarchical multiple regression analysis. According to Meade and Craig (2012), multivariate outliers result from careless and random responding, and before proceeding with further data analysis, such multivariate outliers should be excluded.

Further, data were screened for individual cases by using the casewise diagnostics tool. Casewise diagnostic tool was used to evaluate those individuals whose actual distress scores dropped more than three standard deviations from their predicted distress scores (Warner, 2013). The Cooks' statistics were not greater than 1, and no further outliers were found in the data file. After completing all stages of data screening, there remained 109 cases for further analysis of hierarchical multiple regression with moderation. This sample size was adequate to perform regression analysis that was determined 107 cases from a prior power analysis (see Chapter 3).

Research Question Results

The associated probability values were set for the traditional $p < .05$ as a means to

reject the null hypothesis for statistically significant findings (Télez, García, & CorralVerdugo, 2015). Final data analysis was conducted by using two hierarchical moderated regression analyses according to research questions and hypotheses on a sample of ($N = 109$) after removing four multivariate outliers as a result of testing statistical assumptions. A two-step hierarchical multiple regression analysis was used to address all of the study's research questions. Two separate hierarchical moderated regression analyses were conducted to examine the relationship between perceived Islamophobia and psychological distress by considering the moderating role of group identification. The RQs, hypotheses, and model of this study were examined as follows:

Research Question 1

The first analysis was used to examine the impact of Perceived Islamophobia on psychological distress among Muslim immigrants in Canada without the moderating variable of in-group centrality and in-group superiority. The H0 and H1 for this analysis were as follows:

RQ1. Does perceived Islamophobia predict psychological distress among Muslim immigrants in Canada?

Null Hypothesis 1 (H01): Perceived Islamophobia will not be a significant predictor of psychological distress among Muslim immigrants in Canada.

Alternative Hypothesis1 (HA1): Perceived Islamophobia will be a significant predictor of psychological distress among Muslim immigrants in Canada.

A hierarchical multiple regression analysis was conducted with moderation. In the first step, two variables were included, Perceived Islamophobia and identity centrality to predict the psychological distress (Q#1 & 2). The results indicate that, as expected, perceived Islamophobia significantly predicts psychological distress, $\beta = .356$, $t(105)3.26$, $p = .002$. The null hypothesis was rejected that perceived Islamophobia will not be a significant predictor of psychological distress among Muslim immigrants in Canada. Results are illustrated in Table 7.

Research Question 2

A hierarchical moderated regression analysis was conducted to check the moderating role of identity centrality in the relationship between perceived Islamophobia and psychological distress. The H0 and H1 for this analysis were as follows:

RQ2. Is identity centrality a significant moderator of the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada?

Null Hypothesis 2 (H02): Identity centrality will not be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

Alternative Hypothesis 2 (HA2): Identity centrality will be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

To test the hypothesis that identity centrality moderates the relationship between perceived Islamophobia and psychological distress, hierarchical multiple regression

analysis with moderation (Table 7) was conducted. In the first step, two variables were included, perceived Islamophobia and identity centrality to predict the psychological distress. In the second step, perceived Islamophobia, identity centrality, and interaction term PIS×identity centrality were added to see the moderation effects. The variables were mean centered, and an interaction term between PIS×identity centrality was created to avoid potentially problematic high multicollinearity (Aiken & West, 1991).

The overall regression model was significant. Model 1, without the interaction term to predict distress from PIS and identity centrality, was not significant, $R^2 = .046$, $\Delta R^2 = .045$, $F(2,106)2.57$, $p = .081$. Model 2 with the interaction term between PIS×identity centrality, was significant, $R^2 = .107$, $\Delta R^2 = .061$, $F(1,105), 7.14$, $p = .009$. The results show that after adding the interaction term, PIS×Centrality at step 2, ΔR^2 was increased by .061, F -change (1,105), 7.14, $p = .009$, bringing the overall R^2 at step 2 to .107. This finding indicates that in model 1, PIS and centrality did not explain a statistically significant portion of the variance in psychological distress. However, in model 2, the interaction between PIS and identity centrality explains a significant unique portion of the variance in psychological distress. The results are illustrated in Table 7.

Table 7

Hierarchical Multiple Regression Analyses With Moderation Predicting Psychological Distress From PIS, Identity Centrality, and PIS × Identity Centrality

Step	Predictors	Unstandardized coefficients		Standardized coefficients		R^2	ΔR^2	F^a	Sig. ΔF
		B	SE	β	t				
1						.046	.046	2.57	.081
	PIS	.269	.121	.223	2.23				
	Id- centrality	-.044	.142	-.031	.307				
2						.107	.061	*7.14	.009
	PIS	.430	.132	.356	3.26				
	Id- centrality	-.128	.141	-.091	.908				
	PIS × Id- centrality	-.065	.024	-.277	2.67				

Note. PIS = Perceived Islamophobia Scale; Id-centrality = identity centrality. Model 1 $df(2,106)$, Model 2 $df(1,105)$.

^a F test at Step 2 is for the change in R^2 after adding the interaction term in model.

* $p < 0.05$. ** $p < 0.01$.

The results in Table 7 indicate that there was statistically significant perceived Islamophobia × identity centrality interaction $\beta = -.227$, $t(105) = -2.67$, $p = .009$, which indicates that identity centrality moderates the relationship between perceived Islamophobia and psychological distress, and the null hypothesis was not retained.

Further, the analysis was conducted to see the relationship between perceived Islamophobia and psychological distress across the two levels of identity centrality. Examination of the interaction plot showed a buffering effect, and a higher level of identity centrality resulted in decreased psychological distress. In contrast, the lower identity centrality resulted in increased psychological distress. The results are illustrated in Figure 7.

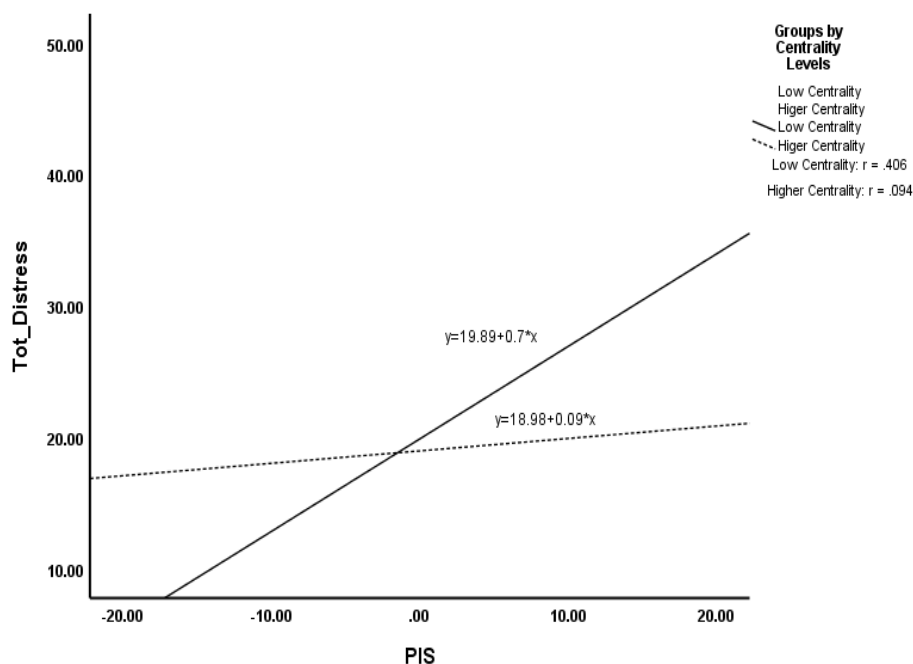


Figure 7. Scatterplot showing the relationship between perceived Islamophobia and psychological distress across two levels of identity centrality.

Research Question 3

Further, to see the moderating role of in-group superiority in the relationship between perceived Islamophobia and psychological distress, a hierarchical multiple moderated regression was conducted. The H0 and H1 for this analysis were as follows:

RQ3. Is in-group superiority a significant moderator of the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada?

Null Hypothesis 3 (H03): In-group superiority will not be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

Alternative Hypothesis 3 (HA3): In-group superiority will be a significant moderator of the relationship between perceived Islamophobia and psychological distress.

To answer the third question, another separate hierarchical multiple regression analysis with moderation was conducted. In the first step, two variables were entered, perceived Islamophobia and in-group superiority to predict psychological distress. In the second step, perceived Islamophobia, in-group superiority, and the interaction term PIS×superiority was added to test the moderation effects. Overall, the regression model was not significant. The model 1 without the interaction term to predict distress from PIS and in-group superiority was nonsignificant, $R^2 = .051$, $\Delta R^2 = .051$, $F(2, 106)2.84$, $p = .063$. Model 2, with the interaction term between PIS×Superiority, was also not significant, $R^2 = .057$, $\Delta R^2 = .006$, $F(1,105),.661$, $p =.418$. The results in table 8 indicate that in-group superiority and psychological distress did not account for a significant proportion of the variance in psychological distress.

Moreover, there was no significant change in R^2 after adding the interaction term in the second step of hierarchical multiple regression. With the addition of the interaction term, PIS ×Superiority at the second step, ΔR^2 was increased by .006, bringing the overall R^2 at the second step to .057. However, this was not a statistically significant increase in R^2 . To avoid potentially problematic high multicollinearity with the interaction term, the variables were centered, and an interaction term between PIS×Superiority was created (Aiken & West, 1991). The results are illustrated in Table 8.

Table 8

Hierarchical Multiple Regression Analyses With Moderation Predicting Psychological Distress From PIS, In-Group Superiority, and PIS × In-Group Superiority

Step	Predictor	Unstandardized coefficients		Standardized coefficients	<i>t</i>	<i>P</i>	<i>R</i> ²	ΔR^2	<i>F</i> ^a	Sig. ΔF
		<i>B</i>	<i>SE</i>	β						
1							.051	.051	2.84	.063
	PIS	.281	.118	.233	2.37	.019				
	Superiority	-.182	.236	-.076	.773	.441				
2							.057	.006	*.661	.418
	PIS	.308	.123	.255	2.51	.014				
	Superiority	-.186	.236	-.077	.789	.432				
	PIS × Superiority	-.030	.036	-.080	.813	.418				

Note. PIS = perceived islamophobia, Superiority = perceived in-group superiority. Model 1, *df* (2,106), Model 2, *df* (1,105).

^a*F* test at Step 2 is for the change in *R*² after adding interaction term in the Model 2.

p* < 0.05. *p* < 0.01.

.

Results in Table 8 indicate that there was a nonsignificant PIS×Superiority interaction, $\beta = -.080$, $t(105) = -.813$, $p = .418$. Perceived Islamophobia remained a significant predictor of psychological distress in model 1 and model 2. This means that perceived Islamophobia significantly predicts psychological distress among Muslim immigrants in Canada. Moreover, results indicate that in-group superiority does not moderate the relationship between perceived Islamophobia and psychological distress among Canadian Muslims, and the null hypothesis is retained.

Summary

The purpose of this quantitative correlational study with moderation was to examine the differing moderating roles of centrality and in-group superiority in the relationship between perceived Islamophobia and psychological distress. The first question of the study was that either perceived Islamophobia predicts psychological

distress among Muslim immigrants in Canada. The results indicate that perceived Islamophobia significantly predicts psychological distress among Muslim immigrants in Canada. Consequently, the null hypothesis was rejected that perceived Islamophobia does not predict psychological distress among Muslim immigrants in Canada.

Further, for the second question that either identity centrality moderates the relationship between perceived Islamophobia and psychological, results indicate that identity centrality significantly moderates the relationship between perceived Islamophobia and psychological distress. The null hypothesis was not retained. Further analysis was conducted with reference to a low and higher level of PIS. Further analysis indicated a buffering effect, and an increase in identity centrality decreased psychological distress among Muslim immigrants in Canada. However, a low level of identity centrality resulted in increased psychological distress.

Concerning the third question, the goal was to investigate the moderating role of in-group superiority in the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada, where the null hypothesis was retained. The main effect of the in-group superiority to predict psychological distress was also nonsignificant, which indicates that in-group superiority is not a significant predictor and moderator between perceived Islamophobia and psychological distress among Canadian Muslims. Based on the result of this study, there is evidence to support that perceived Islamophobia is related to psychological distress and a higher level of identity centrality buffers against psychological distress among Muslim immigrants in Canada, even in the presence of perceived group discrimination. In Chapter 5, the

findings of this study are interpreted and discussed with reference to research questions and previous research literature. Further, the recommendations based on the study's limitations and strengths, along with the implications of this research study, are also presented. Lastly, Chapter 5 also includes positive social change implications for the individual, methodological, theoretical, empirical, and practice scopes.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative correlational study with moderation was to examine the differing moderating roles of centrality and in-group superiority in the relationship between perceived Islamophobia and psychological distress. The present study helps to answer the question of which dimension of group identity can moderate the relationship between perceived discrimination and psychological distress among Muslim immigrants in Canada. It was hypothesized that perceived Islamophobia would be a significant predictor of psychological distress among Muslim immigrants in Canada. Similarly, it was also hypothesized that identity centrality and in-group superiority would be significant moderators of the relationship between perceived Islamophobia and psychological distress. This rationale was based on previous conflicting research findings related to the moderating role of group identification by focusing on which dimension of group identity (identity centrality or in-group superiority) protects against psychological distress. There were three research questions guiding this research:

- RQ1. Does perceived Islamophobia predict psychological distress among Muslim immigrants in Canada?
- RQ2. Is identity centrality a significant moderator of the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada?

RQ3. Is in-group superiority a significant moderator of the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada?

The results indicate that perceived Islamophobia significantly predicts psychological distress among Muslim immigrants in Canada and identity centrality significantly moderates the relationship between perceived Islamophobia and psychological distress. However, in-group superiority was not a significant moderator in the relationship between perceived Islamophobia and psychological distress. Previous studies have found mixed results regarding the moderating role of group identity in the relationship between perceived Islamophobia and psychological distress (e.g., Friedman & Brownell, 1995; Friedman & Saroglou, 2010; Goforth et al., 2014; Jasperse et al., 2012; McCoy & Major, 2003; Twenge & Crocker, 2002). The present research provides evidence regarding the moderating role of different dimensions of group identity in the relationship between perceived Islamophobia and psychological distress. This chapter contains a description and review of the research questions, along with an interpretation of the findings. I discuss and explain the interpretations with reference to previous research literature and the theoretical framework presented in Chapters 1 and 2. Additionally, the limitations of the study and recommendations for further research are addressed in this chapter. Lastly, this chapter includes implications for positive social change corresponding to potential individual, methodological, theoretical, empirical, and practical impacts of the study.

Interpretation of Findings

Perceived Islamophobia and Psychological Distress

Literature review and research findings. The results of multiple hierarchical regression indicated that perceived Islamophobia significantly predicts psychological distress among Muslim immigrants in Canada. This result both confirms and expands previous research findings that suggest that Islamophobia has a negative impact on the well-being of Muslim immigrants in western countries (Cherney & Murphy, 2016; Friedman & Clack, 2009; Ghaffari & Çiftçi, 2010; Gordijn, 2010; Kunst et al., 2012). The present research findings are consistent with previous research findings, in that perceived Islamophobia was found to be a significant predictor of psychological distress among Canadian Muslims. For example, previous research conducted by Gordijn (2010) supported the findings of the present study by indicating that Islamophobia has a negative impact on the well-being of Muslim immigrants in western countries as a result of their perception of increased stereotypes against Islam and Muslim identity. Similarly, research conducted by Friedman and Clack (2009) supported the present research finding by providing evidence that increased perception of discrimination at the group level results in increased psychological distress among a stigmatized group. These findings contribute to the broader literature on the negative impacts of perceived discrimination for individual well-being.

Implications for existing research and theory. SIT provided a theoretical framework for the present research. According to SIT, social identity provides people with a collective self-concept that has a strong emotional value for the members of a

group, and prejudice from the dominant group harms individuals' well-being and perceptions about their own group (Tajfel & Turner, 1986). Based on this theoretical background, in the present study, it was assumed that perceived Islamophobia would have a direct negative impact on psychological distress among Canadian Muslims. The findings of the present research are well aligned with the theoretical foundations of SIT. The result of the present study provide evidence that constant discrimination and perception of a negative attitude against their own group have a negative effect on the well-being of Muslim immigrants in Canada. In the present study, the perception of negative attitudes toward Islam and Islamic identity was related to psychological distress among Muslim immigrants in Canada. The previous research findings also support that pervasive discrimination and rejection from an outside group toward the in-group can result in a higher level of anxiety and psychological distress (Baumeister & Tice, 1990; Cozzarelli & Karafa, 1998; Frable, 1993).

Identity Centrality Moderating Effect

Literature review and research findings. The second hypothesis of the study was that identity centrality would be a significant moderator in the relationship between perceived Islamophobia and psychological distress. The data analysis indicates that identity centrality significantly moderates the relationship between perceived Islamophobia and psychological distress. However, identity centrality alone did not explain significant variance in psychological distress.

As described in Chapter 2, there have been mixed findings on the impact of identity centrality, which may be either protective or harmful for the well-being of a

stigmatized group. For example, according to the rejection identification model, long-term discrimination from the dominant group results in increased identification with the in-group, which buffers against the negative effects of discrimination (Branscombe et al., 1999). However, there is another perspective about the moderating role of group identification, which indicates that perceived group discrimination can have a negative impact on psychological well-being (McCoy & Major, 2003). The results of the present study support the rejection identification model and indicate that a higher level of identity centrality buffers against psychological distress among Canadian Muslims. The relationship between PIS and distress differs depending on the level of identity centrality. The findings of the present research corroborate previous research findings indicating that increased identity centrality protects against psychological distress (e.g., Kunst et al., 2013; Schaafsma, 2011; Verkuyten & Yildiz, 2007). Schaafsma (2011) found that higher identifiers were less likely to be affected by the negative effects of discrimination and that stronger identification with the religious group shields against negative emotional outcomes among Muslim immigrants, even in the presence of increased perception of discrimination.

Similarly, Verkuyten and Yildiz's (2007) research findings supported the present research findings by indicating that perceived group rejection is associated with stronger in-group identification among Turkish-Dutch Muslims. However, Kunst et al.'s (2013) findings indicate that perceived Islamophobia predicts increased religious identification and well-being only for German-Turks, with no relation found among a sample of Norwegian-Pakistanis. However, the present research sample mainly consisted of

Canadian Pakistanis; thus, the present study adds to the literature that perceived Islamophobia predicts increased religious identification and well-being among Canadian Pakistanis as well.

Similarly, findings of research conducted by Jasperse et al. (2012) support the finding of the present research that stronger group identification moderates the relationship between perceived discrimination and psychological distress, and people with a higher level of identity centrality can have less psychological distress even in the presence of perceived group discrimination. Thus, the findings of the recent study can be explained in light of previous research that suggests that the relationship between discrimination and well-being can vary depending on the strength of people's group identification among varied Muslim groups (Kunst et al., 2012; Schaafsma, 2011).

Implications for existing research and theory. SIT predicts that differences in the importance of social identity can lead to different social and emotional responses in the presence of discrimination (Stryker & Serpe, 1994; Tajfel & Turner, 1986). However, previous research findings provide mixed evidence. A few research findings (e.g., Friedman & Saroglou, 2010; Jasperse et al., 2012) indicate that higher identity protects against the harmful effects of discrimination. In contrast, other research findings (e.g., Burrow, 2010; Phalet et al., 2018) show that higher identity results in increased distress. The findings of the present research indicate a buffering effect and demonstrate that an increase in identity centrality resulted in decreased psychological distress among Muslim immigrants in Canada, whereas a low level of identity centrality resulted in increased psychological distress among Muslim immigrants in Canada. Thus, the findings of the

present research support social identity theory, which indicates that higher identification with the in-group provides a sense of belonging, which further protects from the harmful effects of discrimination from an outside group. Similarly, the present research findings support SIT's notion that differences in identity centrality can lead to different emotional and psychological consequences in the presence of group discrimination.

Based on the present research findings, Muslim immigrants living in Canada might be able to use their religious group as a coping mechanism when experiencing anxiety and distress. Increased identification with the group might help in mitigating the harmful effects of perceived Islamophobia. Therefore, the higher centrality of the Muslim identity might help to reduce the impact of increased perception of discrimination against their own group, which may further protect them from psychological distress. At the same time, findings indicate that low identity centrality can lead to increased psychological distress.

In-Group Superiority Moderating Effects

Literature review and research findings. The third assumption of the study was that in-group superiority would be a significant moderator in the relationship between perceived Islamophobia and psychological distress. To check this, hierarchical multiple regression analysis with moderation was conducted. The results indicate that in-group superiority does not moderate the relationship between perceived Islamophobia and psychological distress among Canadian Muslims, and the null hypothesis was retained. The main effect of in-group superiority was also nonsignificant, which indicates that in-group superiority was not related to psychological distress. However, the findings are not

consistent with the previous research findings, which suggest that in-group superiority can lead to different responses as the result of perceived Islamophobia (e.g., Bilali et al., 2016).

The previous research literature indicates mixed findings regarding the moderating role of in-group superiority in the relationship between perceived Islamophobia and psychological distress. Based on this previous literature, it was hypothesized that in-group superiority, another dimension of in-group superiority, might provide a better explanation to predict which dimension of group identification is protective or harmful for the well-being of Muslim immigrants in Canada. The results of the present study indicate that in-group superiority was not a significant moderator in the relationship between perceived Islamophobia and psychological distress. The findings of the present research are contrary to the previous research findings. For example, Bilali et al. (2016) found believing that one's group is good (sense of pride) can alleviate the negative consequences of group discrimination.

Similarly, Roccas, Klar, and Livitain (2006) identified that two dimensions of group identification (e.g., identity centrality & group superiority) might lead to different responses and reactions from the victimized group in the presence of persuasive discrimination. However, the findings of the present research indicate that another dimension of group identification (in-group superiority) is not related to psychological distress among Muslim immigrants living in Canada. Although there was variance in the R^2 when the interaction term was added to the second step of the hierarchical regression, it was not significant. One possible explanation for these findings is that the present

research sample was not large ($N = 113$) and mainly consisted of Canadian Pakistani Muslims (74%). The inclusion of a larger sample with more diverse backgrounds might provide a better explanation of the moderating role of in-group superiority in the relationship between perceived Islamophobia and psychological distress. The previous literature shows that differences in social context among varied groups of Muslims may lead toward different emotional outcomes in the presence of group discrimination (Jasperse et al., 2012; Schaafsma, 2011).

Implications for existing research and theory. According to SIT, a multidimensional approach toward group identity can provide a better picture of its role in determining the relationship between perceived group discrimination and psychological distress. Another dimension of group identity is a belief in group superiority, which can be protective in the presence of pervasive discrimination (Tajfel & Turner, 1979). The previous research findings support the assertion that a stronger belief in group superiority can lead to different psychological consequences in the presence of pervasive group discrimination (Iqbal & Bilali, 2018). Based on SIT theory, it was assumed that the relationship between perceived Islamophobia and psychological distress can vary depending on the level of in-group superiority. However, the findings of the present study indicate that in-group superiority does not moderate the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada.

Limitations of the Study

External Validity

It was already mentioned in Chapters 2 and 3 that the findings of the research can be generalized only to Muslims living in Calgary, Canada. The sample for the present research consisted of Muslims from diverse backgrounds. There were, however, issues related to 74% of the sample being composed of Pakistani Muslim Calgaryans, which raises the question of generalizability to all Muslims living in Calgary from different countries and with differing heritage. Another concern of external validity involves religious sects, in that most of the participants in the sample were Sunni Muslims (92.9%). Likewise, regarding participants' heritage in this sample, approximately 70% of respondents were South Asian, 26% were East Asian, 10% were Middle Eastern, and 5% were Black, Afro-Caribbean, or African American. One person was Hispanic White or Euro American (.9%). The low level of representation of Middle Eastern, Black, Afro-Caribbean, and Hispanic White or Euro Americans may raise concerns for the external validity of the present research findings. Moreover, the sample size for the current research was 113, which may be a limitation in generalizing the results. A larger sample might provide better generalizability as compared to a smaller sample.

Construct Validity

All of the constructs used in the current research were operationally defined to ensure that the theoretical framework, primary construct, and measuring scales were well aligned. Moreover, the statistical proprieties (e.g., validity, coefficient alpha) of all scales were described in the current research to make sure that particular scales measured the

same constructs that they purported to measure (Frankfort-Nachmias & Nachmias, 2014). All of the scales used in this research have an alpha level above .7 except the PIS. The reliability coefficient for the PIS was lower ($\alpha = .667$), which was largely driven by the low reliability of the general fear subscale ($\alpha = .330$). However, the reliability coefficient for the other two subscales of the PIS was high. For fear of Islamization, the alpha was ($\alpha = .718$), and for Islamophobia, in media, the alpha was ($\alpha = .842$).

Internal Validity

The design of the present study was correlational, which can be the biggest threat to the internal validity in this study because of the lack of control in cross-sectional research methods. Similarly, social desirability might affect the responses of participants because the intent of the study was also described in the informed consent. However, the possible bias related to response was controlled by using the anonymous data collection method as the data was collected online. However, there were issues concerning the sample, and these issues were sorted out during data screening and cleaning procedures. For example, people with higher or extreme scores were not added in the final analysis of regression to reduce bias. Therefore, the results will be interpreted and applied with caution.

Recommendations for Action

Methodological Guidance

For the researchers, who want to expand research in this area in the future, they should consider two recommendations. First, to reduce the participant's bias and social desirability by rephrasing the content of informed consent. For the present study, in the

informed consent process, the intent of the research was mentioned, which might result in some nonsignificant and low scores on a few scales, especially in-group superiority.

Withholding of some information within legal and ethical boundaries can result in better outcomes. The other recommendation is that the researcher should use such instruments that do not appear to have face validity, which can alert the response of participants towards the construct that is being measured (Xie, 2011). The use of other instruments with low face validity could lead to more unbiased responses from the participants without any anxiety and apprehensions.

Recommendations for Future Research

In the future, researchers could expand upon this study by considering the larger and more diverse sample. In the present study, most of the sample consisted of Pakistani Canadian Muslims, and the representation of other regions and nationalities was less. Other researchers are encouraged to replicate this study to include a larger number of Arabs, Turks, Black/African, and Hispanic in the sample. The previous literature supports that population experiences related to culture; race could later impact how distress is experienced (Cokley et al., 2011). Moreover, the moderating role of in-group superiority should be checked by comparing the level of superiority among Muslim immigrants belonging to diverse heritage, sects, and country. It could provide better insight into the moderating role of in-group superiority in the relationship between perceived Islamophobia and psychological distress.

Implications

Implications for Social Change

Individual impacts. The findings of this research will help to devise intervention programs for the well-being of Muslim immigrants living in Canada by considering the moderating role of group identification. The purpose of this study was to see which dimension of group identity (identity centrality & in-group superiority) moderates the relationship between perceived Islamophobia and psychological distress. The findings indicate that identity centrality moderates the relationship between perceived Islamophobia and psychological distress. The results will help therapists and counselors to consider the group identity as a significant element for the well-being of Muslim immigrants in conducting the counseling and therapeutic session. The key findings of this study provided a robust understanding of how religious preference, at a group level, might serve as a factor for how anxiety and distress experienced. Moreover, research findings also exhibit how the importance of religious identity can lead to different expressions of distress as a result of perceived Islamophobia among Muslim immigrants living in Canada. These findings will provide insight to the practitioners and counselors to consider the unique role that identity centrality plays in mitigating the negative effects of perceived Islamophobia.

Methodological, theoretical, and empirical impacts. The potential impact on positive social change, at a research level, stems from this study's three literature contributions towards previous conflicting research findings, theoretical expansion, and empirical findings. First, these research efforts include solving the old debate about the

moderating role of in-group identity. The previous research has mixed and conflicting results of the moderating role of group identity as few are of the view that it protects from negatives effects of discrimination. In contrast, other research findings view it as harmful for the well-being. To solve this debate in the previous literature, the focus of this research was to investigate group identity by considering the multidimensional approach. Therefore, It was assumed that in-group superiority that is another dimension of group identity might be protective. The findings of present research contribute that in-group superiority; another dimension of group identity does not moderate the relationship between perceived Islamophobia and psychological distress. However, identity centrality significantly moderates the relationship between perceived Islamophobia and psychological distress. The finding of present research fills a gap in the previous research by investigating the group identification from multidimensional aspects.

Secondly, the study provides support that perceived Islamophobia and identity centrality are significant predictors of psychological distress among Muslim immigrants in Canada. Thirdly, the study fills a gap in the previous literature that a higher level of identity centrality protects against the detrimental effects of psychological distress among Muslim immigrants in Canada.

Practice Implications

The findings of this study would be significant in providing a baseline for developing counseling strategies for Muslim immigrants living in Canada by considering the moderating role of identity centrality. Further, that may help in the prevention of harmful effects of perceived Islamophobia, ultimately leading towards better

psychological well-being. Moreover, these findings will help therapists and counselors to consider the group identity as a significant element for the well-being of Muslim immigrants in conducting the counseling and therapeutic session. Also, findings will be very beneficial for the better social reforms and better policies to reduce stereotypes, prejudice, and discrimination associated with the Muslim's religious identity, ultimately leading towards positive social change in the community.

Conclusions

The purpose of this quantitative correlational study with moderation was to examine the differing moderating roles of centrality and in-group superiority in the relationship between perceived Islamophobia and psychological distress. In this study, a sample of ($N = 113$) Muslim males and females above 18 years old assisted in the examination of the moderating role of identity centrality and in-group superiority in the relationship between perceived Islamophobia and psychological distress. This study utilized an online survey tool, SurveyMonkey, to collect the data from Muslim immigrants living in Calgary, Canada.

It was hypothesized that perceived Islamophobia would be a significant predictor of psychological distress among Muslims immigrants in Canada, and two dimensions of group identity (identity centrality and in-group superiority) will moderate the relationship between perceived Islamophobia and psychological distress. The results indicate that perceived Islamophobia significantly predicts psychological distress among Muslim immigrants in Canada, and identity centrality significantly moderates the relationship between perceived Islamophobia and psychological distress. However, in-group

superiority was not a significant moderator in the relationship between perceived Islamophobia and psychological distress.

This study provided insights into the impact that perceived Islamophobia has on the well-being of Muslim immigrants living in Canada. Moreover, the findings indicate that the importance of identity centrality can mitigate the negative effects of perceived Islamophobia. This study fills a gap in the previous literature that higher identity centrality protects against the detrimental effects of psychological distress among Muslim immigrants in Canada. Moreover, the findings of this research also contribute in the literature that other dimension of group identity (i.e., in-group superiority) does not moderate the relationship between perceived Islamophobia and psychological distress among Muslim immigrants in Canada. The findings of the present study provide insight to the practitioners and counselors to consider the unique role that identity centrality plays in mitigating and aggravating the harmful effects of perceived Islamophobia. The findings will be very beneficial for the better social reforms and better policies to reduce stereotypes, prejudice, and discrimination associated with the Muslim's religious identity, ultimately leading towards positive social change in the community.

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Appendix A: Demographic Questionnaire

Reminder: All information provided will remain anonymous. If you have any questions, contact the researcher

Please answer the questions by circling the letter beside the answer that applies best or write your answer in the space provided whenever necessary.

1. Do you identify as Muslim?

- a. Yes
- b. No

2. What religious practices within Islam do you identify with?

- a. Sunni
- b. Shi'a
- c. Sufi
- d. Ahmadiyya
- e. Other (please specify): _____

4. How religious do you consider yourself to be?

1 = Not at all religious; 5 = Very religious

1	2	3	4	5
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5. What is your gender?

- a. Woman
- b. Man
- c. Other gender identity (please specify): _____

6. (If answered Man to #5) Do you routinely keep a long beard, wear a kufi, or wear anything else that visibly identifies you as a Muslim man?

- a. Yes
- b. No
- c. N/A

7. (If answered Woman to #5) Do you routinely wear hijab or anything else that visibly identifies you as a Muslim woman?

- a. Yes
- b. No
- c. N/A

8. Which of the following best represents your racial or ethnic heritage? Choose all that apply:

- a. Non-Hispanic White or Euro American
- b. Black, Afro Caribbean
- c. Latino
- d. East Asian
- e. South Asian
- f. Middle Eastern
- h. Other (Please indicate: _____)

9. Generational status:

- a. 1st Generation (you were born outside of Canada. and moved to Canada when you were an adult 15 years or older)
- b. 1.5 Generation (you were born outside of Canada but arrived in Canada in early or middle childhood, i.e., 6 – 14 years of age)
- c. 2nd generation (you were born in Canada, and one or both parents were born outside of Canada, or you moved to the U.S. when you were 6 years old or younger)
- d. 3rd generation (you and both of your parents were born in Canada)

10. What is your country of origin? _____

11. What is your highest level of education?

- a. High school diploma
- b. Some college
- c. Associate degree
- d. Bachelor's degree
- e. master's degree
- f. Professional degree
- g. Doctorate
- h. Other: _____

Appendix B: Perceived Islamophobia Scale

Please circle the degree to which you agree or disagree with the following statements using the scale indicated below.

Note: In a question below, the term “islamization” refers to the perceived imposition of an Islamic political system on a society with a different social and political background.

1 = Totally disagree 2 = Somewhat disagree 3 = Disagree
4 = Agree 5 = Somewhat agree 6 = Totally agree

- | | | | | | | |
|--|---|---|---|---|---|---|
| 1. Many non-Muslim Canadians avoid Muslims. | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. Non-Muslim Canadians are suspicious of Muslims. | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. In general, non-Muslim Canadians trust Muslims. | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. Overall, only a few non-Muslim Canadians are
afraid of Islam. | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. Most non-Muslim Canadians feel safe among Muslims. | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. Many non-Muslim Canadians get nervous in the presence
of Muslims. | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. A lot of non-Muslim Canadians are afraid that Muslims are
going to take over Canada. | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. Many non-Muslim Canadians fear an “islamization” of
the Canada. | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. A lot of non-Muslim Canadians consider Islam a threat
to Canadian values. | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. Canadian media always presents Muslims as dangerous
people. | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. Islam is always presented as a threat to Canadian culture
in the media. | 1 | 2 | 3 | 4 | 5 | 6 |

12. Canadian media spreads a lot of fear of Muslims and 1 2 3 4 5 6

Islam.

Adapted from "Perceived Islamophobia Scale: Scale Development and Validation," by J. R. Kunst, D. L. Sam, and P. Ullberg, 2013, *International Journal of Intercultural Relations*, 37(2), p. 225-237. © 2012 Elsevier Ltd. All rights reserved. Reprinted with permission.

Appendix C: Perceived In-Group Superiority Scale

Please circle the degree to which you agree or disagree with the following statements using the scale indicated below.

1= Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

- | | |
|--|-----------|
| 1. I believe that Muslims are better people | 1 2 3 4 5 |
| than people who endorse another religion. | |
| 2. I think everyone should be a Muslim. | 1 2 3 4 5 |
| 3. I think Muslims are very special people. | 1 2 3 4 5 |
| They are destined to change things in the world. | |
| 4. Islam is better than other faiths. | 1 2 3 4 5 |

From "Radicalization process of Islamic youth in the Netherlands: The role of uncertainty, perceived injustice, and perceived group threat" by B., Van den Bos, K., & Loseman, A. (2013).

Radicalization process of Islamic youth in the Netherlands: The role of uncertainty, perceived injustice, and perceived group threat. *Journal of Social Issues*, 69, 586-604. Printed with Permission.

Appendix D: Muslim Identification Scale

Muslim Identification Scale

Please circle the degree to which you agree or disagree with the following statements using the scale indicated below.

1 = Strongly disagree 2 = Somewhat disagree 3 = Disagree
4=Neutral 5=Agree 6 = Somewhat Agree 7= Strongly Agree

- | | |
|---|---------------------------|
| 1. My Muslim identity is an important part of myself. | 1 2 3 4 5 6 7 |
| 2. I identify strongly with Muslims. | 1 2 3 4 5 6 7 |
| 3. I feel a strong attachment to Muslims. | 1 2 3 4 5 6 7 |
| 4. Being a Muslim is a very important part of how I see myself. | 1 2 3 4 5 6 7 |
| 5. I am proud of my Islamic background | 1 2 3 4 5 6 7 |
| 6. I feel a strong sense of belonging to Islam | 1 2 3 4 5 6 7 |

From "National (Dis) Identification and Ethnic and Religious Identity: A Study Among Turkish-Dutch Muslims," by M. Verkuyten and A. A. Yildiz, 2007, *Personality and Social Psychology Bulletin*, 33(10), p. 1448–1462. 7; 33; 1448. *Pers Soc Psychol Bull* originally published online Jul 26, 2007; Reprinted with permission.

Appendix E: Kessler Psychological Distress Scale (K-10)

These questions concern how you have been feeling over the past 30 days. Tick a box below each question that best represents how you have been

1. During the last 30 days, about how often did you feel tired out for no good reason?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
---------------------	-------------------------	---------------------	---------------------	--------------------

2. During the last 30 days, about how often did you feel nervous?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
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3. During the last 30 days, about how often did you feel so nervous that nothing could calm you down?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
---------------------	-------------------------	---------------------	---------------------	--------------------

4. During the last 30 days, about how often did you feel hopeless?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
---------------------	-------------------------	---------------------	---------------------	--------------------

5. During the last 30 days, about how often did you feel restless or fidgety?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
---------------------	-------------------------	---------------------	---------------------	--------------------

6. During the last 30 days, about how often did you feel so restless you could not sit still?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
---------------------	-------------------------	---------------------	---------------------	--------------------

7. During the last 30 days, about how often did you feel depressed?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
---------------------	-------------------------	---------------------	---------------------	--------------------

8. During the last 30 days, about how often did you feel that everything was an effort?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
---------------------	-------------------------	---------------------	---------------------	--------------------

9. During the last 30 days, about how often did you feel so sad that nothing could cheer you up?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
---------------------	-------------------------	---------------------	---------------------	--------------------

10. During the last 30 days, about how often did you feel worthless?

1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time
---------------------	-------------------------	---------------------	---------------------	--------------------

From "Short Screening Scales to Monitor Population Prevalences and Trends in Non-Specific Psychological Distress," by R. C. Kessler, G. Andrews, L. J. Colpe, E. Hiripi, D. K. Mroczek, S. L. T. Normand, et al., 2002, *Psychological Medicine*, 32(6), p.959-956. Kessler R. Professor of Health Care Policy, Harvard Medical School, Boston, USA.

Appendix F: Email Correspondence Between Dr. Jonas R. Kunst and Riffat Ali

Regarding the use of PIS Scale

From: Riffat Ali <xxxxxxxxxxxxxx >
Sent: Friday, April 19, 2019, 06:37
To: Jonas R. Kunst
Subject: Request/permission for PIS scale

Hello Dr. Kunst,

My name is Riffat Ali, and I am a Ph.D. student in Social Psychology at Walden University. I have a master's degree in Psychology, M.Phil. In Forensic psychology and counseling degree too. My background is teaching/counseling, and I am an assistant professor at a university. I am interested in pursuing my dissertation in the area of perceived Islamophobia, psychological distress and the moderating role of group identification (identity centrality& in-group superiority) by considering the multidimensional approach among Canadian Muslim immigrants.

I highly appreciate your work in this field and your work inspired me to conduct my Ph.D. research in this area. I was ecstatic when I read about your study on perceived Islamophobia and psychological distress in the journal. However, this journal did not include a copy of the PIS scale(**Kunst, Sam, & Ulleberg, 2012**);, psychological distress scale, and identity centrality scale. I am planning to use these scales in my study. Kindly can you permit me to use PIS scale? Kindly can you provide me identity centrality (**Verkuyten & Yildiz, 2007**) and psychological distress scale(**Kessler's Psychological Distress scale,2002**) with keys, which you have used in your studies. I am wondering if the scales are available for use?

I appreciate your assistance in this matter and in any direction you might offer. Please feel free to contact me at name riffat.ali@waldenu.edu

Sincerely,

Riffat Ali

--

Thanks,
Riffat Ali
PhD Student (Social Psychology)
Walden University
riffat.ali@waldenu.edu

From: Jonas R. Kunst xxxxx
Sent: Thursday, April 18, 2019 11:30 PM
To: Riffat Ali
Subject: Re: Request/permission for PIS scale

Dear Riffat Ali,
our scale is free to use and attached at the end of the paper. Alternatively, you can find it here: <https://csblab.com/perceived-islamophobia-scale/>

When it comes to the other scales, I unfortunately don't have them at hand right now as I am travelling.

Best,
Jonas

Associate Professor
Department of Psychology
University of Oslo

P. O. Box xxxxxxxxx
Phone:xxxxxxxxx
Culture, Society and Behavior Lab

Appendix G: Letter for Flyer Distribution and Announcement Request

Riffat Ali xxxxxxxxxx

Date

Dear community partner:

I, Riffat Ali (main researcher), request permission to collect research data from your organization's members.

Recruitment will be conducted via dissemination of flyers and online announcements in your site. Here, participants will be provided with informed consent, should they choose to participate.

Later, participants should have access to an online source, such as a laptop or mobile device, as a mean to carry out their participation.

As a community partner, your role would be to distribute research invitations (in the form of flyers, announcements, emails) on the researcher's behalf.

Your members will have access to crisis intervention information should this type of situation arise due to participation. My Committee Chairperson, Dr. Brandon Cosley, is in charge of supervising my research efforts in your site remotely.

Walden University Institutional Review Board (IRB) Approval Number: xxxxxxxxxxxxxx
Expiration: xxxxxxxxxxxxxx

Should you have any questions, please feel free to contact me at riffatalius@waldenu.edu or Dr. Brandon Cosley at brandon.cosley@mail.waldenu.edu. Sincerely, Riffat Ali Ph.D. Social Psychology Candidate at Walden University.

Appendix H: Initial and Follow-Up Recruitment Email

Subject Heading: Perceived Islamophobia and Psychological Distress among Canadian

Muslims

Assalamualaikum Wa Rahmat Allah Wa Barakatu,

Thank you for taking the time to read this letter. My name is Riffat Al, and I am a doctoral student in Social Psychology at Walden University studying under the supervision of Dr. Brandon Cosley. I am conducting research on Perceived Islamophobia and psychological distress among Canadian Muslims by considering the moderating role of identity centrality and ingroup superiority. I would appreciate your assistance in collecting information. This research has the potential to inform future psychological interventions and policies with the Canadian Muslim community. You can assist me in these efforts by participating in this research study.

I am looking for Canadian Muslims from diverse backgrounds to participate in this study. To participate, you must be and live in Canada. If you are above the age of 18 and can read English questions, then you can participate in this research study.

This survey will take 15 minutes to complete. Your responses will be anonymous and confidential, and you may withdraw from the study at any time with no penalties.

If you agree to participate in the research study, simply click on this link or copy-and-paste it into your web browser.

<survey web link>

If you have any questions about this study, please feel free to contact me at riffatalius@waldenu.edu or my Committee Chair, Dr. Brandon Cosley at xxxxxxxx. Walden University Institutional Review Board (IRB) Approval Number: xxxxxxxxxxxxxx Expiration: xxxxxxxxxxxxxx

Please feel free to forward this message to anyone you think may be interested. I am grateful for your time and responses and may Allah (SWT) reward you for your efforts. JazakAllah Khair.

Warm regards,

Riffat Ali Ph.D. Social Psychology Candidate at Walden University. Phone#xxxxxxx

Appendix I: Recruitment Flyer



Assalamualaikum

Do you have 15 minutes?

Would you like to contribute to academic research?

REQUIREMENTS: If you are 18 years old Canadian Muslim (Male/Female) and can read questions in English, then you can participate in this research study.

PURPOSE: The purpose of this study is to understand Muslim's own feelings towards their religion. The participants will be asked to answer the questions about their feelings and attitude of society towards their religious group. The nature of participation is voluntary, and participants will provide their opinion on an online survey.

This research has no financial compensation and gift cards.

FOR MORE INFORMATION: Visit (<https://www.surveymonkey.com/r/GHR3FJN>) to access the study and its detailed description or contact the research at xxxxxxxxxxxxxxxxxxxxxxxx.

Walden University Institutional Review Board (IRB) Approval Number: : 11-14-19-0608415 Expiration: November 13, 2020.



Appendix J: Email Correspondence Between Dr. Doosje and Riffat Ali Regarding the

Use of In-Group Superiority Scale

From: Riffat Ali [xxxxxxxxxxxxxxxxxxxxxxxxxxxx]

Sent: maandag 1 juli 2019 17:44

To: Doosje, Bertjan

Subject: Request for In group superiority scale

Hello Dr Doosje, Bertjan,

My name is Riffat Ali, and I am a Ph.D. student in Social Psychology at Walden University. I have a master's degree in Psychology, M.Phil. in Forensic psychology and counseling degree too. My background is teaching/counseling, and I am an assistant professor at a university. I am interested in pursuing my dissertation in the area of perceived Islamophobia, psychological distress and the moderating role of group identification (identity centrality & in-group superiority) by considering the multidimensional approach among Canadian Muslim immigrants.

I highly appreciate your work in this field, and your work inspired me to conduct my Ph.D. research in this area. I was ecstatic when I read about your study on "Determinants of Radicalization of Islamic Youth in the Netherlands: Personal Uncertainty, Perceived Injustice, and Perceived Group Threat" in the journal. However, this journal did not include a copy of the ingroup superiority scale (Doosje et al., 2013). I am planning to use this scale in my study to measure in-group superiority for Muslim adults in Canada. Kindly can you permit me to use this scale? Kindly can you provide me ingroup superiority scale (Doosje et al., 2013) with keys, which you have used in your studies. I am wondering if the scale is available for use. Is this scale can be used with adults too? I appreciate your assistance in this matter and in any direction you might offer. Please feel free to contact me at name riffat.ali@waldenu.edu

Sincerely,

Riffat Ali

Thanks,
Riffat Ali
PhD Student (Social Psychology)
Walden University
riffat.ali@waldenu.edu

From: Doosje, Bertjan xxxxxxxx

Sent: Tuesday, July 2, 2019 8:22 AM

To: Riffat Ali

Subject: RE: Request for In group superiority scale

From: Doosje, Bertjan <xxxxxxxxxxxx >
Sent: Tuesday, July 2, 2019 8:22 AM
To: Riffat Ali
Subject: RE: Request for In group superiority scale

Dear Riffat Ali,
Thank you for your request.
Attached please find a list of items that we have used in the article that you mention.
These items are free to use.
I think these items are good to use with adults as well.

Good luck with your research!

Kind regards,

Bertjan Doosje

Bertjan Doosje, PhD
University of xxxxxx, Social Psychology