An Investigation of the Relationship between Acculturation, Follower Identity, and Organizational Climate with Leadership Effectiveness

by
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Abstract

Increasing international human migration resulting in ‘globalization’ of the workplace has brought in unique benefits as well as challenges. This study broadens the literature lying on the intersection of leadership and diversity in such organizational settings. While earlier empirical work concerning leadership in diverse groups has focussed on how majority leaders should manage dissimilar group members, this study investigated effectiveness of minority leaders who were dissimilar to the group they were leading.

Specifically, the study was focused on investigating factors that are potentially related to a leader’s effectiveness in a small group. Such factors included the state of immigrant acculturation to destination country’s culture; group members’ perceptions of leader group prototypicality and leader stereotypicality; effects of group ethnic diversity; and moderating influence of an organizational climate that is inclusive or otherwise.

The data for this quantitative study came from 51 groups, ranging in size from 4 to 9 members, within diverse work settings (such as government or industry), in the Canadian workplace. The group leaders were first generation South Asians. Demographic data for the analysis was obtained from both leaders and group members. Using a convenience sample and a cross sectional design, this multilevel data was analysed using mixed model analysis with R.

The results indicated that immigrant leaders unanimously chose to fully integrate with destination country’s culture. Leader group prototypicality and leader stereotypicality were found to be important factors which contributed
significantly to individual and group level perceptions of a leader's effectiveness. However, group demographic diversity was found not related to follower perceptions of leadership effectiveness. Another significant finding was that perceptions of leader effectiveness were not biased by leader gender. While majority of leaders found organizational climate as being inclusive, this factor was not found to significantly moderate the relationship between follower perceptions of leadership and follower ratings of leadership effectiveness.

These findings have important implications for academic scholarship, business landscape, and policy makers. Specifically, this study provides empirical evidence that when immigrants accept and absorb the destination country’s culture and values, they are better placed for leadership roles and are a potential resource that can significantly contribute to the human capital of the receiving nation. Similarly, the negative effects of diversity are minimized in inclusive work environments. Furthermore, dissimilar leaders in ethnically diverse groups being perceived as ‘group prototypical’ seems to suggest that the concept of group prototypicality itself has different connotations in varied settings.

**Keywords:** Leadership, Diversity, Relational demography, Organizational climate, Leader prototypicality
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This monograph is dedicated to my late son Puneet, whose optimism about life and faith in his dad, kept me inspired and motivated throughout this journey.

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CHAPTER 1 - INTRODUCTION

1.1 Overview

Extensive cross-national migration of individuals has resulted in a world that is becoming increasingly globalized. Such migration is now multi-dimensional and forming a pattern of move from the ‘Global South’ to the ‘Global North’. (UN International Migration Report, 2013). Western workforces are continuing to change, and multicultural societies are becoming the norm. Not surprisingly, the global economy has moved diversity to the top of the agenda with immigrants, guest workers, gender, and ethnic differences continuing to dramatically change the composition of the workforce (Roberson, 2013). Successful management of this diverse workforce is among the most important global challenges faced by today’s organizations (Mor Barak, 2005. 2013).

However, while the process of immigration has been comprehensively researched by anthropologists (e.g., Graves, 1967), sociologists and social psychologists (e.g., Sam & Berry, 2006), such investigations have not adequately addressed management issues concerning such immigrants (i.e., effective development and absorption of such immigrants into the workforce). A significant number of such migrants have the education and other skill sets which make them eligible to work in the destination nation’s workforce (Creticos & Schultz, 2006). They often aspire to seek leadership roles upon joining such a workforce.

Multiple factors are likely to influence how immigrants will eventually perform as leaders. This will largely depend on how such immigrants will acculturate in the
destination nation (Sam & Berry, 2006). Leaders are also influenced by the context in which they operate (Porter & McLaughlin, 2006); hence a variety of contextual factors, operating at different levels of abstraction, will affect the leadership effectiveness of such immigrant leaders. Such contextual (or situational) factors, that form part of this study, include follower perceptions of leader group prototypicality, leader stereotypicality, and the nature of organizational climate (supportive or otherwise). This investigation focuses on gaining a better understanding of immigrants as leaders in the context of small groups.

One of the areas of research within the domain of leadership, that is currently attracting significant attention of leadership scholars, is the dynamics of leadership of demographically diverse groups (Chin, 2013; Gardner, Lowe, Moss, Mahoney, & Cogliser, 2010)). This segment of leadership research - addressing important psychological concepts such as ethnic identity and group diversity, which are relevant to research in diverse organizations - is currently considered underdeveloped (Chrobot-Mason, Ruderman, & Nishii, 2013). In addition, the nature and relevance of supportive organizational climate has increasingly become salient (Schein, 2010; Mor Barak, 2005) to improvements of organizational productivity. This process has been clearly complemented by the implementation of a national policy of 'multiculturism', which has become the cornerstone of Canada’s immigration policy for settlement of immigrants.

In Canada (where this study was conducted), immigrants form an increasingly large proportion of the workforce (Statistic Canada, 2015). In 2011, immigrants represented 20.6% of the population in Canada (the highest of the G8 countries) and
22% of the labour force (Statistics Canada, 2015; Department of Finance Canada, 2014). It is projected that soon 100% of the labour force growth in Canada will be from immigration. Additionally, immigration policies favouring education have ensured a highly educated immigrant population, representing nearly 30% of those with university degrees in Canada (Immigration Overview, 2013).

Further, Canada has historically been a destination for immigrants from the South Asian Nations. There is evidence of the first such settlers dating to the early part of 20th century (Walton-Roberts, 2003). Over the last 10 years (2004-2013), South Asians\(^1\) have contributed, on average, 19.9% of the overall number of immigrants coming to Canada (Immigration Overview: 2013). With the current immigration policy encouraging younger skilled immigrants, South Asia (with a preponderance of younger skilled, workforce) will be a major source of immigrants into Canada who are, and increasingly will be, adding to leadership potential in the workforce. As such, South Asian immigrants have been chosen as the demographic sample for this study.

From a policy perspective, given the nature of human capital shortages predicted in the Canadian workforce, as well as the profile of skilled manpower from South Asia that may potentially partly fill such gaps, an investigation into factors that will lead to a better understanding of how such immigrants can take on leadership roles effectively in the receiving nation is both relevant and topical.

\(^1\) South Asia includes India, Pakistan, Sri Lanka, Bangladesh, Nepal, & Bhutan.
1.2 Statement of objectives and Scope of the study

There is extensive academic literature which separately addresses the subjects of acculturation, diversity and leadership. However, there is little evidence of research that has threaded these three, seemingly disparate, streams of literature into one piece so as to address a management issue that is functionally and logically interconnected from the point of view of organizational leaders, institutional policy makers, and the business world. For example, current research on leadership is scattered across multiple disciplines which has resulted in a literature that has significant breadth, but which lacks depth in certain specific domains. This is particularly so in the case of immigrant leadership within diverse groups, an area within leadership research that is increasingly becoming salient to practice (Chrobot-Mason et al., 2013).

While multiple leadership theories exist to study group interactions, in this study, a relational approach to leadership was deemed most appropriate to understand such leader-member relationships as noted by Liden and Antonakis (2009). Specifically, this study employs Leader-Member Exchange theory (LMX) to explore LMX differentiation and its relationship with leader effectiveness in diverse groups. Such recognition of the salience of context to the study of leadership (cf. interactional psychology as an approach to understand the combined influence of person and situation reciprocally; Endler & Magnusson, 1976) has been noticed by leadership scholars (e.g., see special issue on ‘Context in Leadership’; Human Relations, Nov 2009). Specifically, the role of national culture, organizational culture/climate, and team level interactions (such as group similarity, leader-member relationships, and leader prototypicality) on leadership has been highlighted (Liden & Antonakis, 2009) as potential areas for investigation. The
selection of contextual factors chosen for this study (namely ethnicity, within group relationships, and organizational climate) has been done to partially answer this call.

Intercontinental migration is now a well-established phenomenon. Consequent to such migration, numerous psychological and sociological changes occur in individuals. Such changes in values, attitudes, abilities and motives have been well documented in the literature, broadly under the subject of acculturation (Berry, 2003; Phinney & Flores, 2002; Rudmin, 2003). These behavioral changes in personal (and ethnic) identity often result in shifts away from values held before arrival in the destination country. Additionally, such behavioral shifts have relevance to inter and intra-group relations (Berry, 1992). Both individual idiosyncratic characteristics and sociocultural factors affect the process of acculturation, hence immigrants adapt in unique ways. Such adaptation, therefore, results in different acculturation end states such as assimilation, integration, separation, or marginalization (Berry, 2006). This variance has relevance to potential employment and leadership success of immigrants in the destination nation’s workforce. It should be noted however that the context is a multicultural destination country.

Followers (i.e. subordinates in the context of a work group) play an essential role in determination of leadership effectiveness of a leader. This is particularly so in a context where groups are not ethnically homogenous. Such group diversity has implications relating to leader group prototypicality as well as leader stereotypicality. While earlier research has addressed leadership of diverse groups, the emphasis has been on management of diversity concerning those members of the group who are
dissimilar; ethnically dissimilar leaders have not been studied. Leadership effectiveness of such leaders in the given context could thus be fruitful.

In addition to the role of followers mentioned above, organizational climate is a salient contextual variable that influences leadership effectiveness (e.g., Schein, 2010; West & Richter, 2011). Specifically, the supportive role that an inclusive environment can play has been well recognized (Nishii, 2013). Context specific effects of organizational climate, as proposed in this study, are aimed to complement this evolving literature.

In summary, this study is focussed on investigating the relationship between leadership effectiveness and leader acculturation, leader group prototypicality, leader stereotypicality, leader-member relations, and organizational climate, in the context of small, ethnically diverse groups. The above-mentioned variables have been visualized at different levels of abstraction (i.e., individual, group, and organizational levels). Thus, an immigrant’s approach to acculturation and leadership style are considered ‘within person’ phenomena. Similarly, group aggregates will influence factors such as leader group prototypicality, stereotypicality and diversity. Finally, organizational climate will be considered as an organizational level factor. Accordingly, this study is proposed to be conducted as a cross-level and multi-level investigation.

1.3 Contributions

This study proposes to make important contributions to research and practice. First, this research being multi-disciplinary, brings together literatures spanning acculturation, diversity and leadership thus setting the stage for clearer understanding
of the dynamics of leadership effectiveness concerning immigrants. Specifically, it is intended to examine the relationship between leader acculturation and leader effectiveness. This would be particularly useful as the findings should provide insights into how, amongst current and future immigrants, leaders can be identified, socialized and developed.

Second, it will extend the work of van Knippenberg, Dreu and Homan (2004). These authors have developed a categorization-elaboration model of work group diversity and group performance and made propositions such as “Social categorization results in intergroup biases that are disruptive to group functioning to the extent that the identity implied by the categorization is subjectively threatened or challenged (proposition 6), and “All dimensions of diversity may elicit social categorization processes as well as elaboration processes” (Proposition 8). This research is an empirical attempt to address some of the propositions visualised in their model from the perspective of a dissimilar leader.

Third, this study builds upon research in the relational demography domain by Guillaume, van Knippenberg, and Brodbeck (2014) which has examined the effects of cultural dissimilarity on individual performance in culturally diverse groups. Specifically, by investigating the implications of leader cultural dissimilarity within a diverse group, and its effects on follower perceptions of leadership effectiveness, this study aims to further our understanding related to leader group prototypicality and stereotypicality.

Fourth, an investigation of the moderating effects of an inclusive organizational climate on the relationship between relational leadership and leadership effectiveness will add to the extant literature on organizational climate. Such organization level effects
are considered potentially relevant predictors and/or moderators of how these relate to, and influence, leader effectiveness of dissimilar leaders.

Finally, this investigation proposes to make practical contributions in so far it addresses real life issues that concern policymakers and business leaders in a country where immigrants (and South Asians, who are an increasingly salient ethnic group of immigrants), are projected to provide the bulk of person-power in the Canadian workforce (Statistics Canada, 2015). For example, the findings could be a potential basis for consideration of policy guidelines on how to evaluate, and provide training to, immigrants seeking employment as potential leaders in the workforce.

Five chapters follow this introductory chapter. In the following chapter (Chapter 2), the relevant literature is reviewed in five sections: Section 2.1 deals with acculturation, specifically focusing on acculturation strategies employed by immigrants, and how such strategies set the stage for the immigrant's absorption in the destination nation workforce; Section 2.2 explores relational leadership and its relevance to leader effectiveness; in Section 2.3, the concept of followers as members of a diverse group is reviewed in terms of leader group prototypicality and stereotypicality; Section 2.4 reviews organizational climate as it pertains to leadership effectiveness; in Section 2.5, leadership effectiveness is reviewed within the context of this study. Chapter 3 presents the research framework and hypotheses, followed in Chapter 4 by a discussion of the proposed methodology. Data analysis and results are presented in Chapter 5. Finally, discussion of the findings, contributions, implications, and limitations of the study are presented in the concluding Chapter 6.
CHAPTER 2: LITERATURE REVIEW

2.1 Acculturation

2.1.1 Introduction.

Human migration between nations has been one of the most visible phenomenon in the recent past that has arguably reshaped the political structures in many nations across the world. Individuals relocate to other countries for multiple reasons such as social, educational, economic, or personal (Rudmin, 2003). A large majority migrates to other countries voluntarily, and on a permanent basis, with the hope of achieving economic success in life in the destination country; this category of migrants - as contrasted with other categories such as refugees, sojourns etc. - have been termed as immigrants (Berry, 2001). Such immigrants are the subjects of this study.

A major characteristic of immigrants is that they have strong motives to move to a new country. Most often, they want to find a better economic position. In 2013, 232 million people, or approximately 3.2 percent of the world’s population, were international migrants (UN International Migration Report, 2013). Most of them were immigrants. Even though there are many exceptions (such as the ‘brain drain’ phenomenon involving bright students/ professionals moving to the Western world; Louw & Foster, 1986), immigrants often come from lower socioeconomic classes (Stalker, 2008) and have certain expectations that they wish to fulfil in their new country of residence (Van Oudenhoven, Ward, & Masgoret, 2006). Fulfillment of such expectations is linked directly to successful participation in the workforce in the destination country which is
further tied to immigrants’ effective integration or assimilation in the destination nation’s culture (a process that is termed as ‘acculturation’).

Most of the studies concerning immigrant acculturation have focused on the immigrants’ social and psychological adjustments in the destination country (e.g., Berry, 2001; Sam & Berry, 2006; Ward & Masgoret, 2008). Issues of post-acculturation success in the workplace concerning such immigrants have, however, not received adequate attention. Such scarcity of research in the organizational context is surprising given that immigrants are now important stakeholders who are increasingly supporting substantial parts of organizational functioning (Mor Barak, 2005, 2013). In this section, we analyse the acculturation strategies made by immigrants, and how such choices relate to the immigrant’s success as a leader in the destination nation workplace.

The following discussion, while avoiding a detailed analysis of the antecedents and other factors responsible for various states of acculturation, addresses two questions: first, is there a relationship between different states of acculturation achieved by an immigrant and her potential to subsequently become effective as a leader in the workplace of the destination nation? And second, which state of acculturation is most suited for such leadership roles? To guide this discussion, and place it in an appropriate context, a brief review of salient dimensions and strategies, that are part of the extant literature on acculturation, are reviewed below.

Individuals, when exposed to changes in their social environment, adapt uniquely to such changes (Burke & Reitzes, 1981). Such effects are more pronounced when
individuals migrate from one country (country of origin2) with a distinctive culture, to another (destination nation), with a substantially different culture. Such adaptation to the new cultural environment involves behavioural changes in the individual. This process, referred to as Acculturation, “comprehends those phenomena which result when groups of individuals, having different cultures, come into continuous first-hand contact, with subsequent changes in the original culture pattern of either or both groups” (Redfield, Linton, & Herskovits, 1936, p. 149). In other words, acculturation implies cultural and psychological changes that follow intercultural contact (Berry, 2003), or changes that arise following ‘contact’ between individuals and groups of different cultural backgrounds (Sam, 2006).

2.1.2 Acculturation Dimensions.

Acculturation dimensionality forms a salient feature of not only how acculturation is theorized but also how it is measured. Acculturation was initially conceptualized as unidimensional, with immigrants viewed as moving linearly, over time, away from their traditional way of living. Subsequently, the concept of biculturalism was developed (Berry, 1997; Schwartz, Unger, Zamboanga, & Szapocznik, 2010; Szapocznik, Kurtines, & Fernandez, 1980) which represented comfort and proficiency with both one’s heritage culture, and the culture of the country in which the immigrants had settled. Biculturalism is thus primarily focused on cultural behaviors such as language use, and choice of friends (Cabassa, 2003, Schwartz & Unger, 2010).

This concept has further developed into variations such as synthesizing of specific parts of both cultures into a unique personalised blend (Benet-Martínez, Leu,

2 Also referred to as ‘heritage’ culture (Schwartz & Unger, 2010)
Lee, & Morris, 2002), or the concept of ‘multiculturals’ (Fitzsimmons, 2013). While these multiple approaches provide different lenses for understanding the process of acculturation in different contexts, further discussion of such approaches is beyond the purview of this study. Given the organizational context in which this study is framed, the multidimensional framework proposed by Berry (1992, 2003) has been adopted in this study.

A multidimensional framework of acculturation is distinguished by “relative preference for maintaining one’s heritage culture and identity and a relative preference for having contact with, and participating in, the larger society along with other ethnocultural groups” (Berry, 2003, p.22). Immigrant functioning within such a ‘larger society’ can take various forms (such as the ‘melting pot’ strategy prevalent in the USA, or multicultural models available in many European nations and Canada). Since this study has been conducted in the context of immigrants coming into Canada, following discussion on acculturation strategies is restricted within the domain of multiculturalism. Such a multiculturalism domain also implicitly implies that the destination nation’s culture is not necessarily homogenous.

### 2.1.3 States of Acculturation.

In essence, acculturation describes the end states that immigrants may achieve during the process of acculturation. One such typology (the fourfold acculturation typology: Berry, Kim, Power, Young, & Bujaki, 1989) has now been commonly adopted as a standard in Acculturation Psychology (Rudmin, 2003). The four generic types of acculturation states that an immigrant may achieve are labeled as Integration,
Assimilation, Separation, and Marginalization (Berry, 2001; Sam & Berry, 2006). These four states are briefly reviewed below.

Integration is an approach “when individuals maintain their original culture during their daily interactions with other groups” (Berry, 2006). It includes goals such as levelling barriers to association, creating equal opportunity regardless of race, and the development of a culture that draws on diverse traditions, rather than merely bringing a racial minority into the majority culture (Rudmin. 2003). Integration can only be freely chosen and successfully pursued by non-dominant groups when the dominant society has an open and inclusive orientation towards cultural diversity (Phinney, Jacoby, & Silva, 2007). Mutual accommodation is therefore an essential aspect required for integration to be attained (Berry, 2001). In such an environment, newcomers are not pressured to give up their national, ethnic or cultural identities.

Cultural assimilation is the process by which a person, or a group's language and/or culture, come to resemble those of another group (Rudmin, 2003). The underlying thesis is that the newcomers should be helped to become as similar to the culture of the destination country as possible with the ultimate goal to make the immigrants into indistinguishable members of the existing majority (Sam & Berry, 2006). Thus, when individuals do not wish to maintain their own cultural identity anymore and seek daily interaction along the ways of the destination nation’s culture, they are using the assimilation strategy (Berry, 2006). The term is used to refer to both individuals and groups. Full assimilation occurs when new members of a society become indistinguishable from other members of the majority group. While many countries (such as the USA) use an assimilation approach to immigration (Sam, 2006), Canada is not a
part of this group. While integration and assimilation are associated with positive acculturation, there also exist possibilities of immigrants not being able to achieve either of these two states (Berry, 2001). Consequently, when individuals place a value on holding on to their original culture, and at the same time wish to avoid interacting with others in the destination nation’s culture, they are using the ‘Separation’ alternative (Berry, 2005). Furthermore, if there is little interest in own cultural maintenance, and simultaneously little interest in having relationship with others from the destination nation’s culture, then a state of ‘Marginalization’ is said to have been achieved (Berry, 2005). Marginalization implies that there is social exclusion and relegation of individuals to the fringes of society. Consequently, such individuals are unlikely to be involved in the local workforce in any meaningful roles, particularly so in any leadership positions.

2.1.4 Adaptation.

While going through the process of acculturation, individuals are constantly adapting to the destination nation’s cultural environment. Such cross-cultural adaptation has been conceived in two domains: the first concerns the psychological (emotional/affective) adaptation that affects the sense of well-being or self-esteem; and the second dimension concerns the sociocultural (behavioral) adaptation that links the individual to others in the new society (as manifested, for example, in activities of daily intercultural living) (Berry, 1992; Berry & Sam, 1997). In other words, the former refers to individual psychological well-being or satisfaction, while the latter is related to the ability to acquire culturally appropriate skills, and to negotiate interactive aspects of the destination nation’s environment so as to ‘fit in’ (Ward & Kennedy, 1999).
Even though these constructs are conceptually and empirically distinct, there appears an interrelationship between the two dimensions of adaptation. Psychological adjustment, defined in terms of psychological and emotional well-being, is broadly affected by the measurement of sociocultural adaptation (personality, life changes, coping styles and social support). For example, psychological adjustment has been associated with personal flexibility, internal locus of control, relationship satisfaction, approach-oriented coping styles, and use of humor (Berno & Ward, 1998; Ward & Rana-Deuba, 1999).

Sociocultural adaptation, by contrast, is defined in terms of behavioral competence and is more strongly influenced by factors underpinning culture learning and social skills acquisition. These include length of residence in the new culture, cultural knowledge, amount of interaction and identification with nationals of the receiving nation, cultural distance, language fluency, and acculturation strategies (Searle & Ward, 1990; Ward & Kennedy, 1994). Such an adaptation is relevant to this study which focuses on immigrant behavior in the workplace. Specifically, the extant literature has seemingly not investigated the effects of sociocultural adaptation on leadership roles in the workplace. This gap in the literature is further developed in Chapter 3 to arrive at suitable hypotheses.

2.2 Relational Leadership

2.2.1 Introduction.

In spite of research having consistently shown that leaders are highly influential in shaping team processes and outcomes (Zaccaro, Rittman, & Marks, 2001), the vast
majority of leadership scholarship has remained focused on two levels; leaders as individuals, or leadership at the organizational level (De Church, Hiller, Murase, Dory, & Salas, 2010). The importance of leaders being crucial to shape intragroup processes has been recognized (e.g., Gelfand, Nishii, Raver, & Schneider, 2005; Wentling, 2004), but there is scant evidence of empirical support in this regard. In particular, the role of leaders to influence the relationship between group diversity and outcomes has remained largely unexplored (Nishii & Mayer, 2009).

A critical determinant of the success or failure of ethnically diverse teams is the leadership. Existing literatures have explored the positive effects of leadership style on subordinate performance from a team perspective (e.g., McColl-Kennedy & Anderson, 2002; Wang et al., 2018). In addition to leader centric approaches such as transformational leadership (Bass, 1995) or visionary leader behavior (Greer, Homan, De Hoogh, & Den Hartog, 2012), it is proposed that for a leader to be effective in a small and diverse group, where constant interactions between the leader and group members are expected, the leader-member relationship is critical. As such, a relational approach to leadership may be more appropriate for this study.

### 2.2.2 Relational leadership theory.

Relational leadership theory is a relatively new term in leadership that has established as a mainstream leadership perspective (Day & Antonakis, 2012; Dinh, Lord, Gardner, Meuser, Liden, & Hu, 2014). This theory encapsulates two perspectives of relational leadership: an entity perspective that “focuses on identifying attributes of individuals as they engage in interpersonal relationships, and a relational perspective that views leadership as a process of social construction through which certain
understandings of leadership come about and are given privileged ontology” (Uhl-Bien, 2006, p 654). Given the intent in this study to investigate issues concerning individual attributes and perceptions of followers within a group, the following discussion falls within, and expands upon the entity perspective.

The entity perspective views organizational life as the result of individual action (Hosking, 2007) and predominantly explores relational leadership issues through the “relationship based” approaches to leadership research (Graen & Uhl-Bien, 1995; Uhl-Bien, 2006). It views leadership as a two-way influence relationship between a leader and a follower aimed at achieving mutual goals (Brower, Schoorman, & Tan, 2000). Multiple sub-approaches have evolved along this research stream to further explain leader-follower relationships (such as Hollander’s Relation Theory; Hollander 1964, 1978: Charismatic leadership theory; Howell & Shamir, 2005: and, the Social Identity Theory of Leadership; Hogg, 2001). However, the most prominent approach to explain the entity perspective of relational leadership has been the leader-member exchange theory (Bauer & Erdogan, 2015).

Leader-member exchange (hereafter called LMX) theory (and elaborated upon in the following section), appears well suited in the context of this study. Leader-follower (or manager-subordinate) relationship is one of the most studied phenomena in the organizational literature (Bauer & Erdogan, 2015). LMX provides a theoretical perspective that has been used extensively to further our understanding of such relationships. However, since LMX is premised on the notion that leaders differentiate between their followers, majority of such studies have focussed only on dyadic relationships; less attention has been paid to the implications of LMX differentiation on
group related outputs such as leadership effectiveness as perceived by the group (Martin, Epitropaki, Thomas & Topakas, 2010).

This is a significant omission for multiple reasons. First, the evidence on the effects of LMX differentiation is somewhat ambiguous. While LMX has been found to be positively related to support, and creation of obligation in individuals (e.g., Maslyn & Uhl-Bien, 2001) resulting in higher levels of performance (Masterson, Lewis, Goldman, & Taylor, 2000), there is also the potential of negative outputs at group level due to perceptions of bias and unfairness when leaders differentiate between group members in terms of the type and quantum of support provided (Uhl-Bien, Graen, Scandura, 2000). Such concurrent positive and negative influences can potentially impact the overall group level outcomes.

Second, while dyadic relationships between the leader and group members may provide valuable insights, it is the overall performance of the group that remains critical from the organizational point of view. Additionally, some scholars have suggested that more attention should be paid to the context surrounding LMX relationships and studying LMX with non-US samples (Anand, Hu, Liden & Vidyarthi, 2011). This is so because LMX was developed in the context of Western cultures where both leaders and subordinates expect (and accept as fair) differentiated leader behavior given their individualistic cultural orientation. Such relationships in a diverse group, with a dissimilar leader (with a value system different from the destination nation culture), can provide new insights to leadership literature.

Finally, the context (a small, ethnically diverse group) is noteworthy because the demands and requirements of leadership at this level are quite different (Zaccaro et.al.
2001). Specifically, there is direct communication between the leader and the subordinates wherein individual interpersonal relationships are salient. More significantly, such interaction is regular, frequent, and spread across multiple micro contexts in which the follower has ample opportunity to judge the leader while the leader has similar prospects to take the dyadic relationship to a more matured state.

Liden et al., (2006) have made multiple suggestions to further the scholarship on LMX differentiation and its effects on group outputs. One such suggestion is to further explore group members’ perceptions of LMX differentiation in different contexts. Accordingly, it may be fruitful to explore the effects of LMX differentiation based on group ethnic structure and leader dissimilarity.

In the following sub-section, a brief review of the LMX perspective with specific focus on its relevance, application, and effects in a diverse group is carried out. Thereafter the concept of LMX differentiation is elaborated upon. Finally, a case is made to answer the question whether group ethnic diversity and leader dissimilarity is related to group perceptions of leadership effectiveness.

2.2.3 LMX Theory of leadership.

From the above discussion, it would be apparent that LMX theory (Graen & Uhl-Bien, 1995) has evolved as a form of relational leadership and established as a mainstream leadership perspective (Day & Antonakis, 2012; Dinh, Lord, Gardner, Meuser, Liden, & Hu, 2014) with a focus on the type of relationship that the leader has with each of the followers in the group. Such relationships can be formed as in-groups (characterised by mutual respect, liking, and reciprocal influence, and based on
expanded and negotiated role responsibility), or out-groups (based on job description, formal communication, and defined roles) (Bauer & Erdogan, 2015). Within an organizational work unit, subordinates become a part of the in-group or the out-group based on how well they work with the leader, and how well the leader works with them.

Theoretically, LMX is grounded in theories of social psychology (such as social exchange theory), and sociology (unified theory of social relations: Fiske, 1992). Social exchange theory explains social change and stability as a process of negotiated exchanges between parties wherein human relationships are formed by using a subjective cost-benefit analysis and comparison of alternatives (Blau, 1964; Cropanzano & Mitchell, 2005; Emerson, 1976). According to this theory, when two persons interact over a period of time, such exchange relations can take on developmental attributes. For example, attitudes of interpersonal attraction and trust will form between persons who repeatedly engage in mutually rewarding exchange, adding new dimensions to their relationship (Cook & Emerson, 1987).

According to the unified theory of social relations, people are fundamentally sociable, and they generally organize their social life in terms of their relations with other people using a combination of four mental schemata or models to generate most kinds of social interactions, evaluations, and affect. The theory gives culture a crucial role in such mental formulations. According to Fiske (1992), people rarely use any one of these models alone; they construct personal relationships, roles, groups, institutions, and societies by putting together two or more models, using them in different phases of an interaction, or at different, hierarchically nested levels.
For example, in the Authority Ranking schema (one of the four relational models, which is relevant to this discussion), people categorize their social interactions based on a conception of asymmetry among people, who are linearly ordered along some hierarchical social dimension. When people are thinking in terms of such linearly ordered structures, they treat the higher rank as superior. Such a notion of authority in the context of this study has interesting possibilities in so far as the conventional hierarchy of authority could potentially be influenced by ethnic considerations.

As mentioned above, substantial empirical research has been conducted in the last two decades using this perspective (Bauer & Erdogan, 2015). The initial focus, for the most part, remained focused on leader-subordinate relations at the individual or dyad levels. However, such emphasis on dyadic relationships, in isolation from group outcomes, has been perceived as a limitation (Bauer & Erdogan, 2015; Sparrowe & Liden, 1997). Since employees work in groups, it has been suggested that nuances of social context of group functioning need further investigation (e.g., Vidyarthi, Liden, Anand, Erdogan & Ghosh, 2010).

### 2.2.3 LMX Differentiation.

One of the fundamental issues, while studying effects of LMX within a group, is the notion of LMX differentiation (Henderson, Liden, Glibkowski, & Chaudhry, 2009). LMX differentiation is defined as the variability in the quality of LMX relationships between members of the same workgroup (Erdogan & Bauer, 2010; Liden et al., 2006). In contrast to individual-level outcomes, which have been well established by now, definitive conclusions regarding the effects of LMX differentiation remain scarce (Yu, Matta, & Cornfield, 2018). Recent reviews of the LMX differentiation literature have
stated that LMX differentiation is understudied, effects of LMX differentiation have been mixed, and conclusive findings are hard to come by (Anand et al., 2015; Erdogan & Bauer, 2015).

The construct of LMX differentiation is also linked to the levels of analysis. Although earlier conceptualizations of LMX were visualized and tested at the dyadic level of analysis (e.g., Cogliser & Schriesheim, 2000), recent studies have found that LMX occurs at multiple levels (e.g., Harris, Li, & Kirkman, 2014; Henderson et al., 2009). For example, it has been suggested that team level LMX may interact with within-team differentiation in predicting team level outcomes such as team potency and team conflict (Boies & Howell, 2006). Similarly, Harris & Kirkman (2014) have investigated how LMX differentiation and LMX relational separation attenuate LMX’s influence on OCB and turnover intentions.

One specific area, that has not seemingly received adequate attention, concerns our understanding of how within group LMX differentiation relates to overall perceptions of a leader’s effectiveness at the group level. Since leaders are central to the discussion of the success of group outcomes as well as forming LMX relationships with their subordinates, it seems prudent to investigate further this relationship between group LMX differentiation and group level ratings of leader effectiveness. This gap in extant literature is addressed in detail in the following chapter while developing hypotheses.

2.3 Group dissimilarity and leadership

Work group dissimilarity has evolved as an important subset of scholarly attention within diversity literature (Mor Barak, 2013). Cross cultural teams, in which people with
different ethnic and cultural backgrounds work together towards a common goal, are now ubiquitous in business contexts (e.g., Kirkman & Shapiro, 2005). Such amalgamation of diverse cultural and ethnic backgrounds has shown both positive and negative impacts on work group productivity (Brodbeck, Guillaume & Lee, 2010). Despite the potential benefits of increased innovation and creativity that results from culturally heterogeneous teams, such teams pose challenges for the culturally dissimilar members (van Knippenberg & Schippers, 2007; Williams & O’Reilly, 1998). These ambiguous results are typical in diverse teams (Brodbeck et al., 2010).

While several mediators and moderators can potentially affect the subordinate performance, satisfaction and other such outcomes in work groups, leadership has been recognized as a prime predictor of such effects (Hogg, 2001). However, issues regarding diversity and leadership have received scarce attention in the literature (Eagly & Chin, 2010), prompting Day and Antonakis (2012) to call for more empirical research directed at numerous facets involved with diversity and leadership. One such gap in literature relates to the effects of work group ethnic dissimilarity on follower perceptions of leader effectiveness.

In this section, first the theoretical perspectives on diversity are briefly reviewed. This leads to a discussion of the effects of demographic dissimilarity which is underpinned on the construct of ethnic identity. The section concludes with identification of the potential areas for investigation.
2.3.1 Theoretical perspectives on Diversity.

Theoretically, three different perspectives inform the effects of demographic heterogeneity in groups. These perspectives are positioned at different levels of analysis. The social categorization perspective proposes that at the individual level, ethnically different work group members are less socially integrated, which ultimately leads to lower individual performance and well-being (Chatman & Flynn, 2001). Similarly, at the group level, ethnic diversity increases conflict and decreases cohesion, leading to lower group performance (Harrison, Price, Gavin, & Florey, 2002).

However, offering opposite conclusions at the group level, the information/decision making perspective suggests that by exposing group members to a broader range of knowledge, and potentially divergent perspectives and opinions, and by stimulating the elaboration of task relevant information, ethnic diversity at the group level enhances individual group members' creativity and learning (see e.g., Dahlin, Weingart, & Hinds, 2005).

Finally, embedded in the wider societal context, the embedded intergroup relations perspective suggests that the distribution of power and status accorded to various ethnic groups in the societal context affects the way members in ethnically diverse work groups interact with each other and accordingly affects how members perform and learn from each other (Ely, Thomas, & Padavic, 2007).

2.3.2 Ethnic identity.

Ethnic origin refers to a collection of individual characteristics such as physical appearance, national origin, language and religion, as well as the sharing of cultural
identity, values, attitudes, and behaviors (Phinney, 1996). It is a concept which is considered among the most salient individual characteristics in organizational settings (Jackson, May, & Whitney, 1995). It differentiates people at two levels: as a surface-level diversity characteristic (which is readily visible to others), and a deep-level diversity characteristic, which does not become visible to others until repeated social interaction has occurred (Brodbeck et al., 2010; Riordan, 2000).

Ethnic origin leads to a related concept, ethnic identity, which is defined as “one’s sense of belonging to an ethnic group … it is that part of one’s thinking, perception, feelings, and behavior that is due to ethnic group membership” (Phinney, 1996, p. 13). Research on ethnic identity suggests that race and ethnicity may be social constructions for majority members as well minority members, and that these may vary over time, context, and individuals (Chrobot-Mason, 2004).

Such distinctive nature of ethnic identities, when transposed into a multicultural work setting, is likely to generate unique challenges. While developmental theory suggests that a well-developed ethnic identity serves as a secure position which allows people to be more open and accepting to people from other ethnic groups (Phinney et al., 2007), research suggests that negative attitudes are typical, if not inevitable, in intergroup situations, due to a universal tendency to prefer one’s own group and to think that other groups are inferior (Aronson, Wilson, & Akert, 1994).

In contrast to ethnic identity, which is more precise and narrow in scope, national or societal culture is a term used by social scientists to refer to a set of parameters of collectives that differentiate the collectives from each other in meaningful ways; it is the “shared motives, values, beliefs, identities, and interpretations or meanings of significant
events that result from common experiences of members of collectives and are transmitted across age generations” (House et al., 2004, pp. 15). The two constructs of ethnic identity and national/societal culture, though appearing overlapping, are distinct from each other due to differences in scope and dimensionality. In the context of this study, both concepts are applicable since the immigrants could be ethnically different but coming from the same overarching cultural cluster (Southern Asia: Hofstede, Hofstede, & Minkov, 2010).

### 2.3.3 Empirical evidence of effects of demographic dissimilarity.

Earlier research has shown that individual demographic attributes are significantly associated with characteristic perceptions, attitudes or work outcomes (Riordan & Shore, 1997). Such findings have provided consistent (even though weak) evidence across diverse populations, on the association between similarity and interpersonal attraction. For example, it was found that demographic dissimilarity can lead to repulsion (Rosenbaum, 1986), with differences between people increasing the distance between them and lowering interpersonal attraction and liking. In other words, people tend to be drawn to those who are similar to them in terms of demographic characteristics, activities, or attitudes (Byrne, 1997). However, Harrison, Price, and Bell (1998) found that surface level (demographic) dissimilarity is weakened as the length of time group members spend working together increases.

Employee dissimilarity can be visualized as a cross-level construct; it is an interactive function between the individual attribute of an employee and the distribution of the attribute within the work group (Riordan, 2000). Employee dissimilarity can occur along many attributes, including demographic attributes. Demographic dissimilarity
refers to the difference between the focal group member and his or her peers in terms of the demographic characteristics (such as ethnic dissimilarity) that employees use to categorise themselves, and others, into social categories (Chattopadhyay, Tluchowska, & George, 2004). In this study, ethnicity has been chosen as the differentiating demographic variable because earlier research has established the strong influence of ethnicity on employee social identification (e.g., Baugh & Graen, 1997; Tsui, Egan, & O’Reilly, 1992).

Such dissimilarity is also a function of the number of peers who are demographically different in a group; it increases as the number of work group peers who do not share the attribute increases (Tsui et.al. 1992). Thus, an employee working in a group that includes greater number of peers belonging to a dissimilar race or ethnicity will encounter greater ethnic dissimilarity compared to an employee working in a group dominated by the same ethnicity (Chattopadhyay et al., 2004).

Brodbeck et al., (2010) found that ethnic diversity in work groups can have both positive and negative effects simultaneously at the individual and group levels of analysis and that these effects interact across levels. Furthermore, all effects including the interactions were found to be moderated by the societal level status disparity between the dominant ethnic group and other ethnic groups of subdominant societal status such that the expected effects are predominant for members of the subdominant ethnic groups.

Guillaume, van Knippenberg, and Brodbeck (2014) suggest that employee dissimilarity will lead to less identification within a work group when work group membership is unable to . fulfil people’s identity concerns (i.e., their need for a positive
and distinctive identity, uncertainty reduction, and belongingness). However, when such needs are met, the negative effects of dissimilarity are likely to lessen.

In sum, while the extant research on the effects of ethnic dissimilarity within the organizational settings has approached the problem considering multiple predictors and levels of analyses, the effects of employee dissimilarity from the leader and its effect on perceptions of a leader’s effectiveness, at the group level, have not been addressed so far. Current study addresses this gap by measuring the effects of such group ethnic dissimilarity on group perceptions of leader effectiveness.

2.4 Leader prototypicality and stereotypicality

Leadership is a social process that involves both a leader and a follower (Hollander, 1992). However, the discussion of leadership often begins, and ends, with a focus on the leader; the “pivotal importance of followers to leaders” (Brown, 2013, p.332) is often overlooked, missing the vital point that leadership is not about leaders in isolation. Rather, leadership is about understanding the bidirectional influences between leaders and followers (Avolio, 2007) where roles concerning leading and following are fluid and dynamic (Day 2000). Followers are the direct determinants of leadership attempts at success or failure, and consequently an inseparable part of the process in understanding a leader’s effectiveness (Yukl, 2013).

Central to the efficacy of such a leader-follower relationship is followers’ perceptions about a leader’s legitimacy. As noted by scholars (e.g., Brown, 2013), leadership is defined by the joint perceptions of followers, and thus involves the intricate processes of human perception. Hence, fundamentally, leadership begins with a person
gaining legitimacy as a leader, and it is activated when followers accept his/her status as a leader (Hollander 2013). Such acceptance by followers is essential, both to provide legitimacy to the leader, and his/her effectiveness as a leader (Kellerman 2008).

Two concepts – leader group prototypicality and leader stereotypicality – provide the basis for a leader’s acceptance in the minds of subordinates. While earlier research (e.g., Hains, Hogg & Duck, 1997) has established the importance of leader group prototypicality and leader stereotypicality in a school setting, the effects of these concepts in the context of a diverse group with a dissimilar leader have not been studied in organizational settings. In this section, constructs of leader group prototypicality and leader stereotypicality are reviewed in the context of a ethnically diverse group to study the effects of leader dissimilarity on follower perceptions of leader’s effectiveness.

2.4.1 Theoretical underpinnings of Social identity.

In the psychology of group membership, one of the salient concepts is that of social identity (Tajfel & Turner, 1979, 1986). Individuals belong to social groups that are an important source of pride and self-esteem. Such groups (based on nationality, ethnicity, organizational membership and such) give individuals a sense of social identity or belonging to the parts of the world that are meaningful to their personal identity (Ashforth & Mael, 1989). Social identity is one of the two components of the construct of identity: the personal component is derived from idiosyncratic characteristics (such as personality and intellectual traits), while the social component is derived from salient commonalities of the group memberships such as race, class, ethnicity, and nationality (Ellemers, Spears & Doosje, 2002).
Social identity is defined as “the individual’s knowledge that he or she belongs to certain social groups, together with some emotional and value significance to him or her of the group membership” (Tajfel, 1978, p.63). It involves a process of self-categorization, along with an attachment of value to the particular social category; together these two elements (group categorization and value attachment) constitute social identity (Hogg & Terry, 2000; Turner, 1982). It is a perception of oneness with a group of persons (Ashforth & Mael, 1989).

This self-defining quality of social group membership is anchored in theories of social identity and self-categorization. Social identity theory (SIT) predicts certain intergroup behaviours on the basis of perceived group status differences and the perceived legitimacy and stability of those status differences (Tajfel & Turner, 1979, 1986, 2004). Self-categorization theory (SCT) is a social cognitive intergroup theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), that can be used to cast light on leadership as a characteristic of intergroup structure. This theory attributes group behavior to a depersonalization of perception, affect and behavior.

The social identity approach conceptualizes social categorization of people into out-groups (different from the self), and in-groups (which includes the self) that stimulate a motivation to perceive or achieve a sense of positive group distinctiveness (Hogg & Reid, 2006). In other words, in such a social construction, individuals see themselves not only in individual terms (i.e., characteristics that identify the self as a unique individual, or the identity ‘I’) but also in terms of group or organizational membership (i.e., characteristics that identify the self as a group member, the collective self, or the social identity ‘we’) (Ellemers, Gilder, & Haslam, 2004).
Such self-categorization as a group member exerts an important influence on perceptions, attitudes, and behaviors (Reynolds, Haslam, & Turner, 2012), and transforms the self-concept from a structure based on individuality to one based on group prototypicality (i.e. group normativeness). Seeing the self through the group membership suggests keeping the best interests of the group in front; it implies merging the two (the self-interest and the group-interest) and experiencing the social identity as both self-describing and self-guiding (Turner, 1985).

Assumptions of social identity discussed above have implications for followers to the extent that leaders, who are perceived to be group prototypical are perceived to serve the groups’ best interest (van Knippenberg, 2011). The concept of leader group prototypicality is briefly reviewed below before identifying certain aspects that have not received adequate attention in the literature so far.

2.4.2 Leader Group Prototypicality.

One of the salient aspects of the social identity approach is the notion of group prototypes - mental configurations of the characteristics that define the group, what group members have in common, and what distinguishes the group from other groups (Rosch, 1999). Such group prototypes are subjective representations that capture not so much the group average as an idealized image of the group, and what truly defines the group; the socially shared reality of the group (van Knippenberg, 2011).

Building on this conception of group prototypicality, Hogg (2001) has articulated a social identity theory of leadership that views leadership as a group process, generated by social categorization and prototype-based depersonalization processes associated
with social identity. In such a conceptualization, intra group prototypicality generates a group identity wherein the most prototypical member is invested with greater influence over the group. This is in line with the notion that leadership may be a structural feature of the in-groups that is generated by group belongingness (Hains et.al., 1997).

Group prototypicality does not imply being as similar as possible to the group on as many attributes as possible; rather it concerns the extent to which the leader represents the ideal type of the group in terms of group defining characteristics (van Knippenberg, 2011). This leads to an inference that diversity should not be mistaken for an absence of shared identity (van Knippenberg, Haslam, & Platow, 2007), and that being demographically dissimilar does not necessarily exclude the possibility of a leader embodying the group identity. This is an important point which is further explained below in the context of leader stereotypicality.

However, demographic attributes may play a role in a situation which at the best of times is difficult, making the situation more challenging when the team member is culturally different (e.g., Chatman, Polzer, Barsade, & Neale, 1998). Even when the group downplays the significance of demographics and does not consider this factor at the core of its identity, a leader differing from the group in demographic attributes shared by the team may be faced with at least the initial impression that the leader is different from the team and unlikely to embody what the group stands for (van Knippenberg, 2011).

Haslam and Platow (2001) suggest that group members are likely to favor leaders whom they perceive to serve the group and act in the group’s best interest, also implying that acts that are (or can be interpreted as) indicative of the leader’s group-
oriented motivation feed into leadership effectiveness. In such situations, the leader’s active role in managing perceptions of the team’s identity and the leader’s representativeness of that team identity become all the more important (van Knippenberg & Hogg, 2003).

2.4.3 Leader Stereotypicality.

The concept of leader stereotypicality is related to, but different from, leader group prototypicality. According to this concept, followers have mental schemas of ideal leadership behavior (Hains et al., 1997). Such images are invariably context specific. For example, mental images of an effective church leader will differentiate significantly from that of an effective military leader. It is to be noted that leaders who are stereotypical are likely to be, but not necessarily, group prototypical. Conversely, leaders who are not group prototypical can still be effective leaders in so far they meet the requirements of leader stereotypicality. This argument opens up possible avenues for a dissimilar leader to be considered effective even when the criterion of group prototypicality is not fulfilled.

Leader categorization theory (Lord, 1977; Lord, Foti & DaVader, 1984) also suggests that people have preconceptions about how effective leaders should behave in general, or in specific situations. People are categorized as leaders on the basis of the perceived match between their behavior or character, and the prototypic attributes (i.e. schema) of the pre-existing leader category (Hogg, Hain's, & Mason, 1998). The perceived effectiveness of an incumbent leader depends on the extent to which the person’s leadership attributes are congruent with the perceiver’s salient leadership schema (Hains et al., 1997).
Given the discussion so far, it would appear that follower acceptance of a
dissimilar leader is intricately linked to both leader group prototypicality and leader
stereotypicality and having the normative characteristics of a salient in-group (i.e., being
group prototypical) may be as important for leadership as having the characteristics of a
particular type of leader (i.e., being congruent with the schema as a nominal leader
category). However, the relevance of group prototypicality, and whether its effects have
diminished in the modern globalized work environment, is a question that the current
leadership literature has seemingly not addressed. This gap is addressed in the extant
study.

2.5 Organizational Climate

The significant role of organizational climate in influencing outcomes at various
levels within the organization (i.e., individual, group, or organization) has been well
established in organizational studies (Schneider, Ehrhart & Macey, 2013). Perceived
organizational support (POS) has been shown to relate to organizational outcomes such
as customer satisfaction (e.g., Cooil, Aksoy, Keiningham, & Marytott, 2009), improved
attendance (e.g., Avery, McKay, Wilson, & Tonidandel, 2007), and OCB (e.g., Organ,
Podsakoff, & MacKenzie, 2005). Such feelings of perceived organizational support
become even more salient in an organization which is demographically diverse (McKay,
Avery, & Morris, 2008). Employees who perceive their organization as being supportive
feel obliged and develop a sense of commitment that adds value to the overall
performance of the organization (Joshi, Liao, & Roh, 2011).
While considerable work has been done recently on some specific dimensions of organizational climate (such as justice, safety, and service), less attention has been paid to the dimension of diversity climate (Schneider et al., 2013) that emphasizes diversity as a valuable resource for the organization (e.g., Avery & McKay, 2010). This is somewhat surprising given the ubiquitous prevalence of diversity in organizations of today. Creating an organizational environment, where a diverse workforce experiences trust, is a key challenge in management of organizational climate (Avery & McKay, 2010; Purdie-Vaughns, Steele, Davies, Ditlmann, & Crosby, 2008).

An inclusive work environment, which integrates rather than merely values diverse individuals in work groups, has been suggested in this respect (Groggins & Ryan, 2013; Shore, Rendall, Chung, Dean, Ehrhart, & Singh, 2010). Such an inclusive climate can generate a sense of belonging, satisfaction, and commitment in employees, thus creating a positive effect and facilitating effective leadership (Nishii, 2013). However, although the concept of inclusion has received more attention in recent years, more research is needed in order to fully understand the nature of this construct (Shore et al., 2010). More specific to this study is the question whether such an environment can enhance the sense of belonging in a dissimilar leader and reinforce the positive acculturation strategy adopted by such an individual, resulting in emphasizing his/her effectiveness as a leader.

In this section, a brief review of the relevance of organizational climate is done with a focus on climate for diversity which accords primacy to inclusion. Specifically, the importance of an inclusive climate in a demographically diverse organization, and how such a climate will moderate the effects of leadership, is highlighted. It may be noted
that the focus of this study is not on the perceptions of individual group members on the nature of organizational climate, it is rather about the perceptions of the dissimilar leader (whether the organizational climate is inclusive or not) that are under consideration.

2.5.1 Diversity Climate.

Organizational climate has been described as “configurations of attitudes and perceptions by organizational members that, in combination, reflect a substantial part of the context of which they are a part and within which they work” (Ashkanasy, Wilderom, & Peterson, 2000, p.8). It is the meaning assigned by the people to their perceptions and experiences within the organization (Schneider et al., 2013). Thus, a conceptualization of organizational climate can be done in terms of a set of behavioral features, each of which sends a signal about the imperatives of a given setting (Schneider, Ehrhart, Mayer, Saltz, & Niles-Jolly, 2005). The cumulative effects of such individual features may depend upon the presence of other features (Aldrich, 1999). Such interplay of individual features (symbolic interactionism; Blumer, 1969) results in the climate being seen as a shared property (Schneider & Reichers, 1983).

Diversity climate, lying within the overarching domain of organizational climate mentioned above, commonly refers to both the general perceptions of an employer’s efforts to promote diversity, and a specific component regarding the attitude towards the probable beneficiaries of such efforts in one’s unit (Mor Barak, 2005, 2013). Empirical evidence supports the idea that a favorable diversity climate has positive effects on work outcomes (e.g., leading to higher performance; McKay, Avery & Morris, 2009). Research on organizational demography also indicates that being in the minority has
significant effects on individuals’ affective experiences in the workplace, including feelings of isolation and lack of personal efficacy in team and one-to-one relationships (Ely, 1994; Ibarra, 1995).

The nature of support experienced by an employee often differs as a function of race and ethnicity wherein minorities find themselves excluded and denied the type of support which is available to the majority (e.g., Deitch, Barsky, Butz, Chan, Brief, & Bradley, 2003; Elsass & Graves, 1997). Much of the extant research in the domain of organizational diversity and leadership climate has been done in the US. Primarily, such research has been conducted in the context of group outcomes under the leadership of a high status (White) leader managing a diverse group. However, limited research has also investigated the experiences of Black leaders managing diverse groups, highlighting certain deep, psychological effects of organizational climate on such leaders.

For example, Livers and Caver (2003) highlight the effects of such racial diversity comparing it to miasma (the term being used analogously to “bad air” as mentioned in Miasma theory), suggesting that there is an inverse relationship between miasma and the degree to which there is an acceptance of difference in organizations. The authors suggest that when non-traditional leaders work with others in organizations that have a low tolerance for individual or cultural difference, the resulting miasma they operate within becomes denser and potentially more difficult in which to maneuver. “This can lead to degraded communication, interpersonal interactions, and work performance as individuals become increasingly guarded, uncomfortable, and less participatory in their organizations” (Livers & Caver, 2003, p. 124).
There is evidence that other ethnicities (cf. Blacks) also receive differential treatment which may affect their perceptions of support (Foley, Kidder, & Powell, 2002). For example, Hispanic employees in the US have been found to experience more stress vis-à-vis White employees leading them to perceive lack of organizational support (Rodriguez-Calcagno & Brewer, 2005). Avery et al., (2007), while examining the relationship between effects of employee perceptions of organizational diversity climate and supervisor-subordinate ethnic similarity found that such dissimilarity was only significant when organizational diversity climate was not perceived to be supportive.

Gonzalez and Denisi, (2009), studying the impact of demographic diversity on individual attachment in a relatively diverse organization found that, at the individual level, diversity climate moderates the impact of relational and categorical demography on affective organizational commitment, organizational identification, and intention to quit. An employee’s sense of inclusion and climate for diversity has been found to influence work quality and commitment (Glisson & James, 2002; Hwang & Hopkins, 2012) and the employee’s health and social functioning (Travis & Mor Barak, 2010).

Similarly, Avery, McKay, and Wilson (2008) while studying effects of perceived discrimination based on race/ethnicity in the USA, found that Blacks and Hispanics (as compared to Whites) perceived (4 and 3 times more respectively) race/ethnicity-based discrimination. However, no relationship was found between similarity with one’s supervisor and co-workers, and perceptions of discrimination. Overall, effects of prototypical and demographic dissimilarity on the prevalence of perceived discrimination were limited, for the most part, to the focal type of discrimination associated with the dissimilarity.
It has been suggested that employees who perceive a positive climate for diversity (that their employers maintain fair employment practices, respect their unique characteristics and provide opportunities for development and promotion) have higher organizational commitment and lower intention to quit (Gonzalez & Denisi, 2009). It was also found that climate for diversity may mediate the relationships between individual characteristics (such as gender and ethnicity) and organizational outcomes (Acquavita, Pittman, Gibbons, & Castellanos-Brown, 2009).

While overall evidence regarding climate for diversity is relatively scarce both in terms of range and context (Schneider et al., 2013), the predominant indication is that managing diversity through fair policies, practices, and procedures may lead to positive perceptions of diversity climate, which may improve perceptions of inclusion and organizational outcomes. Consequently, in the last several years, diversity rhetoric has shifted from a focus on diversity management to one on inclusion (Nishii, 2013). The crucial role of an inclusive climate is further elaborated below.

### 2.5.2 Climate for Inclusion.

As mentioned above, one of the significant problems facing today’s diverse workforce is exclusion (Ibarra. 1993), and more specifically social exclusion in the workplace (Mor Barak, Findler, & Wind, 2003). To manage both the problems and the potential benefits associated with diversity, organizations need to create environments that are inclusive of all employees (Ferdman & Davidson, 2004; Shore et al., 2010). Such an inclusive environment makes it possible to leverage positive benefits of diversity (Holvino, Ferdman, & Merrill-Sands, 2004), as well as facilitate the integration of differences, assure all employees that they are treated in a fair and equitable way,
and empowers all employees to contribute to the effectiveness of their work group (Guillaume et al., 2014).

Within the organizational context, the inclusion-exclusion construct is conceptualized as a continuum of the degree to which individuals feel a part of critical organizational processes (Mor Barak, 2000). The inclusive workplace at the macro (i.e., organizational) level is defined as one that values and utilizes individual and intergroup differences within its workforce and alleviates the needs of disadvantaged groups, including minorities and women (Mor Barak, 2013). It is characterised by a collective commitment to integrating adversative cultural identities as a source of insight and skill (Ely & Thomas, 2001), and can make an employee feel as an insider in the organization through access to decision making and other organizational networks. Inclusion is, therefore, the perception of how one fits into the organization compared to the mainstream (Mor Barak, 2008).

Thus, inclusion in the workplace refers to an individual's sense of being a part of the organization in both formal processes (such as decision making and access to information), and informal processes (such as social gatherings), during which decisions and information exchange occur (Schneider et al., 2013; Mor Barak, 2013). To that extent, an inclusive climate can be perceived as a construct that is closely related to the well-established construct of perceived organizational support (POS). Wayne, Shore, Bommer, and Tetrick (2002) investigated this relationship and found that organizational practices that provide recognition to the employee (feelings of inclusion and recognition from upper management) were related to POS.
Earlier research has shown that such a sense of inclusion is related to satisfaction with the organization (Hwang & Hopkins, 2012; Mor Barak, Cherin & Berkman, 1998); that inclusion in an organization’s information networks has an effect on employee job satisfaction and well-being (Hwang & Hopkins, 2012; Mor Barak & Levin, 2002); and possible career opportunities and advancement (Mor Barak, 2013). Nishii (2013) avers that the key to moving from a plural organization to an inclusive one is to alter the sociocultural context within which heterogeneous individuals interact. Such an inclusive environment is therefore likely to reinforce the psychological state of an immigrant in a leadership role, facilitating her/his self-efficacy on the one hand while simultaneously addressing the identity concerns of all employees.

Creation of an inclusive environment however is not without some adverse reactions from certain employees. Inclusion is hampered when employees perceive others in terms of oversimplified and negative stereotypes and interpersonal interactions are perverted by status dynamics (DiTomaso, Post, & Parks-Yancy, 2007). Creation of an inclusive environment as part of diversity management practices, which focuses specifically on improving the outcomes of historically disadvantaged groups (such as minorities), may cause resentment or backlash on the part of individuals who do not directly benefit from these practices (Brewer & Miller, 1984; Ensari & Miller, 2006).

Others (e.g., Green & Kalev, 2008) have argued that such diversity management practices may help to reduce bias in key personnel decision-making moments, but they are unlikely to alter the day-to-day relational sources of discrimination that impact people’s experiences of inclusion. Ensari and Miller (2002) found that during cooperative dyadic out-group contact, self-disclosure, typicality, and salience were key
factors for reducing bias toward new members of that out-group category, and that personalized contact was shown to disconfirm negative stereotypes of out-group members and diminish the in-group/outgroup distinctions that fuel conflict.

2.5.3 Inclusive climate as a moderator of leadership.

The relationship between climate and leadership has been one of the earliest to be investigated (e.g., Fleishman 1953; Lewin, Lippitt, & White, 1939; Likert, 1961). The theme that received particular emphasis consistently in these studies was that leaders were crucial to the development and maintenance of organizational climate. That notion of leadership as an antecedent to organizational climate has endured (e.g., Zohar & Tenne-Gazit, 2008).

Later studies have been more specific, investigating relationships between certain leadership perspectives and specific climate types (such as transformational with safety climate; Zohar, 2002, and servant leadership as an antecedent to OCB; Ehrhart, 2004), or effects of leader personality on climate (e.g., relationship between the Big Five personality traits and procedural justice perceptions climate; Mayer, Nishii, Schneider, & Goldstein, 2007). The emphasis has thus been on studying the effects of leadership as an antecedent factor that influences organizational climate.

There has been a recent shift to understand the role of climate as a moderator of relationships between leadership behavior and organizational/group level outcomes. For example, Nishii (2013) has explored the moderating effects of climate for inclusion in gender diverse groups. Similarly, Brimhall, Lizano, and Mor Barak (2014) found that there was a significant indirect effect of LMX on job satisfaction via inclusion. Employee
perceptions of the quality of their supervisory relationship increased job satisfaction through increased feelings of inclusion, suggesting that inclusion plays a role in how LMX influences employee job satisfaction.

Notwithstanding the recent scholarly attention on studying the impact of a climate for inclusion on organizational level outcomes (Schneider et al., 2013), what has remained relatively unaddressed is the effect of such an inclusive climate as a moderator of the relationship between leadership and individual-level relationships with members within a group. More specifically, further empirical investigation is needed to understand the moderating role of inclusive climate on leadership effectiveness of leaders who are dissimilar.

2.6 Leadership Effectiveness.

Leaders are required to be effective in the workplace. However, what exactly causes a leader to be deemed as an effective leader has been deliberated extensively without any unanimity. There is considerable lack of clarity in the domain of leadership effectiveness because scholars often vary in their definition of leadership effectiveness (Avolio, 2007; Yukl, 2008).

Such lack of clarity is at least partially attributable to the proliferation of numerous theoretical approaches that have emerged in the leadership literature in the last few decades. Each of these approaches has a narrowly aligned perspective; for instance, LMX theory views leadership effectiveness in the context of a dyad while the transformational approach is concerned with influencing the whole group. This limits the usefulness of results (Yukl, 2013). Another reason for such ambiguity is the contextual
nature of leadership. For example, the criterion to measure leadership effectiveness of a CEO is vastly different from that of a junior manager.

In this section, conceptualization and operationalization of leadership effectiveness is reviewed, leading to how leadership effectiveness is contextualized in this investigation. Thereafter, effects of the cross-cultural nature of such assessments on leadership effectiveness are discussed.

2.6.1 Conceptualizing leadership effectiveness.

Theoretically, leadership effectiveness can be conceived in many different ways (Hogan, Curphy, & Hogan, 1994). For instance, leadership can be separated into two broad categories; leadership emergence and leadership effectiveness (Lord, DeVader, Alliger, 1986). Leadership emergence “concerns the factors associated with someone being perceived as leader like” (Hogan et al, 1994, p. 496) and whether or not an individual is viewed by others as a leader (Judge, Heller, & Mount, 2002: cf. with the concept of leader stereotypicality mentioned earlier).

Leadership effectiveness, on the other hand, is viewed in terms of the consequences of a leader’s influence on a single individual, group, or organization. A commonly used indicator of leadership effectiveness is the extent to which the performance of the team or organization is enhanced, and the attainment of goals is facilitated (Kaiser, Hogan & Craig, 2008). Alternatively, follower perceptions of the leader are another common indicator of leadership effectiveness (Yukl, 2013). Leader effectiveness may also be perceived in terms of leader’s contribution to the quality of group processes.
Stogdill (1950) differentiated between someone being perceived as a leader, and leadership effectiveness which refers to a leader’s performance in guiding the activities of the unit toward achievement of its goals. Hogan et al. (1994) reinforce this notion and suggest that leadership effectiveness should be measured in terms of team group or organizational effectiveness. Since the data needed to make this evaluation is often difficult to obtain, or badly contaminated by external factors, the authors suggest that the best alternative is to ask subordinates, peers, and superiors to evaluate a leader. However, because subordinates’, peers’, or bosses’ ratings involve judgments about the frequency of certain behaviors, typically stronger links are found between personality and these ratings, rather than between personality and indices of effectiveness (Hogan et al., 1994).

Another approach to understanding leadership effectiveness is to view it through individual leadership perspectives (e.g., Trait, Behavior, or Transformational approaches). In particular, leader effectiveness has been closely associated with leader behaviour, which has been found to influence follower response (Bass & Bass, 2008). Leaders are considered effective when they are able to influence subordinate satisfaction or performance.

Such a behavioral approach to leadership involves measuring leadership effectiveness along two dimensions: initiating structure (i.e., production-oriented leadership), and consideration (i.e., employee-oriented leadership) (Bass & Stogdill, 1990), and involves using two corresponding measures. For example, *objective measures* (such as sales or market share) are used to measure initiating structure, and
subjective measures (such as ratings obtained from the leader’s superiors, peers, or subordinates) are used to measure the dimension of consideration (Yukl, 2013).

Yukl (2013) provides a useful approach to categorize leadership effectiveness in terms of three common variables: firstly, characteristics of the leader (e.g., traits, behavior etc.); second, characteristics of the followers (e.g., attributions about the leader, satisfaction with job etc.); and finally, characteristics of the situation (e.g., organizational culture, size of organization, national culture values etc.). This approach to judge leadership effectiveness is both comprehensive and intuitive, and partly guides this investigation.

In a recent comprehensive review of the subject, DeRue, Nahrgang, Wellman, and Humphrey (2011) provide an integrated model wherein they conceptualize leadership effectiveness along three dimensions: (a) content, (b) level of analysis, and (c) target of evaluation. The content of leadership effectiveness relates to task performance (e.g., individual or group performance), affective and relational criteria (e.g., satisfaction with the leader), or overall judgments of effectiveness that encompass both task and relational elements (e.g., overall effectiveness of the leader).

The level of analysis corresponds to whether leadership effectiveness is conceptualized at the individual, dyadic, group, or organizational level. For example, some studies conceptualize leadership effectiveness as individual-level leader effectiveness, whereas other studies focus on dyadic-level relationships, group-level performance, or organizational performance (Kaiser et al., 2008). Finally, target of evaluation refers to whether the leader is the target of evaluation (e.g., leader effectiveness, satisfaction with leader) or another outcome that is within the domain of
leadership effectiveness but not specific to the leader (e.g., group performance) (DeRue, et al., 2011).

The integrated model (DeRue et al, 2011) provides guidelines for evaluation of leadership effectiveness in this study. Specifically, the target of evaluation is the immigrant leader, with followers and superiors providing feedback. The level of analysis is both individual and group level. The combination measures overall effectiveness of the leader (encompassing both task performance, and relational dimensions as mentioned above). This approach has been influenced by the suggestion made by Yukl (2008), who views “The selection of appropriate (leadership effectiveness) criteria depending on the objectives and values of the person making the evaluation… people have different values... it is usually best to include a variety of criteria in research on leadership effectiveness.” (p. 11).

2.6.2 Cross Cultural Issues.

A major issue that has relevance to immigrants assuming leadership roles in another societal culture, and be considered effective in such roles, relates to cross cultural aspects of leadership. Individuals in leadership positions are increasingly coming from diverse backgrounds and there is increased interest in studying whether effective leadership is related to a person’s race, ethnic background, national origin, or physical appearance (Ospina & Foldy, 2009).

Cultural values and behavior can influence the attitude and behavior of managers in a number of different ways (Adler, 1997; Lord & Maher, 1991), including their acceptance and reactions to social norms of a different country even when such values
and norms have not been internalized. Most managers will conform to such social norms because socially unacceptable forms of behavior are likely to undermine a leader’s effectiveness Yukl (2013). According to such a culturally endorsed theory of leadership, leader behaviors that are accepted and considered active within a collective, are the attributes and behaviors that most clearly fit within the parameters of the cultural forces surrounding the leader (House, Wright, & Aditya, 1997).

In a large empirical study on leadership in a cross-cultural context, the GLOBE study (House, Hanges, Javidan, Dorfman, & Gupta, 2004), has examined the extent to which societal and organizational culture affects the perceptions people hold about what constitutes effective leadership. It was found in this study that certain leadership attributes are universally accepted and considered effective, worldwide regardless of the specific cultural values espoused in a particular collective.

According to such universal dimensions of leadership, members of different cultures share a common frame of reference regarding effective leadership (House et al., 2004). However, it was also noted that there are significant differences between societies and cultural clusters in how strongly each of the leadership dimensions was endorsed, and the extent to which specific leadership attributes and behaviors that were universally endorsed as contributing to effective leadership, in contrast to those that are culturally contingent (Dorfman, Hanges, & Brodbeck, 2004).

Specifically, of the six culturally endorsed global dimensions of leadership identified in the study, two (team leadership, and charismatic leadership) were found to be universally effective whereas the remaining four dimensions (participative, autonomous, humane, and self-protective leadership) were found to be culturally

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contingent. The study found high variability between country scores and sometimes even obvious disagreement between managers from different cultures about whether the respective leadership characteristics inhibit or contribute to outstanding leadership (Chhokar, Brodbeck, & House, 2008).

Since this study proposes to investigate the leadership effectiveness in the context of South Asian immigrants, it is relevant to note the salient aspects of this societal culture with leadership effectiveness. Appendix H provides a graphical summary of responses from both the South Asian, and Anglo (which includes Canada) societal clusters (GLOBE study, 2008). These responses highlight the difference between societal cultures on various dimensions and can be useful in understanding the leadership dynamics within a group.
CHAPTER 3 – RESEARCH FRAMEWORK AND HYPOTHESES

Based on the review of the literature above, this chapter initially presents the research framework and specifies the research questions. This is followed by a justification for this research leading to proposed hypotheses.

3.1 Research Questions and Framework

Following research questions concerning South Asian immigrants to Canada guided this study:

Research question 1: What is the relationship between an immigrant’s state of acculturation and her/his effectiveness as a leader in the destination nation workforce?

Research question 2: How is group level LMX differentiation related to perceptions of leadership effectiveness?

Research question 3: Does group ethnic diversity affect perceptions of a dissimilar leader’s effectiveness?

Research question 4: Is leader group prototypicality and leader stereotypicality salient in ethnically diverse groups?

Research question 5: Does organizational climate moderate the relationship between leader-member relationship and follower perceptions of leadership effectiveness?

Figure 3.1 depicts the proposed framework in a graphical representation of the relationships between key constructs.
3.2 Research Justification

Given the reality of globalization and immigration, this research should be useful in many ways. From the immigrants’ point of view, it will be helpful to know how acculturation and leadership relationships may affect their success in destination nation workplace. From the perspective of the destination nation, a clearer awareness of important influences that shape acculturation strategies chosen by immigrants can prove valuable. Similarly, a clearer definition of contextual conditions in the workplace, such as group ethnic diversity, will add to our understanding of group level dynamics when the leader is dissimilar.

The study will provide further validation to the concepts of leader group prototypicality and leader stereotypicality as articulated in social identification theory.
Finally, the nature of organizational climate has been identified as a potentially important contextual factor that affects, amongst other things, leadership related outcomes. Overall, this study should result in findings that have both academic and practitioner value and which will provide guidelines to shape appropriate policies for eventual useful utilization of human capital (i.e., immigrants) in Canada.

### 3.3 Research Hypotheses

Six relationships were proposed to be investigated in this study. These are described below.

#### 3.3.1 Leader acculturation and leadership effectiveness.

Acculturation has been defined as a phenomenon which results when individuals with different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both individuals or groups (Sam, 2006). Specific to immigrants, acculturation implies the degree of adaptation to the destination nation culture while possibly retaining a linkage to one’s original culture. As brought out earlier, this process can result in one of the four possible states in an individual's state of acculturation at a given time i.e., assimilation, integration, separation, or marginalization (see Chapter 2.1.3 for explanation of these terms).

The acculturation strategy chosen by the immigrant has relevance to how such immigrants are perceived as leaders in the workplace. While immigrants make choices based on multiple inputs, it is reasonable to assume that the degree of positive adaptation to the destination nation culture (i.e., Assimilation or Integration) will have a direct bearing on immigrants’ success in leadership roles in the destination nation work...
environment. Conversely, those immigrants who have adopted strategies of Separation or Marginalization, and have thus distanced themselves from the mainstream society, will find it hard to be accepted as effective leaders in the local workplace. Accordingly, the following hypothesis is made to test the relationship between acculturation and leadership effectiveness:

**H1: Leadership effectiveness will be related positively to acculturation states in accord with degrees of adaptation to destination nation culture.**

### 3.3.2 LMX differentiation and leadership effectiveness

As brought out in Chapter 2, LMX theory is based on the premise that leaders form differentiated relations with the group members (Graen & Uhl-Bien, 1995). Such relationships can be broadly divided into two categories: high-quality relationships are formed through socio-psychological exchanges based on trust and respect with selected group members (the in-group) while only work-related, transactional relationships are formed with other group members (the out-group). Such dual-categorized relationships generate what has been termed as LMX differentiation within the work group which is defined as “a process by which a leader, through engaging in differing types of exchange patterns with subordinates, forms different quality exchange relationships (ranging from low to high) with them” (Henderson et al., 2009, p.519).

Other conceptualizations are possible to contextualize the definition of LMX differentiation mentioned above. For example, Liden et al., (2006), have used median LMX within the group as a measure of central tendency. Use of mean as a measure of group level aggregation, or alternatively a ratio of in-groups versus out-groups could
also be used to measure LMX differentiation. However, consistent with prior LMX differentiation measures (e.g., Erdogan & Bauer, 2010; Harris et al., 2014; Henderson et al., 2008), we used the variance in the individual level LMX scores for each group to capture group-level differentiation. While the benefits of high-quality relationships are well recognized, LMX theory posits that effective leaders cannot establish high-quality exchanges with all of their subordinates (Liden & Graen, 1980). Thus, even though LMX theory is fundamentally premised on the idea of LMX differentiation within the group, the conceptual underpinnings of LMX theory do not speak directly to the implications of these differences for workgroup effectiveness (Yu et al., 2018) or similar other effects (such as leadership effectiveness). In these circumstances, the size (i.e., range) of LMX differentiation as well as the position of group LMX mean (high or low) are potential factors that appear significant in determining how effective the leader is perceived by the group as a whole.

Earlier research studying the effects of LMX differentiation on group level outcomes has provided mixed results. For example, while Liden et al., (2006) found that LMX differentiation was not significantly related to group outcomes, Stewart and Johnson (2009) found that when group members, as a whole, have a high-quality relationship with the leader, LMX differentiation is positively related to group overall performance. It would appear that further validation of the outcomes of LMX differentiation at the group level is needed to help clarify such ambiguity in results.

Furthermore, since leaders are important contributors to group level outcomes, it is worthwhile to investigate whether LMX differentiation (analogously to its relationship with group outcomes) is also related to follower ratings of leader effectiveness at the
group level. Such a relationship between LMX differentiation and group level ratings of leadership effectiveness does not appear to have been empirically tested so far. Higher LMX differentiation would imply that at least some members of the group believe that their relationship with the leader is of lower quality. Plausibly, such group members will also rate the leader as less effective as compared to others who have rated the leader high in effectiveness. Accordingly, the following hypothesis was proposed to test this relationship:

\[ H2: \text{LMX differentiation will be negatively associated with perceptions of leadership effectiveness.} \]

3.3.3 Group ethnic dissimilarity and leadership effectiveness.

Group social identities are powerful differentiators of perceptions (Brewer & Pierce, 2005; Hogg, 2001; Markus, 2008) and are marked by a number of factors such as race, gender ethnicity (Brewer, Gonsalkorale, & van Dommelen, 2013). Such divisions provide a basis for shared identity and group membership that may become an important source of social identification.

However, even though individuals may share a common ingroup membership on one dimension (such as ethnicity), they may belong to different categories on another dimension (such as national culture or gender). Earlier work into such crossed categorization has explored the de-categorizing effect of crossing categories and there is some evidence that categorical structures are abandoned when cues for categorization diverge (Crisp, Hewstone, & Rubin, 2001).
Such categorization and differentiation at group level can have ramifications for how a dissimilar leader is perceived. While ethnic identity has been established as a powerful predictor in research on social identity in real-world contexts (Brewer et al., 2013), its effects on, and relationship with, group leaders has remained unaddressed. It is plausible that the overall group ethnic similarity with the leader will have a corresponding effect on perceptions of leader’s effectiveness. Specifically, if the majority of group members are culturally and ethnically similar to the leader, the overall group perceptions of leadership effectiveness are likely to be higher as compared to a group ethnic composition where group members are dissimilar to the leader.

Accordingly, following hypothesis is made to test the relationship between group ethnic dissimilarity and leadership effectiveness:

**H3. Group overall ethnic and cultural similarity to the leader will be positively related to ratings of leadership effectiveness.**

### 3.4.4 Leader group Prototypicality, Stereotypicality and leadership effectiveness.

The concept of leader prototypicality, and its linkage to the notion of in-groups and out-groups, has been highlighted earlier while discussing the Social Identity theory. Group prototypical leaders are more likely to be rated as effective vis-à-vis those who are not group prototypical. Since leaders in this study, being first generation South Asian immigrants, were ethnically and culturally dissimilar from the destination nation ethnic majority, they were expected to be generally rated low in follower ratings. However, such effects of prototypicality were likely to be contingent on group
composition, i.e., being more pronounced in groups which comprised of majority members being culturally and/or ethnically different (e.g., being Caucasians and/or First Nations) as compared to groups in which majority of members were culturally and/or ethnically similar to the leader (i.e., being Asian and/or South Asian).

The construct of leader stereotypicality, while being somewhat similar to the concept of leader group prototypicality mentioned above, is a distinct construct. The word 'stereotype' signifies a belief about a certain type of individual, a group of individuals, or roles that people fit into (Todd, 2016). Such stereotypes exist for all types of people and roles. A leader being deemed effective as a leader, or otherwise, is thus a contextual phenomenon such that a person who is deemed an effective leader in one context may not be considered an effective leader in another.

It has been suggested that physical features associated with race, sex, or ethnicity, may activate prototypes that impact perceiver's expectations of the leader prototype (Lord, Brown, Harvey, & Hall, 2001), and individual experiences and social identity shape the expectations for how a leader should behave (Hogg, 2001). Earlier research has repeatedly outlined the stereotypical image of an effective leader in the North American context being that of a white male with certain typical characteristics (e.g., being assertive and competitive). Such a portrait of a leader is very different from the one that is stereotypical of leaders raised in the collectivistic culture of South Asia (refer to findings in GLOBE study).

Putting the above two complementary (though conceptually distinct) concepts of leader group prototypicality and leader stereotypicality together, it is posited that an immigrant, in a leadership role in the Canadian workforce context, will face challenges
of both leader group prototypicality and leader stereotypicality. Accordingly, the following hypothesis is made to test the relationship between leader group prototypicality, and leader stereotypicality, with ratings of leadership effectiveness:

\[ H4: \text{There will be a positive relationship between leader group prototypicality and leadership effectiveness.} \]

\[ H5: \text{There will be a positive relationship between leader stereotypicality and leadership effectiveness.} \]

3.3.5 Organizational climate as a moderator of the relationship between LMX and leadership effectiveness.

Work climates exert an important influence on organizations and people who work in them (Kuenzi & Schminke, 2009). Scholars have studied the mediating/moderating role of organizational climate on organizational relationships such as between leadership and OCB (e.g., Ehrhart, 2004; Schneider et al., 2005). Inclusive environments are characterised by a collective commitment to integrating diverse cultural identities (Ely & Thomas, 2001) and make it possible to leverage diversity’s potential benefits (Holvino et al., 2004).

Given earlier empirical evidence, it is likely that an inclusive climate will moderate the relationship between leader-member relationships and follower ratings of leadership effectiveness. Thus, it would appear that, all else being equal, a supportive organizational climate, should encourage immigrant leaders to be more effective. Accordingly, following hypothesis is made to test the moderating effect of organizational
climate on the relationship between leadership relationships and leadership effectiveness:

**H6. An inclusive organizational climate will positively moderate the relationship between LMX and leadership effectiveness.**
CHAPTER 4 - METHODOLOGY

4.1 Introduction

Research involving ethnic minorities and immigrant populations has been plagued by certain methodological challenges such as small numbers, lack of reliability of sampling frames, and cross-cultural research issues (Knight, Roosa, & Umana-Taylor, 2009). Scholars have also noted lack of sufficient theoretical frameworks to guide research involving immigrant populations (Bernal & Domenech-Rodriguez, 2012). Such multifaceted nature of immigrant populations demands an insightful research design which should seek to establish clarity in cultural meanings and cultural interpretations at every step of the research.

This chapter is organized in four sections. In Section 4.2, essentials of the research design are given. This is followed in section 4.3 by an elaboration of the steps used in selection and participation of participants. In section 4.4, the measures used in this study are described. Finally, Section 4.5 deals with variables (including control variables).

4.2 Research Design

The research design used in this study was a correlational design utilizing cross-sectional survey methodology which included a number of survey instruments. The purpose of the design was to assess the relationships between various predictor variables (i.e., followers’ assessments of leader group prototypicality and leader stereotypicality; organizational climate) and leadership effectiveness.
4.3. Participants

4.3.1. Sample Frame.

The participants in this study consisted of groups which included leaders and their followers or group members. The leaders were first generation immigrants who had arrived in Canada after entering adolescence (age 13 years or older). This cut-off age was chosen, as at this stage of life, individuals bring with them values and characteristics from their country of origin but continue their assimilation and socialization in the new (receiving) country (Rumbaut, 2004). To improve external validity of findings (Tashakkori & Teddlie, 2009), participants were approached in multiple types of organizations (such as government and private organizations). Leaders were defined as supervisors, team leads, and other managers who were leading groups ranging in size between 3 and 9 individuals.

The choice of South Asians as the sample ethnic group was based on a few factors. Firstly, as noted earlier, South Asians are a growing immigrant group in Canada who are potentially an important source for destination nation’s workforce (Immigration Overview, 2013). Secondly, this ethnic group has distinctly different cultural values as compared to the destination nation’s majority and thus provided an appropriate context for the purposes of this investigation which was focused on dynamics within a diverse group. Finally, the researcher’s own South Asian ethnicity was considered as a potentially helpful factor in generating a larger sample size.

The data was obtained as a convenience sample from within the population of interest. The participants included leaders and their followers (team members) who
were clustered in groups of varying sizes. In such clustered data, perceptions of leadership effectiveness concerning the group leader are likely to be correlated within the group because the group members share the same environment (Raudenbush & Bryk, 2002).

Groups were considered the higher level of analysis i.e., level 2 (hereafter called L2). Individual group members\(^3\) in each of these groups were considered as level 1 (hereafter called L1). In multilevel models, the units of analysis are usually individuals (at the lower level) who are nested within aggregate units at a higher level (Luke, 2004). Accordingly, group members (L1) were considered units of analysis in this study. Covariates were used to measure characteristics at both leader and follower levels; hence these could be either L1 or L2 variables. The dependent variable (leadership effectiveness), was measured at follower level (L1).

Responses were obtained from both leaders and followers. Leader data consisted of responses on leader acculturation and perceptions of organizational climate (relevant to H1 and H6). Follower data consisted of follower perceptions about leader group prototypicality, leader stereotypicality, and relationship with leader i.e., LMX (relevant to H2, H3, H4 and H5). Followers also provided perceptions of leadership effectiveness (the response variable). Demographic data was obtained from both leaders and followers as a control.

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\(^3\) Also referred synonymously as ‘followers’ or ‘subordinates’
4.3.2. Sample Size.

Determining the appropriate number of participants for a given design is one of the difficult sampling problems. One recommended method to approximate the number of participants is to conduct a power analysis (Slavin & Smith, 2009). A power analysis advises the researcher regarding how many subjects are necessary to detect any effects that result from the independent variables, given (a) the size of the effect of these variables in the population, (b) the type of statistical tests to be used, and (c) the level of significance (alpha level) of the study (Lipsey & Hurley, 2009).

It has been acknowledged that in such multilevel analysis, 50 or more groups are needed (Maas & Hox, 2005). The authors have shown that only sample size < 50 at level 2 leads to biased estimates of the second-level standard errors. In all other simulated conditions, the estimates of the regression coefficients, the variance components, and the standard errors are unbiased and accurate. Given these suggestions, a targeted sample of 50 leaders and 150 to 250 team members (ranging between 4 to 9 members per group) was obtained.

Initially, the participants were recruited through the media of community networks. Immigrant community networks tend to have some form of organizations and associations that allow immigrants to maintain a collective identity (Schrover & Vermeulen, 2005). Such an approach has been used earlier in studies involving immigrants and diverse groups (Winters, Janvry, & Sadoulet, 2001). Through such community networks, it is easy to identify immigrants who meet the study criteria. To further augment the sample size, a snowball technique (Atkinson & Flint, 2001) was
used to enlarge the sample size. This technique uses previously identified individuals who know and recommend additional potential participants.

Seventy leaders responded initially with 51 remaining eligible for final analysis; the remainder were omitted as they did not meet the stipulated group size criterion (i.e., group size ≥ 3). A total of 367 followers were invited to participate in the study, with 305 responding. The response rate for leaders is not meaningful due to the snowball technique; the response rate for followers was 83%. A further 18 follower surveys were eliminated from the sample as an inadequate number of surveys were received from their group (78% of invited respondents). The final dataset in this study contained 51 leaders and 287 followers clustered in 51 groups. Group size ranged between 4 to 9 members (mean = 5.6). This met the criterion for adequate sample size as described above.

4.3.3. Sample Description.

As noted above, the sample in this study comprises 51 leaders of groups ranging in size from 4 to 6 (mean = 5.6), representing 287 followers in total. The average age of the leaders in this study was 50.7 (SD=9.5) and 34% were female. The mean number of years reported by leaders being in Canada was 25 years (SD=10.5). Leaders arrived primarily from India (90%), with an additional 5% from Sri Lanka. Twenty-five percent of the leaders were self-employed, 35% worked in government organizations, and the remainder (40%) in industry. All the leaders in this study had a post-secondary education, with 22% having a masters and 8% a doctoral degree.
The average age of the followers in this study was 37.6 years (SD=13.8) and 47% were female. Seventeen percent of the followers were identified as South Asian, 22% as Asian, 23% as First Nations, and 18% as Caucasian. Eighty-one percent of the followers in this study had a post-secondary education, with 14% having a masters and 22% a doctoral degree.

4.3.4. Data collection.

The data was collected through surveys in two stages. Leaders were sampled in stage one: their group members were sampled in stage two. A combination of web surveys (Simesk & Veiga, 2001) and paper versions of the questionnaire were used for collection of data. To conduct the survey, a web-based service (Qualtrics) was used. Such a service is convenient for data-gathering activities (Evans & Mathur, 2005).

Potential participants were invited to create a secure online identification code and password and asked to key in the appropriate survey number to access the study. Researchers have noted disadvantages about failing to reach respondents who do not have access to technology (Fowler, 2013). In consideration of this advice, and also to expedite the process of data collection, paper-based versions of the surveys were also distributed.

A letter was mailed to potential participants explaining the rationale of the study and to give them advance notice (Appendix G). A week later, the survey information was emailed to leaders, with a reminder to non-respondents following a week later. Once the sample size for leaders was achieved with eligibility criteria having been met, they were asked to provide contact details of their group members.
The group members were then requested to fill out the follower survey electronically. The researcher also hand-delivered paper-based surveys to their workplaces and arranged a private area in which the surveys could be completed. The lead researcher remained on site until the surveys were completed. The survey sheets were then collected, and data was transferred to electronic format. The leaders were not on site when paper surveys were being filled out by the team members.

4.4. Measurement

The importance of sound measurement has been well recognized in research since it defines the quality of research (Cokley, 2007; Hinkin, 1998). Accordingly, the selection of well-established measures for the various variables used in this study was an important consideration. Some of the questions that needed to be addressed in this respect included the measurement characteristics of the Instrument and whether the measure was appropriate. A summary of constructs and variables along with scales and sources employed is given at Appendix A. Discussion of each of the variables follows.

4.4.1. Acculturation.

To study the bimodal nature of acculturation, it is essential to measure both the adaptation to the culture of destination country as well as simultaneous retention of the culture of country of origin. Majority of earlier studies have used demographic variables (such as generational status, age, and years lived in new country) with the underlying assumption that those individuals, who have more exposure to the mainstream culture, have greater adaptation with passage of time (e.g., Berry, Phinney, Sam, & Vedder, 2006; Ryder, Alden, & Paulhus, 2000). Other variables include pre-exposure to mainstream culture, residence in an ethnic neighbourhood, willingness to seek
language education, and frequency of contact with the mainstream culture (Searle & Ward, 1990).

Since the focus in this study was on behavioural outcomes that are domain specific (immigrant behaviour in workplace), measurement of immigrant sociocultural adjustment in mainstream culture was considered appropriate in this context. However, it may be noted that the assumption is that acculturation is a process that develops over time and is not work context specific. Indeed, the measure of acculturation needs to be such that it allows measurement of cultural adaptation of the individual across all contexts and situations. Accordingly, the Sociocultural Adaptation Scale (Ward & Kennedy, 1999) was used to measure acculturation state of immigrants. Immigrants in leadership roles were asked questions such as: “Have you adapted to the local etiquette”, and “How well do you understand the local value system”. This scale (see Appendix B for details), comprises 20 items measured on a 5-point scale. Higher scores on the scale reflect higher levels of adaptation. The Cronbach alpha for this scale was .93. Leader acculturation was measured at the individual (leader) level.

As regards such immigrants’ continued preference for country of origin culture, the Multigroup Ethnic Identity Measure (Phinney 1992) was used. This scale measures the desire to retain one’s ethnicity based on multiple dimensions such as exploration, affirmation, and belonging. The original Multigroup Ethnic Identity Measure containing 23 items has been shortened to six items by Homma and colleagues (Homma, Zumbo, Saewyc, & Wong, 2014). Having tested it empirically, Homma et al., (2014) suggest that the shorter version of the MEIM can be used to compare levels of ethnic identity across different ages or acculturation groups.
This six-item version of the MEIM was measured on a 7-point scale. Typical questions were "I participate in cultural practices of my own group, such as special food, music, or customs", and "I feel a strong attachment towards my own ethnic group". Higher scores on the scale reflect more attachment and commitment to one’s ethnic group. The Cronbach alpha for this scale was .84. The list of items for the ethnic identity measure as well as relevant demographics items are listed at Appendix C.

4.4.1.1 Scoring criteria.

Leader destination nation acculturation was measured on a 5-point scale and recoded as follows: scores below and up to 1.25 were deemed ‘low very’; scores from 1.26 to 2.50 were deemed as ‘low’; scores from 2.51 to 3.75 were deemed ‘medium’; and scores above 3.75 were deemed ‘high’. Similarly, leader’s country of origin cultural preference was measured on a 7-point scale and recoded as follows: scores below and up to 1.75 were deemed as ‘very low’; scores from 1.76 to 3.50 were deemed ‘low’; scores from 3.51 to 5.25 were deemed ‘medium’; and scores above 5.25 were deemed ‘high’.

4.4.2.2 Recoding leader acculturation.

The relationship posited in Hypothesis 1 can be conceptualized as shown in Figure 4.1. This conceptual model was operationalized as shown in Figure 4.2 below.
The overall state of leader acculturation was measured by combining leader response scores on two variables (i.e., destination nation adaptation, and country of origin cultural preferences). Destination nation adaptation was measured as follows: a) assimilation required ‘high’ scores on destination nation variable and ‘low’ or ‘very low’ scores on the country of origin variable; b) integration required ‘medium’ or ‘high’ scores on both country of origin and destination nation variables; c) marginalized individuals
would score ‘high’ on country of origin but ‘low’ or ‘very low’ on destination nation dimension; and d) those who had followed the separation strategy would score ‘low’ or ‘very low’ on both country of origin and destination nation dimensions.

Table 4.2 below shows coding schema in a tabular form to arrive at the leader overall state of acculturation.

Table 4.2 Coding schema for acculturation states of immigrant leaders

<table>
<thead>
<tr>
<th>State of acculturation</th>
<th>Leader destination nation score</th>
<th>Leader country of origin score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assimilated</td>
<td>High</td>
<td>Low/Very Low</td>
</tr>
<tr>
<td>Integrated</td>
<td>High/Medium</td>
<td>High/Medium</td>
</tr>
<tr>
<td>Marginalized</td>
<td>Low/Very Low</td>
<td>High</td>
</tr>
<tr>
<td>Separated</td>
<td>Low/Very Low</td>
<td>Low/Very Low</td>
</tr>
</tbody>
</table>

4.4.2. LMX differentiation.

To measure LMX relationships, the LMX-MDM instrument (Liden & Maslyn, 1998) was used. This scale measures LMX relationship along four dimensions (i.e., Affect, loyalty, contribution, and Professional respect). The LMX-MDM is a multidimensional scale rather than a unidimensional measure of LMX (such as LMX-7: Scandura & Graen, 1984). LMX-MDM was chosen because it has broader domain coverage and better reflects a subordinate’s evaluation of the relational characteristics and qualities of the leader-subordinate relationship than do unidimensional measures of LMX (Wang, Law, Hackett, Wang, & Chen, 2005).
This scale has 12 items. Higher scores on the scale reflect higher quality relationship with the supervisor. Group members were asked questions (such as “My supervisor is a lot of fun to work with”, and “I admire my supervisor’s professional skills”) and were rated on a 7-point scale (7= Strongly agree to 1= Strongly disagree). The complete list of items is given at Appendix D. This scale had a Cronbach’s Alpha of .94 in this study. Within group variance in individual level LMX scores was used to operationalize LMX differentiation for each group (Liden et al., 2006).

Operationalization of the construct of LMX differentiation has been visualised as differentiation patterns of LMX quality between team members (Martin, Thomas, Legood, & Russo, 2018). Three main properties of such a differentiation process pattern that can be identified and assessed are central tendency, variation, and relative position. For this study, the focus was on the property of variation (i.e., within-team dispersion in team members' LMX quality or, in other words, LMX differentiation) which was summarized from individual level to the work group level.

Similarly, different types of compositional models (such as additive, consensus, dispersion, or process models: Chan, 1998) can be employed to aggregate the data (Kozlowski & Klein, 2000). Since LMX differentiation is fundamentally a dispersion scale of LMX, dispersion model was used in this study to measure the amount of within-team variation in individual level LMX scores using standard deviation of the team scores. LMX was measured at the dyad level but aggregated at the group level which provided a group level of assessment concerning the leader-group relation.
4.4.3. Group Ethnic Diversity.

Group diversity in the context of this study specifically implied demographic dissimilarity based on ethnicity. Group diversity has been conceptualized as a form of separation, variety or disparity within the group (Harrison & Klein, 2007). In such a conceptualization, members differ from one another qualitatively on an attribute (such as ethnicity in the extant study), and groups differ to the extent how group members are spread across all the categories. Under a conceptualization of diversity as *variety*, continuous distances are not meaningful and qualitative distinctions are needed (Harrison & Klein, 2007).

The demographic variables (gender, age, ethnicity, and education) concerning leaders and followers were recoded into categories. It may be noted that since only the follower ethnicity was the dimension of diversity, which was of interest in this study, the analysis was specific to group ethnic diversity; other forms of diversity were controlled for. Ethnicity was grouped in five categories. These categories were: Caucasians (n=50), Asians i.e., other than South Asians (n= 64), First Nations (n= 65), South Asians (n= 47), and Others (n= 57).

Ethnic diversity was calculated using Blau’s (1977) index of heterogeneity. Blau’s (1977) index is appropriate for measuring distinctions such as group heterogeneity in ethnicity and is the most commonly employed measure for diversity as *variety* (Bunderson & Sutcliffe, 2002). Various researchers have used this measure for this purpose and discussed its advantages (e.g., Harrison & Sin 2006; Tsui & Gutek, 1999). Blau’s index calculates the proportion of group members relating to a specific category
based on the total number of individuals in a specific category, and total number of different categories in the group of interest.

Specifically, Blau’s index uses the formula \(1 - \sum p_k^2\) to measure a categorical variable where \(p\) is the proportion of group members in \(k^{th}\) category. Values of Blau’s Index can range from 0 to \((k-1)/k\). It is maximum when members of a group are spread equally (called ‘evenness’) over all K categories i.e., each category contains the same number of cases. However, in data with uneven group sizes, traditional version of Blau’s index is systematically biased such that it underestimates the level of diversity in smaller groups.

Hence, it has been suggested that Blau’s Index be modified to adjust for the upper limit in group size (Biemann & Kearney, 2010; Harrison & Klein, 2007). The modified index is \(\text{BlauN} = 1 - \sum N_k (N_k - 1) / N (N - 1)\) where \(N_k\) is the absolute frequency of group members in the \(k^{th}\) category and \(N\) is the total number of group members. This alternative calculation is essential to get an unbiased estimation of within-group variety. \(\text{BlauN}\) index was adopted as group size was relevant in this study due to the inter group comparisons needed on the dimension of group ethnic composition which was the focus of this hypothesis.

Since the purpose was to analyse the inter-group differences on perceptions of leadership effectiveness between ethnically more diverse groups versus less diverse groups, it was necessary to categorise groups on this (ethnic) dimension. A coding schema was created for interpretation of Blau’s Index since guidelines for a broad categorization of Blau’s Index (D) were not found in earlier literature). The proposed
schema was based on the following D score scale: ‘High’ > Mean + .5 SD; ‘Moderate’ = Mean ± .5 SD; ‘Low’ < Mean - .5 SD.

This diversity scale was interpreted as follows: ‘High’ diversity implied maximum evenness or spread of ethnicity in the group; ‘Moderate’ diversity represented a mostly heterogeneous (even) group composition; and ‘Low’ diversity implied an ethnically polarised group. Briefly put, higher values indicated greater ethnic diversity (heterogeneity).

4.4.4. Leader group prototypicality and leader stereotypicality.

Leader group prototypicality and leader stereotypicality are salient markers for identification and acceptance of leaders in a group (Brown, 2013). Earlier research has established that leaders who are low on leader group prototypicality (Platow & van Knippenberg, 2001), leader stereotypicality (Fielding & Hogg, 1997), or both (Hains et al., 1997), lack acceptance and effectiveness as leaders (Hogg, 2001). Building on this approach, the measures used in this study included establishing the group social identity and then obtaining follower feedback from the subordinates about the leader group prototypicality and leader stereotypicality. See Appendix E for details of these measures.

4.4.4.1 Social identification.

To obtain a measure of social identification, the Social Identification Scale developed by Mael and Ashforth (1992), was used. This scale has four items which were measured on a 7-point scale. Group members were asked questions such as: “When someone criticizes Canada, it feels like a personal insult”; and “When someone
praises Canada, it feels like a personal compliment.” Higher scores on the scale reflected higher social identification. This scale had a Cronbach’s Alpha of .86 in this study. Social identification was measured at the group member level and aggregated to the level of the group.

### 4.4.4.2 Group salience.

Group salience dimension measures commitment, liking, and identification with the group. Group salience was measured using Group Salience Scale (Hains et al., 1997). This scale consists of 11 items. Subordinates were asked questions such as “How similar do you feel in your group? (similar)”; How important is your group to you? (importance); and, “How well do you match the representative position of your group? (self-prototypicality)”. Group members were asked to respond to each item on a 7-point scale (7= Strongly agree to 1= Strongly disagree). Higher scores on the scale reflected higher fit, liking, and identification with the group. This scale had a Cronbach’s Alpha .89 in this study. Group salience was measured at the individual level and aggregated to the level of the group.

### 4.4.4.3 Leader group prototypicality.

Leader Group Prototypicality was measured using the Leader Group Prototypicality Scale (Platow & van Knippenberg, 2001). This scale consists of five items such as “This team leader is a good example of the kind of people that are member of my team”; and “This team leader has very much in common with the members of my team”. Team members were asked to respond to each item on a 7-point scale (7= Strongly agree to 1= Strongly disagree). Higher scores on the scale
reflected greater leader group prototypicality. This scale had a Cronbach’s Alpha of .89 in this study. Leader group prototypicality was measured at the group member level and aggregated to the level of the group.

Being immigrants, all leaders were deemed as non-group prototypical. An additional analysis was deemed necessary to find out whether there was a leader rating differential due to group ethnic composition. Specifically, the question that needed to be answered was whether there was a significant difference between leader ratings in those groups who were primarily composed of South Asian and/or Asian members (collectivist cultures, same as the leader), and groups which were majority Caucasian (or mix of Caucasian, ‘Others’, and First nations).

For this purpose, first each group was subdivided into two subgroups as per ethnic distribution proposed above. A simple majority was used as the criterion to describe a group as being primarily Asian or otherwise. For example, in a group of five members that had one Asian, one South Asian and three ‘Others’ (a mix of Caucasians + First Nations + Others), the proportion for the Asian representation in the group was deemed 40% (2/5 = .40). Of the 51 groups, 13 were found to have a majority of Asian/South Asian members (>50%).

4.4.4.4 Leader stereotypicality.

Leader stereotypicality relates to follower perceptions that a leader is stereotypical (of a leader). Leader stereotypicality was measured using the Stereotypicality leadership behavior Scale (Hains et al., 1997). To establish their mental schema of a stereotypical leader, the subordinates were initially given information that
would identify for them a stereotypical leader. This scale has 5 items which are based on superordinate categorisation of a leader (Cronshaw & Lord, 1987).

Group members were asked the extent to which an effective leader behaves in the following ways: a) carefully plans on what to do; b) emphasizes group goals; c) coordinates group’s activities; d) lets other members know what is expected of them; and, e) takes prompt decisions. These behaviors are considered sufficiently descriptive of general properties of a stereotypical leader of a small group in an organizational context. Group members were then asked to respond to the following three questions on a scale (7= Strongly agree to 1= Strongly disagree): How well does this profile describe your own leader’s style? (stereotypicality); How much would you prefer a leader who had this profile? (stereotypical leader preference); How much would you prefer a leader who had the opposite profile? (non-stereotypical leader preference). Higher scores reflected higher group preference for a stereotypicality leader. This scale had a Cronbach’s Alpha of .68 in this study. Leader stereotypicality was measured at the group member level and aggregated to the level of the group.

4.4.5. Organizational Climate for Inclusion.

To measure organizational climate for inclusion, two scales (detailed below) were used which address the two dimensions of organizational climate (i.e., organizational diversity and organizational climate) (Mor Barak, 2005). These dimensions were subsequently combined to provide an overall measure of how inclusive the organizational climate was.
4.4.5.1 The Diversity Perceptions Scale.

This scale is used to examine employee views about the diversity climate in the organization. It includes 16 items with two dimensions: organizational and the personal, each containing two factors i.e., Organizational dimension (organizational fairness, and Organizational inclusion factors), and Personal dimension (Personal diversity value factor, and Personal comfort with diversity).

The 16 scale items were measured on a 7-point scale summed to create a composite diversity perception. Higher scores on the scale reflect a more positive perception of the diversity climate. The dimensions and factors can be summed and analysed separately to gain more insight into the composition of employees' views of the diversity climate (Mor Barak, 2005). Typical items in this scale include: “Managers here have a track record of hiring and promoting employees objectively, regardless of their race, gender, sexual orientation, religion or age” and “Managers give assignments based on the skills and abilities of employees” and are rated on a seven-point scale (7= Strongly agree to 1= Strongly disagree). The complete scale is listed at Appendix F. Organizational diversity perceptions were measured at the leader level. This scale had a Cronbach’s Alpha of .73 in this study.

4.4.5.2 Perceptions of Inclusion and Exclusion.

This scale uses 15 items to measure the degree to which individuals feel a part of critical organizational processes such as access to information, involvement and participation with the organization, and influence in the decision-making process. The 15 items evaluate a person’s sense of inclusion in relation to the following five system
levels: Work group, Organization, Supervisor, Higher management, and Social/informal. In each of these levels the respondents are asked to evaluate their inclusion in Decision-making process, Information networks, and Level of participation/involvement (Mor Barak, 2005).

    Typical items are: “My coworkers openly share work-related information with me”, “My supervisor often asks for my opinion before making important decisions”, and “I am always informed about informal social activities and company social events”. The items were rated on a 7-point scale and higher scores reflected a more positive climate for inclusion. The complete scale is listed at Appendix F. Perceptions of inclusion and exclusion were measured individually at leader level. This scale had a Cronbach’s Alpha of .90 in this study.

    In order to determine the leader perceptions of the degree of inclusiveness in the organizational climate overall, a new variable was created by taking the mean of organizational climate and organizational diversity. This variable provided the overall perception of organizational climate for each leader.


    Measurement of leadership effectiveness is context based. As mentioned previously in the literature review, Mumford and Barrett (2013) provide a taxonomy according to which leadership effectiveness should be based on the outcomes expected in the study (such as substantive, social, performance, or psychological outcomes). Given the context of this study, wherein assessment of leadership effectiveness was
hypothesised to be related to group ethnic diversity, psychological outputs appeared to provide the most relevant approach to measure leadership effectiveness.

A psychological outcomes appraisal of leadership effectiveness is based on the notion that leadership ultimately lies in a leader’s ability to influence the followers (Brown, 2013; Yukl, 2013). This approach assumes that certain psychological reactions (e.g., trust and/or positive affect) are desirable when leaders exercise influence over the followers (Gardner, Fischer, & Hunt, 2009). Giessner, Van Knippenberg, and Sleebos (2009) have shown that the effects of leader prototypicality on task performance are linked to perceptions of a successful leader.

However, Mumford and Barrett (2013) have suggested that when psychological outcomes are used to measure leadership effectiveness, it is critical that a substantive or empirical justification is provided as to why this outcome would prove to be of value. The authors also note a few limitations in this approach. For example, since psychological outcomes are individual level measures, contagion of psychological outcomes might occur (Johnson 2009).

Leadership effectiveness was proposed to be measured using Perceived Leadership Effectiveness Scale (Hains et al., 1997). Participants were asked to rate their leader on 10 items (see Appendix G for details of all items) on a 7-point scale (7= Strongly agree to 1= Strongly disagree). Higher scores on the scale reflected higher ratings of a leader’s effectiveness. Typical items are “To what extent the leader has qualities for good leadership” and “To what extent the leader matches your image of a good leader”. This scale had a Cronbach’s Alpha of .94 in this study. Leadership
effectiveness was measured individually at the group member level and aggregated to group (leader) level.

4.4.7 Control variables.

There were multiple factors that could potentially influence the distribution of variance in the dependent variable over and above the hypothesised relationships in this study. The basis for choosing such variables was guided by prior research (e.g., Hooper and Martin, 2008; Lau & Murnighan, 2005; Riordan & Shore, 1997), which suggests that demographic diversity is significantly related to subgroup members’ perceptions. Gender, age, and education levels are deemed as typical types of demographic diversity (Pelled, 1996). For example, leader gender could affect follower perceptions of leadership effectiveness (Şahin, Gürbüz, & Şeşen, 2017).

Similarly, demographic diversity could plausibly be a factor in the relationship between LMX differentiation and leadership effectiveness. Previous studies have shown that the quality of relationship between a supervisor and subordinate can be influenced by the degree of similarity in demographic attributes such as sex, age and ethnicity (Tsui & O'Reilly, 1989).

Descriptives of variables for leaders and followers are given at Table 4.4 below. As can be seen, the control variables were chosen at both levels of analysis (i.e., followers at L1 and leaders at L2). Group ethnic dissimilarity was included at follower level (L1) as this formed part of the analysis to answer hypothesis 3. Similarly, as the 51 work groups were nested within three different types of work environment (i.e., government, private industry, and self employed), it was important to test whether there
was a between employment-type variance in the dependent variable, and to control for such variance if it was statistically significant (Atinc, Simmering, & Kroll, 2011).

Four additional factors were included as control variables at leader level (L2); these were leader country of origin, date of arrival in Canada, type of employment in Canada, and group size. Leader country of origin, and date of arrival in Canada were considered relevant factors for analysis of Hypothesis 1 since these variables could conceivably influence an immigrant leader's choice of acculturation strategy (Berry 2003; Sam, 2006). The type of employment (government, private industry, or self employed) could also affect the perceptions of leadership within the group. Group size was another contextual factor that could have a moderating effect on leadership outcomes (Osborn, Hunt, & Jauch, 2002) and was therefore included in the analysis.

4.4.8 Stepwise regression.

In hierarchical models, inclusion of IVs in the model should be ordered with regard to their temporal or logical determined priority. Typically, control variables such as demographic characteristics of participants are entered first as these are not themselves of major interest in the study (Cohen et al., 2003). Accordingly, this process was used throughout analysis in this study.

**Table 4.4 - Summary of Sample Descriptors**

<table>
<thead>
<tr>
<th>Variable</th>
<th>%</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Follower (Level 1) (n=287)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>53%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>%</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td>37.6</td>
<td>13.8</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College degree</td>
<td>23%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>24%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s degree</td>
<td>40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>59%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>18%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian (other than South Asian)</td>
<td>22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Nations</td>
<td>23%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Asian</td>
<td>17%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Leader (Level 2) (n=51)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>66%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>34%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td>50.7</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
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</tr>
<tr>
<td>High school</td>
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<td></td>
</tr>
<tr>
<td>College degree</td>
<td>37%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s degree</td>
<td>22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date of arrival (in Canada)</strong></td>
<td></td>
<td>25 years</td>
<td>10.5</td>
</tr>
<tr>
<td>Pre-1980</td>
<td>16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981- 2000</td>
<td>57%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post 2000</td>
<td>27%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Country of origin (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>%</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>------------------------</td>
<td>----</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td><strong>Type of Organization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Self-employed</td>
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<td></td>
</tr>
<tr>
<td><strong>Group size</strong></td>
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</tr>
<tr>
<td>4 or less</td>
<td>35%</td>
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<td></td>
</tr>
<tr>
<td>5 to 8</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 or more</td>
<td>35%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = Followers = 287, Leaders = 51
L1= Followers (individual level), L2= Leaders (Group level)
CHAPTER 5 - DATA ANALYSIS

5.1 Introduction

This study was intended to investigate the relationships between leader acculturation, follower group identity and leader effectiveness in demographically diverse groups. Additionally, it was aimed to study the moderating effect of leader perceptions of organizational climate being inclusive or otherwise on his/her effectiveness as a leader. The leaders in this study were first generation South Asian immigrants in leadership roles in the Canadian workplace.

The data was analysed using mixed model analysis. This was complemented by using ANOVA and linear regression to reinforce some results. Results of the data analysis are presented in this chapter. An overview of the study and the strategy used for data analysis are presented first. This is followed by exploratory data analysis (EDA). In the next section, hypothesis-based analysis using mixed model analysis, ANOVA, and linear regression is discussed. The chapter concludes with a summary of the findings.

5.2 Analysis strategy

For data that is hierarchical and multilevel in nature, Linear mixed models (LMM)\(^4\) are considered appropriate (West, Welch, & Galecki, 2014; Raudenbush & Bryk, 2002). Such data involves grouping into clusters at the lower level which would lead to inaccuracies in inference with simple regression analysis (Hox, Moerbeek, & Van de

\(^4\) Also known as Hierarchical Linear Models (Raudenbush & Bryk, 2002) and Multilevel Models (Leeuw & Eric, 2008)
Schoot, 2017). In this study, the data was known to be clustered in groups, hence multilevel modelling was chosen as the primary analytic tool for analysis.

Briefly put, a linear mixed model is a parametric linear model for clustered data that quantifies the relationships between a continuous dependent variable and various predictor variables taking into account the group effect (West et al., 2014). In this context, ‘clustering’ implies correlation or dependency among subset of cases within a data set (Cohen, Cohen, West, & Aiken, 2013). In such cases, responses from two randomly selected individuals from the same group will tend to be more alike than individuals selected from different groups.

In clustered data sets, the dependent variable is measured once for each subject (the unit of analysis), and such units of analysis are grouped into, or nested within, clusters of units (West et al., 2014). It is to be noted that a multilevel analysis may not be necessary if inter group differences are not significant (in which case a multiple linear regression analysis or ANCOVA will be appropriate). A verification of inter group differences is, therefore, required as a first step to decide on the type of test to be conducted.

Mixed models may include both fixed effects and random effects. Fixed-effect parameters are associated with one or more continuous or categorical covariates whereas random effects are associated with one or more random factors (Hox et al., 2017). Whereas fixed-effect parameters describe the relationships of the covariates to the dependent variable for an entire population, random effects are specific to clusters or subjects within a population (Cohen et al., 2013; Raudenbush & Bryk, 2002). The main focus of the study was on verifying the hypothesised relationships which related to
fixed effects. Such fixed effects (i.e., regression coefficients) describe the relationships between the dependent variable and the predictor variables for both fixed factors and continuous variables for an entire population of unit of analysis, or for a relatively small number of subpopulations defined by levels of a fixed factor while controlling for group or clustering effects (West et al., 2014).

In addition to using mixed model analysis, Hypotheses 1 and 6, which were specifically related to leaders and were considered unbiased with group effects, were analysed independently using regression and correlation analysis. Additionally, preliminary analysis (including checking the significance of fixed effects) was done in respect of demographic variables at both leader and follower level using ANOVA to assess effects of such variables. SPSS 24 and R softwares were used for analysis.

5.3 Exploratory Data Analysis (EDA)

5.3.1 Data preparation and screening.

The first stage in data analysis is to explore the data and discover initial patterns and to check whether the data meets the criteria necessary for the statistical procedures (Meyers et al., 2013). The tests used in this analysis were parametric, hence it was essential to check the data for assumptions. Tests included checking for a) normal distribution, b) homogeneity of variance, and c) independence (Field 2000).

To assess normality, density and QQ plots were used for visual inspection of the data. This was supplemented with a significance test. Several methods for a normality test have been employed (such as Kolmogorov-Smirnov test, and Shapiro-Wilk’s test) that compare the sample distribution to a normal one in order to ascertain whether data
shows a serious deviation from normality. Shapiro-Wilk’s test is widely recommended for normality tests (Meyers et al., 2013) and was used to assess normality of distribution of data. The results for the outcome variable indicated $W = 0.86793$, (i.e., high correlation) and a $p$-value more than 0.05 which implied that the distribution of the data was not significantly different from a normal distribution. Hence, normality of data was assumed.

To test homogeneity of variance (homoscedasticity), Bartlett’s test is recommended for use when the data is normally distributed (Sharma & Kibria, 2013) though this test is sensitive to a non-normal distribution and is more likely to return a “false positive” in such cases. Levine’s test is considered more robust to departures from normality than Bartlett’s test. However, since the data in this study was normally distributed, Bartlett’s test was used. Results indicated that for all variables, the $p$-value was more than 0.05. The assumption of homogeneity of variance was thus met.

As noted earlier, the data in this study was multilevel and clustered in groups. Since the assumption of independence (which is needed for multiple linear regression) was not met, mixed method analysis was used.

5.3.2 Missing values.

Missing values can create gaps in the data that can influence proper data analysis. Patterns of missing data (typical configuration of missing values), and mechanisms of missingness (relationships between the variables in the study and the missing values) are two interrelated concepts that cover the range of issues pertaining to missing values (Enders, 2010; Meyers et al., 2013). However, these issues were not
relevant to this study as the percentage of missing values in the data was very minimal (<1%). To avoid loss of data, these missing values were replaced with variable means as advised by many scholars (e.g., Schlomer, Bauman, & Card, 2010).

5.4 Hypotheses testing

In this section, analysis done on each of the hypotheses is presented using ANOVA and linear regression. This analysis was done as a precursor to the mixed model analysis (discussed subsequently). Such analysis of variance and multiple regression analysis provided inputs that added to a fuller understanding of the hypothesised relationships. Before discussing individual hypotheses, descriptive statistics (means, standard deviations and correlations) of variables are presented in Table 5.1

**Table 5.1 – Descriptive statistics**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
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<tbody>
<tr>
<td>Mean</td>
<td>5.96</td>
<td>5.71</td>
<td>5.94</td>
<td>5.93</td>
<td>4.14</td>
<td>5.17</td>
<td>5.40</td>
<td>5.62</td>
</tr>
<tr>
<td>SD</td>
<td>0.70</td>
<td>0.88</td>
<td>0.71</td>
<td>0.89</td>
<td>0.48</td>
<td>1.1</td>
<td>0.64</td>
<td>0.84</td>
</tr>
<tr>
<td>1. Leadership effectiveness</td>
<td>.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. Leader group prototypicality</td>
<td>.76</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Leader stereotypicality</td>
<td>.49</td>
<td>.2</td>
<td>.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. LMX</td>
<td>.89</td>
<td>.57</td>
<td>.41</td>
<td>.94</td>
<td></td>
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<tr>
<td>5. L destination nation accultn</td>
<td>.04</td>
<td>.06</td>
<td>-.04</td>
<td>-.02</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. L country of origin attachment</td>
<td>.06</td>
<td>.06</td>
<td>.17</td>
<td>.01</td>
<td>-.02</td>
<td>.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Org diversity</td>
<td>.04</td>
<td>.07</td>
<td>.03</td>
<td>.02</td>
<td>.4</td>
<td>.1</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>8. Org climate</td>
<td>.02</td>
<td>.03</td>
<td>-.04</td>
<td>.01</td>
<td>.56</td>
<td>-.06</td>
<td>.54</td>
<td>.90</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**
*Correlation is significant at the 0.05 level (2-tailed).
Note: Entries in italics on the diagonal indicate Cronbach alpha values
5.4.1 Hypothesis 1 - Leader acculturation.

Hypotheses 1 is restated below:

\[ H1: \text{Leadership effectiveness will be related positively to acculturation states in accord with degrees of adaptation to destination nation culture.} \]

In the first step of analysis, the leaders were categorized based on the four states of acculturation (assimilated, integrated, marginalized, or separated) as defined earlier in Section 4.4. The results showed that out of 51 leaders, four (8\%) were found ‘assimilated’ while 47 (92\%) were found ‘integrated’. None of the leaders were found in categories termed ‘marginalized’ or ‘separated’. The correlation between strategies of assimilation and/or integration, as chosen by the leaders, and their ratings on leadership effectiveness, was analysed using Point-Biserial method and was found to be \( r = 0.38 \).

Additional analysis was conducted to discern whether the difference in follower ratings of leadership effectiveness between those leaders who were assimilated vs. those who were integrated, was significant. A significant difference would imply usefulness of one of these acculturation strategies over the other in terms of eventual success as a leader in the workplace. The results showed a difference between mean leadership effectiveness of those who were ‘assimilated’ (5.70) as compared to those who were ‘integrated’ (5.97). A t-test was conducted between the two groups: the difference was not significant (\( p = .397 \)).

Hypothesis 1 was thus supported. However, the positive relationship between leader effectiveness and acculturation was based solely on two of the four states of acculturation (assimilation/integration). Since none of the leaders in the sample were
found as ‘marginalized’ or ‘separated’, the range was restricted to two of the four categories of acculturation.

5.4.2 Hypothesis 2 - LMX differentiation.

H2: LMX differentiation will be negatively associated with perceptions of leadership effectiveness.

LMX differentiation has been defined as the degree of variability in LMX relationships within work groups (Henderson et al., 2009; Hooper & Martin, 2008). In other words, higher the range of LMX quality within a group, greater will be the level of LMX differentiation (Liden et al., 2006). Measurement of LMX differentiation involved measuring group level variance on ratings of leadership effectiveness within each of the 51 groups and correlating it with group level aggregated perceptions of leadership effectiveness. For this purpose, two new variables (i.e., group level means of leadership effectiveness, and group level variance, of leadership effectiveness) were created.

To test this hypothesis, a hierarchical linear regression analysis was conducted. To control for demographic variables, which could potentially influence follower perceptions of leadership effectiveness, follower level (L1) variables were entered in the model in the first step as per current practice (e.g., see Stewart & Johnson, 2009). This was followed by leader level (L2) demographic variables which were entered in the model in step 2. In the final step, LMX differentiation, which was the variable of interest, was entered in the model. Results of this analysis are shown in Table 5.2 below:
Table 5.2 - Regression of LMX variance on leadership effectiveness

<table>
<thead>
<tr>
<th>Variables</th>
<th>Step 1</th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th>Step 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>SE</td>
<td>b</td>
<td>SE</td>
<td>b</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Follower sex: Male</td>
<td>-0.032</td>
<td>0.043</td>
<td>-0.053</td>
<td>0.042</td>
<td>-0.044</td>
<td>0.028</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Follower age</td>
<td>-0.011</td>
<td>0.053</td>
<td>-0.009</td>
<td>0.052</td>
<td>0.010</td>
<td>0.034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Follower: Caucasian</td>
<td>0.027</td>
<td>0.068</td>
<td>-0.003</td>
<td>0.068</td>
<td>-0.005</td>
<td>0.045</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Follower: First Nations</td>
<td>0.022</td>
<td>0.063</td>
<td>0.023</td>
<td>0.063</td>
<td>0.012</td>
<td>0.042</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Follower: Others</td>
<td>-0.020</td>
<td>0.065</td>
<td>-0.033</td>
<td>0.065</td>
<td>-0.013</td>
<td>0.043</td>
<td></td>
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</tr>
<tr>
<td>7 Follower: South Asian</td>
<td>-0.064</td>
<td>0.069</td>
<td>-0.043</td>
<td>0.068</td>
<td>0.064</td>
<td>0.045</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Follower edn: College degree</td>
<td>-0.093</td>
<td>0.062</td>
<td>-0.102</td>
<td>0.061</td>
<td>-0.071</td>
<td>0.041</td>
<td></td>
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</tr>
<tr>
<td>9 Follower edn: Doctoral degree</td>
<td>0.070</td>
<td>0.064</td>
<td>-0.095</td>
<td>0.063</td>
<td>-0.037</td>
<td>0.042</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Follower edn: High School</td>
<td>-0.042</td>
<td>0.065</td>
<td>-0.045</td>
<td>0.065</td>
<td>-0.040</td>
<td>0.043</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Follower edn: Master's degree</td>
<td>-0.078</td>
<td>0.071</td>
<td>-0.077</td>
<td>0.074</td>
<td>-0.085</td>
<td>0.049</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Leader: Male</td>
<td>-0.005</td>
<td>0.051</td>
<td>0.119</td>
<td>0.034</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Leader age</td>
<td>-0.002</td>
<td>0.003</td>
<td>0.001</td>
<td>0.034</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Leader education: College degree</td>
<td>-0.025</td>
<td>0.061</td>
<td>0.137</td>
<td>0.041</td>
<td></td>
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</tr>
<tr>
<td>15 Leader education: Doctoral degree</td>
<td>-0.347</td>
<td>0.099</td>
<td>-0.306</td>
<td>0.065</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Leader education: Master's degree</td>
<td>-0.194</td>
<td>0.066</td>
<td>-0.118</td>
<td>0.044</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Leader country Others</td>
<td>0.290</td>
<td>0.115</td>
<td>0.278</td>
<td>0.076</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18 Leader country Sri Lanka</td>
<td>-0.087</td>
<td>0.119</td>
<td>0.021</td>
<td>0.079</td>
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</tr>
<tr>
<td>19 Leader work: Industry</td>
<td>0.051</td>
<td>0.058</td>
<td>-0.080</td>
<td>0.039</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>20 Leader work: Self-employed</td>
<td>0.083</td>
<td>0.060</td>
<td>-0.043</td>
<td>0.040</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>21 Leader team size: 5 to 8</td>
<td>0.068</td>
<td>0.058</td>
<td>0.033</td>
<td>0.038</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Leader team size: 9 or more</td>
<td>0.051</td>
<td>0.067</td>
<td>0.078</td>
<td>0.044</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Group variance (SD)</td>
<td></td>
<td></td>
<td>-0.885</td>
<td>0.048</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.013</td>
<td></td>
<td>0.044</td>
<td></td>
<td>0.584</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔR²</td>
<td></td>
<td>0.03</td>
<td></td>
<td>0.55</td>
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</tbody>
</table>

Significance codes: ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05

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As can be seen, with only follower level (L1) demographic variables entered in Model 1, none of the variables were significant (F = 0.65 df 11, 275, p > .05). In Model 2, leader education (at masters and doctoral degrees), and leader country of origin (at category- ‘Others’ level) were found significant with overall model being significant (F=1.61 df 11,275, p < .05). The change in $R^2$ was marginal ($\Delta R^2 = 0.03$). In Model 3, LMX differentiation was introduced in the model and was found to have substantially improved the model fit (F=18.48, df 23, 263, p < .05). The change in $R^2$ was significant ($\Delta R^2 = 0.55$). The relationship between LMX differentiation and leadership effectiveness was negative as hypothesized. The results thus supported Hypothesis 2. The implications of such a strong negative relationship are discussed in the following chapter.

5.4.3 Hypothesis 3 - Group ethnic diversity.

H3. Group overall ethnic and cultural similarity to the leader will be positively related to ratings of leadership effectiveness.

A summary of values obtained using the modified Blau$_N$ Index is given in table 5.3 below (original Blau Index values are shown in parentheses for comparison only).

Table 5.3 Summary of values obtained on Blau$_N$ Index (D)

<table>
<thead>
<tr>
<th>Blau$_N$, (Blau)</th>
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</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>SD</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
</tbody>
</table>
The coding schema has been discussed earlier in Chapter 4. The 51 groups in the study were found to be distributed as follows: 18 groups scored as “High” (>0.57); 23 groups scored “Moderate” (0.43 to 0.57); and 10 groups scored “Low” (<0.43). ‘High’ diversity groups had a mean=6.02 (SD=.27), ‘Moderate’ diversity groups had a mean=5.93 (SD=.36); and the ‘Low’ diversity groups had a mean= 5.87 (SD=.47).

There were two aspects that were significant concerning these results. The first point concerned the within-group variance on perceptions of leadership effectiveness in the three group types (i.e., ‘High’ diversity groups, ‘Moderate’ diversity groups, and ‘Low’ diversity groups). The differences between the three groups in terms of variance on ratings of leadership effectiveness showed a pattern: the most diversified (i.e., heterogenous) groups had lowest within group variance (SD = .27); the least diversified (i.e., homogenous) groups had highest within group variance (SD = .47); and the moderately diverse groups had group variance in between the two (i.e., between ‘High’ and ‘Low’ diversity groups: SD = .36).

A one way between subject analysis of variance test was conducted to assess whether there were differences between the above mentioned three categories of groups with respect to perceptions about leadership effectiveness. This result was non-significant (F = .634, p = .535) indicating that overall, the three subgroups (‘High’, ‘Medium’ and ‘Low’) did not differ significantly from each other. Furthermore, R² = 0.03 indicated a weak effect implying that group demographic diversity as a predictor did not have a significant relationship with perceptions of leadership effectiveness. Hypothesis 3 was thus not supported.
5.4.4 Hypothesis 4 - Leader group prototypicality.

H4: There will be a positive relationship between leader group prototypicality and leadership effectiveness.

As a preliminary step, follower group prototypicality was established. This step was necessary because only when followers perceive themselves to be group prototypical can they consider a leader being either group prototypical or not. Follower self-perceptions about group identification and group belonging across all groups were high (mean= 5.87 and 5.69 respectively). These results indicated that, on average, all followers felt that they were group prototypical.

For the main analysis, hierarchical linear regression (Cohen et al., 2013) was conducted. Since follower perceptions of a leader can be influenced by follower demographic factors, it was necessary to control for such effects. Demographic variables at the follower level (L1) i.e., follower age, follower sex, follower education, and follower ethnicity, were entered in the model in first step. Similarly, since leader level (L2) demographic variables were likely to influence follower perceptions of a leader’s effectiveness, such variables were entered in the model in step 2. In the final step, leader group prototypicality, which was the variable of interest, was entered in the model. Results are presented in Table 5.5 below.

Table 5.5 – Regression of Leader prototypicality on leadership effectiveness

<table>
<thead>
<tr>
<th>Variables</th>
<th>Step 1</th>
<th></th>
<th>Step 2</th>
<th></th>
<th>Step 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DV=Leadership effectiveness</td>
<td>b</td>
<td>SE</td>
<td>b</td>
<td>SE</td>
<td>b</td>
<td>SE</td>
</tr>
<tr>
<td>1 Follower sex: Male</td>
<td>-0.129</td>
<td>0.083</td>
<td>-0.158</td>
<td>0.086</td>
<td>-0.059</td>
<td>0.055</td>
</tr>
</tbody>
</table>
### DV = Leadership effectiveness

<table>
<thead>
<tr>
<th>Variables</th>
<th>Step 1</th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th>Step 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Follower age</td>
<td>-0.001</td>
<td>0.103</td>
<td>-0.001</td>
<td>0.105</td>
<td>-0.027</td>
<td>0.068</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Follower: Caucasian</td>
<td>-0.108</td>
<td>0.132</td>
<td>-0.145</td>
<td>0.137</td>
<td>-0.106</td>
<td>0.088</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Follower: First Nations</td>
<td>-0.224</td>
<td>0.123</td>
<td>-0.236</td>
<td>0.128</td>
<td>-0.122</td>
<td>0.082</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Follower: Others</td>
<td>-0.190</td>
<td>0.127</td>
<td>-0.214</td>
<td>0.131</td>
<td>-0.016</td>
<td>0.085</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Follower: South Asian</td>
<td>-0.260</td>
<td>0.135</td>
<td>-0.252</td>
<td>0.138</td>
<td>-0.143</td>
<td>0.089</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Follower education: College degree</td>
<td>-0.175</td>
<td>0.121</td>
<td>-0.176</td>
<td>0.124</td>
<td>-0.134</td>
<td>0.080</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Follower education: Doctoral degree</td>
<td>-0.090</td>
<td>0.124</td>
<td>-0.095</td>
<td>0.128</td>
<td>-0.148</td>
<td>0.082</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Follower education: High School</td>
<td>-0.121</td>
<td>0.127</td>
<td>-0.127</td>
<td>0.132</td>
<td>-0.004</td>
<td>0.085</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Follower education: Master's degree</td>
<td>0.015</td>
<td>0.138</td>
<td>0.051</td>
<td>0.149</td>
<td>-0.041</td>
<td>0.096</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Leader: Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.003</td>
<td>0.103</td>
<td>-0.061</td>
<td>0.066</td>
<td></td>
</tr>
<tr>
<td>13 Leader age</td>
<td>-0.002</td>
<td>0.005</td>
<td></td>
<td></td>
<td>-0.008</td>
<td>0.003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Leader education: College degree</td>
<td>0.018</td>
<td>0.123</td>
<td></td>
<td></td>
<td>-0.069</td>
<td>0.079</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Leader education: Doctoral degree</td>
<td>-0.243</td>
<td>0.200</td>
<td></td>
<td></td>
<td>-0.215</td>
<td>0.129</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Leader education: Master's degree</td>
<td>-0.220</td>
<td>0.134</td>
<td></td>
<td></td>
<td>-0.179</td>
<td>0.086</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Leader country Others</td>
<td>0.151</td>
<td>0.232</td>
<td></td>
<td></td>
<td>0.003</td>
<td>0.150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Leader country Sri Lanka</td>
<td>-0.013</td>
<td>0.241</td>
<td></td>
<td></td>
<td>-0.066</td>
<td>0.155</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Leader work: Industry</td>
<td>0.075</td>
<td>0.117</td>
<td></td>
<td></td>
<td>0.085</td>
<td>0.075</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Leader work: Self-employed</td>
<td>0.095</td>
<td>0.121</td>
<td></td>
<td></td>
<td>0.073</td>
<td>0.078</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 Leader team size: 5 to 8</td>
<td>0.046</td>
<td>0.117</td>
<td></td>
<td></td>
<td>0.049</td>
<td>0.075</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Leader team size: 9 or more</td>
<td>0.032</td>
<td>0.135</td>
<td></td>
<td></td>
<td>0.002</td>
<td>0.087</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Leader group prototypicality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.533</td>
<td>0.027</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.05</td>
<td>0.08</td>
<td>0.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0.03</td>
<td>0.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signif. codes: ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05

As can be seen, the demographic variables at both follower (L1) and leader (L2) levels accounted for marginal variance in the dependent variable (Model 1 $R^2 = .05$;
Model 2 $R^2 = .08$). Leader group prototypicality, as hypothesized, explained a significant proportion of variance in leadership effectiveness. $(R^2 = 0.62, p < .001; \Delta R^2 = .54)$. The relationship was positive. Hypothesis 4 was thus supported.

5.4.5 Hypothesis 5 - Leader stereotypicality.

H5: There will be a positive relationship between leader stereotypicality and leadership effectiveness.

Leader stereotypicality has been described as a leader being representative of qualities that are associated with the behavior of an effective leader (Giessner & van Knippenberg, 2009; Hogg, 2001). A hierarchical linear regression analysis (Cohen et al., 2013) was conducted to account for variance at both follower (L1) and leader (L2) levels. In step 1, follower (L1) demographic variables were entered in the model. Since follower perceptions of a leader could potentially be influenced by demographic factors, it was necessary to control for such effects. Similarly, since leader (L2) demographic variables were likely to influence follower perceptions of a leader’s effectiveness, such variables were entered in the model in step 2. In the final step, Leader stereotypicality, which was the variable of interest, was entered in the model. Results are presented in Table 5.6 below:

| Table 5.6 – Regression of Leader stereotypicality on leadership effectiveness |
|------------------|------------|------------------|------------------|------------------|
|                  | Variables  | Step 1 b        | SE               | Step 2 b        | SE               | Step 3 b        | SE               |
| DV=Leadership   | Follower   |                 |                  |                 |                  |                 |                  |
| effectiveness    | sex: Male  | -0.129          | 0.083            | -0.158          | 0.086            | -0.153          | 0.075            |
|                  | age        | -0.001          | 0.103            | -0.001          | 0.105            | 0.023           | 0.092            |
|                  | Caucasian  | -0.108          | 0.132            | -0.145          | 0.137            | -0.106          | 0.12             |
As can be seen, the demographic variables at both follower (L1) and leader (L2) levels did not account for any significant variance in the dependent variable ($R^2$ model 1 = .05; model 2 = .07). Leader group stereotypicality, as hypothesized, explained a
significant proportion of variance in leadership effectiveness. \((R^2 = 0.30, p < .001; \Delta R^2 = .23)\). The relationship was positive. Hypothesis 5 was thus supported.

5.4.6 Hypothesis 6 - Organizational climate

H6. An inclusive organizational climate will positively moderate the relationship between LMX and leadership effectiveness.

To determine the moderating effect of organizational climate on the relationship between LMX and leadership effectiveness, a hierarchical linear regression analysis was done in the following steps (Cohen et al., 2013; Miles & Shevlin, 2001).

First, an interaction term was created by multiplying the combined organizational climate variable with LMX. Thereafter, hierarchical regression analysis was done in three steps. In step 1, control variables at leader level (L2) were entered in the model since such demographic variables could potentially affect leader perceptions of organizational climate. In step 2, the main effect predictors (organizational climate and LMX) were entered into the regression analysis. Finally, in step 3, the interaction term (organizational climate x LMX) was entered into the model. Results of this analysis are shown in Table 5.7 below.

Table 5.7 - Regression of inclusive organizational climate on Leadership Effectiveness

<table>
<thead>
<tr>
<th>Variables</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>SE</td>
<td>b</td>
</tr>
<tr>
<td>1 Leader: Male</td>
<td>-0.003</td>
<td>0.200</td>
<td>0.104*</td>
</tr>
<tr>
<td>2 Leader age (Gen X)</td>
<td>-0.020</td>
<td>0.137</td>
<td>0.018</td>
</tr>
<tr>
<td>3 Leader age (Gen Y)</td>
<td>0.044</td>
<td>0.229</td>
<td>0.187*</td>
</tr>
<tr>
<td>4 Leader edn: Bachelor’s degree</td>
<td>-0.143</td>
<td>0.175</td>
<td>0.032</td>
</tr>
<tr>
<td></td>
<td>Leader education: Master’s degree</td>
<td>Leader education: Doctoral degree</td>
<td>Leader: country Others</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------</td>
<td>----------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>5</td>
<td>-0.027</td>
<td>0.141</td>
<td>-0.032</td>
</tr>
<tr>
<td>6</td>
<td>0.050</td>
<td>0.124</td>
<td>-0.003</td>
</tr>
<tr>
<td>7</td>
<td>0.009</td>
<td>0.218</td>
<td>0.023</td>
</tr>
<tr>
<td>8</td>
<td>0.103</td>
<td>0.003</td>
<td>0.050</td>
</tr>
<tr>
<td>9</td>
<td>0.163</td>
<td>0.146</td>
<td>0.036</td>
</tr>
<tr>
<td>10</td>
<td>0.069</td>
<td>0.140</td>
<td>0.066</td>
</tr>
<tr>
<td>11</td>
<td>0.079</td>
<td>0.162</td>
<td>0.055</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signif. codes: ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05

The results of the hierarchical linear regressions showed that in model 1, none of the leader (L2) demographic variables were significant. The model itself was non-significant (F= 0.31 on df 11,39, p >.05). In model 2, the predictor variable (LMX) and the moderator variable (leader perception of organizational climate) were introduced. The results indicated that LMX was highly significant (p <.001) accounting for nearly 81% of variance in the model. Additionally, leader sex (Male) and leader age (Gen Y) were significant (p-values 0.024 and 0.028 respectively). However, organizational climate was not found significant. Model 2 was overall significant (F=23.8 on df 13,37, p < .001) but it was clearly so due to the effects of LMX and not due to organizational climate.

In the final model (Model 3), the interaction term (LMX x organizational climate) was introduced. LMX continued to remain highly significant, accounting for nearly 86% of the variance in the model (p<.001). Similarly, leader sex (male) and leader age(Gen Y) were significant as in model 2. Organizational climate had a weak relationship accounting for 8% of the variance in Model 2 and was non-significant. The interaction
term was also non-significant and had a mildly negative relationship (b = 10.01). Model 3 was significant overall (F = 21.5, df 14, 36, p < .001) but once again this was so due to the strong relationship between LMX and leadership effectiveness. Since organizational climate was not found significant, Hypothesis 6 was not supported. The implications of these results are discussed in the following chapter.

5.4.7 Summary of regression analysis

The results indicate that while hypotheses 1, 2, 4, and 5 were supported, hypotheses 3 and 6 was not supported. This provided the basis for the next stage of analysis which was done to understand the effects of clustering in the data. The following section describes analysis steps and results using mixed model analysis.

5.5 Mixed Model Analysis

In mixed model analysis, the primary goal of model selection is to choose the simplest model that provides the best fit to the observed data (Hox et al., 2017). This particularly applies to the fixed and random effects to be included in the model since such considerations have an impact on both the estimated marginal means and the estimated marginal variance-covariance matrix. Two broad strategies are available for model building (West et al., 2014).

The ‘top-down’ approach specifies four steps: starting with a well specified mean structure for the model; introducing a structure for the random effects; selecting a covariance structure for the residuals; and finally reducing the model to determine what fixed effects parameters are needed in the model. Conversely, the ‘step-up’ approach starts with a simple, ‘unconditional’ level 1 (L1) model containing only a fixed effect (the
overall intercept), random effects associated with the intercept for groups and residuals, and then builds the model by adding fixed effects of covariates measured at the various levels. In the analysis approach used in this study, ‘step-up’ modelling strategy was used.

Similarly, several competing models are possible for carrying out analysis when using mixed model analysis; it is important to select the model that is parsimonious in terms of the number of parameters used while at the same time being the ‘best’ at explaining variation in the dependent variable (Raudenbush & Bryk, 2002; West et.al., 2014).

An important consideration in this process is to establish whether there is a ‘nesting’ relationship between competing models. Model A is considered to be nested in Model B if Model A is a special case of Model B i.e., parameter space of Model A is a subspace of that of Model B. In the following analysis, ‘reference models’ denote models that encompass both the null and alternative hypotheses whereas the ‘nested’ model indicates a model with only the null hypothesis.

The model building process, analysis and results at each stage are explained in the following section. The section is concluded with a summary of results as obtained by the mixed model analysis.

5.5.1 Model building.

Building a multilevel model is a multistep process (Meyers et al., 2013). These steps are briefly explained below in the context of this study.
**Step 1: Fit initial “unconditional” model (Model 1).**

This initial model does not include fixed effects associated with any covariates, hence it is referred to as an “unconditional” model in the multilevel literature\(^5\), i.e., it is not conditioned on any fixed effects other than the intercept, although it is still conditional on the random effects (West et al., 2014). The model includes a fixed overall intercept, and random effects associated with the intercepts for groups. In other words, such a model assesses the amount of variance of the dependent variable that is associated with grouping effects at leader level (L2). It is highlighted here that in this study, the focus was only on fixed effects; random affects were not analysed.

After fitting Model 1, estimates of the initial variance components (i.e., the variances of the random effects at the group level, and the residual variance at the follower level) are obtained. The variance component estimates from Model 1 are then used to estimate intraclass correlation coefficients (ICCs) of dependent variable (i.e., leadership effectiveness) responses at the group level. ICC measures the degree of clustering i.e., the degree of correlation among a set of observations and estimates the amount of dependent variable variance that can be explained by clustering of the cases (i.e., by the leader level [L2] variables). Put differently, ICC measures whether scores from various groups are different from one another than scores within the same group (Raudenbush & Bryk, 2002).

\(^5\) Such a model is known as a variance components model in the classical ANOVA context
ICC ranges from zero (complete independence of observations) to 1 (complete dependence). Thus, an ICC of zero indicates that there is no level group (L2) effect on the dependent variable which implies that a multilevel procedure is not warranted (as the assumption of independence would have been met; Meyers et al., 2013). In this study, ICC describing the amount of leadership effectiveness score variance, that explained the differences among the 51 groups in the study, was found significant.

This unconditional model served as a baseline model that was used to evaluate subsequent models. Once the clustering effect was established, this was used as a covariate in the following analysis. This allowed for statistically controlling for L2 group effects and evaluate the contribution of predictors in the model.

**Step 2: Build Level 2 Model by adding L2 covariates.**

This involves adding fixed effects associated with the covariates measured at the group level (L2) to Model 1 so as to create next iteration of the model (i.e., Model 2) and decide whether to retain the effects of the Level 2 covariates in the model.

Fixed effects at L2 (i.e., leader acculturation and leader demographic variables) were sequentially added to Model 1 to obtain Models at the L2 level. This sequential process allowed to tease out any significant results related to either of the L2 covariates (leader acculturation and organizational climate), or the L2 control variables (leader level demographic factors). At this point, it was assessed whether the L2 component of variance (i.e., the variance of the random group effects) were reduced once effects of L2 covariates were included in the model. Using individual t-tests for each hypothesis, Hypotheses 1 and 6 (since these were the only L2 level hypotheses) were tested to
determine whether fixed effects associated with leader acculturation and leader perceptions of organizational climate should be kept in Model 2.

A likelihood ratio test (LRT) for the fixed effects of all L2 covariates was then conducted. In a LRT, values of likelihood functions for two models are compared on a given hypothesis. If the LRT statistic is sufficiently large, then there is evidence against the null hypothesis model and in favor of the reference model. Based on the results of LRT and t-tests, it was decided that fixed effects associated with these Level 2 covariates should not be retained. Accordingly, Model 1 (unconditional model) was retained as preferred model.

**Step 3: Add L1 Covariates.**

In this step, initially fixed effects associated with the three-follower level (L1) continuous covariates (i.e., follower prototypicality, follower stereotypicality, and follower LMX) were added to Model 1 to obtain Model 3A. A LRT test was done to decide whether fixed effects associated with L1 continuous covariates should be added to Model 1. Given the significant contribution of these variables, it was decided to add these fixed effects and choose Model 3A as our preferred model at this stage of the analysis.

**Step 4: Add Follower level (L1) Categorical variables.**

In this step, L1 categorical variables were added to Model 3A. A LRT test was done to decide whether fixed effects associated with L1 covariates should be added to Model 3A. The resulting model showed a poorer fit. Hence, it was decided not to include the L1 covariates. Model 3A was retained as our preferred (and final) model.
5.5.2. Results of mixed model analysis

5.5.2.1. Model 1 - The Unconditional (Null) Model.

The clustering variable in our model was the group. The unconditional model was needed to assess variance, if any, that could be attributed to the group effect. This model specified that any differences among the groups will be statistically controlled in the multi-level analysis. The output of this model presented three parameters: (a) the fixed effects estimate the intercept which represents the grand mean, (b) the random effects represent the degree to which the intercepts vary among different groups, and (c) the residual is the unexplained variance in the outcome variable.

Analysis of Model 1

The LRT for this model was 607.315. This index reflects how well the model fits the data and is used to compare one model to a different model that seeks to explain the same data. During such comparison, smaller values are reflective of a better fit (West et al., 2014). This data has no interpretation at this stage since it only provided the base index to which the following models will be compared.

The only estimate of fixed effects in this model is the intercept. The value of 5.956 was the estimated population grand mean for the dependent variable (leadership effectiveness) which was within the margin of error of the grand mean of 5.958. Interpreted within the scales for the measures of explanatory variables and the dependent variable, a value approximating six indicated that leader effectiveness was rated as high when considered across all groups in the population.
The estimate of covariance of parameters reflects the random effect of group in the model. The intercept represented the amount of variance explained by the presence of group which was .050. The residual represented the unexplained variance of .440, which implied that a substantial amount of variance was still to be explained in the model.

The ICC represents the percentage of variance explained by the clustering variable group and is computed as intercept estimate / total estimate. The resulting covariance (.05/ .49 = 0.10) indicated that group accounted for approximately 10% of the variance in leadership effectiveness. This implied that scores on the dependent variable were clustered within groups (i.e. members from the same group may report similar scores) to a sufficient extent such that the observations violate the assumption of independence. The L2 clustering effect lead to retention of group variable as a covariate. It should be mentioned that approximately 90% of the variance was still to be explained in the model at this stage.

5.5.2.2 Model 2A.

In this model, L2 predictors leader perceptions of organizational climate and leader acculturation were introduced after being grand mean centered. The output of this model presented four parameters: (a) two for fixed effects, and one each for the random effects of group and the residuals. The -2-restricted log likelihood was 610.8 which showed an increase when compared to this index value of 607.315 in Model 1. This indicated a poorer fit of the model when these two predictors were introduced as covariates. Table. 5.8 shows the estimates and SE of the model. As can be seen, both
leader acculturation and organizational climate were not significant (b = -0.177, p > 0.005 and b = 0.015, p > 0.005 respectively).

A comparison of the models (Model 1 vs. Model 2A) resulted in AIC values of 609.17 and 612.67 respectively, indicating that Model 1 was more parsimonious. Since leader acculturation and organizational climate added no value to the null model, these covariates were omitted from further models.

**Table 5.8 – Fixed effects of L2 covariates (Model 2A)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>SE</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>6.043</td>
<td>0.559</td>
<td>10.797</td>
</tr>
<tr>
<td>Leader acculturation - Integrate</td>
<td>-0.177</td>
<td>0.284</td>
<td>-0.624</td>
</tr>
<tr>
<td>Organizational climate</td>
<td>0.015</td>
<td>0.080</td>
<td>0.189</td>
</tr>
</tbody>
</table>

**5.5.2.3 Model 2B.**

In this model, L2 factor variables (leader demographic variables) were introduced to control for their effects. Tests of fixed effects indicated that none of the L2 factor variables were significant. A comparison of the models (Model 1 vs. Model 2B) resulted in AIC values of 609.17 and 625.12 respectively, indicating that Model 1 (Null model) was more parsimonious. Since leader demographic variables added no value to the null model, these covariates were omitted from further models. Table 5.9 shows the estimates and SE of the model.

**Table 5.9 – Fixed effects of L2 demographic variables (Model 2B)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>SE</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>6.079</td>
<td>0.393</td>
<td>15.471</td>
</tr>
<tr>
<td>Leader sex - Male</td>
<td>0.007</td>
<td>0.126</td>
<td>0.058</td>
</tr>
<tr>
<td>Variable</td>
<td>b</td>
<td>SE</td>
<td>t</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>Leader age</td>
<td>-0.009</td>
<td>0.009</td>
<td>-0.964</td>
</tr>
<tr>
<td>Leader edn college degree</td>
<td>-0.062</td>
<td>0.154</td>
<td>-0.401</td>
</tr>
<tr>
<td>Leader edn doctoral degree</td>
<td>-0.277</td>
<td>0.256</td>
<td>-1.080</td>
</tr>
<tr>
<td>Leader edn master’s degree</td>
<td>-0.158</td>
<td>0.164</td>
<td>-0.961</td>
</tr>
<tr>
<td>Leader arrive</td>
<td>0.013</td>
<td>0.009</td>
<td>1.561</td>
</tr>
<tr>
<td>Leader country Others</td>
<td>0.192</td>
<td>0.291</td>
<td>0.659</td>
</tr>
<tr>
<td>Leader country Sri Lanka</td>
<td>0.006</td>
<td>0.310</td>
<td>0.018</td>
</tr>
<tr>
<td>Leader team size &quot;5-8&quot;</td>
<td>0.002</td>
<td>0.150</td>
<td>0.016</td>
</tr>
<tr>
<td>Leader team size &quot;9 or more&quot;</td>
<td>-0.040</td>
<td>0.183</td>
<td>-0.220</td>
</tr>
<tr>
<td>Leader work Industry</td>
<td>0.106</td>
<td>0.150</td>
<td>0.710</td>
</tr>
<tr>
<td>Leader work Self-employed</td>
<td>0.103</td>
<td>0.149</td>
<td>0.691</td>
</tr>
</tbody>
</table>

### 5.5.2.4 Model 3A.

Having assessed the effects of leader level (L2) variables so far, L1 (follower level) variables were next introduced to the Null model. Specifically, three L1 covariates (follower perceptions of LMX, leader group prototypicality, and leader stereotypicality) were added to Model 1.

The output of this model presents six parameters: four for fixed effects, and one each for the random effects (group) and residuals. Tests of fixed effects indicated that all three covariates were significantly correlated with the outcome variable accounting for nearly 90% of the variance in the model between them. A comparison of the two models (Model 1 vs. Model 3A) gave AIC values of 609.15 and -10.87 respectively implying a significant improvement in model fit. The differences between the models
were statistically significant ($p < .001$). Tests of fixed effects are shown in table 5.10 below.

**Table 5.10** – Fixed effects of L1 covariates (Model 3A)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>0.624</td>
<td>0.128</td>
<td>4.866</td>
</tr>
<tr>
<td>Leader group prototypicality</td>
<td>-0.287</td>
<td>0.189</td>
<td>15.421</td>
</tr>
<tr>
<td>Leader stereotypicality</td>
<td>0.135</td>
<td>0.021</td>
<td>6.515</td>
</tr>
<tr>
<td>LMX</td>
<td>0.489</td>
<td>0.019</td>
<td>25.675</td>
</tr>
</tbody>
</table>

**5.5.2.5 Model 3B.**

The next model at L1 level was fitted with just the four L1 factors (i.e., demographic variables at follower level added to the null model). This was done to assess the effect, if any, of the follower factors on the outcome variable. The output of this model presented seven parameters: five for fixed effects, and one each for the random effects (group) and residuals. The estimate of fixed effects indicated that none of the four factors were significant at any level. A comparison of the two models (Model 1 vs. Model 3B) gave AIC values of 609 and 618.6 respectively implying that addition of L1 factors to the model generated a poorer fit. Model 3B was non-significant. Tests of fixed effects are shown in table 5.11 below.

**Table 5.11** – Fixed effects of L1 covariates (Model 3B)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$b$</th>
<th>$SE$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>6.266</td>
<td>0.144</td>
<td>43.510</td>
</tr>
<tr>
<td>Follower sex male</td>
<td>-0.131</td>
<td>0.083</td>
<td>-1.580</td>
</tr>
<tr>
<td>Follower age</td>
<td>0.000</td>
<td>0.002</td>
<td>-0.230</td>
</tr>
<tr>
<td>Follower edn high school</td>
<td>-0.128</td>
<td>0.127</td>
<td>-1.010</td>
</tr>
</tbody>
</table>
In the final model, all L1 variables (both factors and the covariates) were put together in the model to find out if there was a change in significance levels of any of the follower level (L1) factors once these were assessed along with L1 covariates. The resulting estimates of fixed effects indicated that the L1 factors continued to be non-significant. The three covariates were, however, found to remain significant (p < .001). A comparison of the two models (Model 3A vs. Model 3B) resulted in AIC values of –32.8 and –26.5 respectively implying that addition of L1 factors to Model 3A generated a poorer fit. Tests of fixed effects are shown in table 5.12 below. Model 3A, with the three L1 covariates (i.e., leader group prototypicality, leader stereotypicality, and LMX) was thus found to be the most parsimonious and the best fitting model.

**Table 5.12 – Fixed effects of L1 covariates (Model 3C)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>SE</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>0.695</td>
<td>0.140</td>
<td>4.972</td>
</tr>
<tr>
<td>Follower sex male</td>
<td>0.003</td>
<td>0.027</td>
<td>0.098</td>
</tr>
<tr>
<td>Follower age</td>
<td>0.000</td>
<td>0.001</td>
<td>-0.494</td>
</tr>
<tr>
<td>Follower edn high school</td>
<td>-0.039</td>
<td>0.041</td>
<td>-0.949</td>
</tr>
<tr>
<td>Variable</td>
<td>b</td>
<td>SE</td>
<td>t</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------</td>
<td>-----</td>
<td>-------</td>
</tr>
<tr>
<td>Follower edn college degree</td>
<td>-0.103</td>
<td>0.039</td>
<td>-2.629</td>
</tr>
<tr>
<td>Follower edn master's degree</td>
<td>-0.064</td>
<td>0.045</td>
<td>-1.423</td>
</tr>
<tr>
<td>Follower edn doctoral degree</td>
<td>-0.089</td>
<td>0.040</td>
<td>-2.224</td>
</tr>
<tr>
<td>Follower ethnicity Caucasian</td>
<td>-0.046</td>
<td>0.043</td>
<td>-1.068</td>
</tr>
<tr>
<td>Follower ethnicity first Nations</td>
<td>-0.033</td>
<td>0.040</td>
<td>-0.834</td>
</tr>
<tr>
<td>Follower ethnicity other</td>
<td>0.030</td>
<td>0.041</td>
<td>0.733</td>
</tr>
<tr>
<td>Follower ethnicity south Asian</td>
<td>-0.035</td>
<td>0.044</td>
<td>-0.795</td>
</tr>
<tr>
<td>Leader group prototypicality</td>
<td>0.293</td>
<td>0.019</td>
<td>15.648</td>
</tr>
<tr>
<td>Leader stereotypicality</td>
<td>0.139</td>
<td>0.021</td>
<td>6.682</td>
</tr>
<tr>
<td>LMX</td>
<td>0.481</td>
<td>0.019</td>
<td>25.017</td>
</tr>
</tbody>
</table>

5.5.3 **Overall results of the mixed model analysis.**

Data was collected from both leaders (L2) and group members/followers (L1) for 51 workgroups. The dependent variable was measured at L1 (individual level). The unconditional model yielded a statistically significant result. Approximately 10% of the variance in the model was found to be associated with clustering effect of groups. Since assumption of independence was violated, mixed model analysis was used.

To understand a possible basis for this clustering effect, several models were generated. Step-up strategy (West et al., 2014) was used for model building. The first set of models addressed the level 2 (leader level) variables. There were two L2 predictors and six demographic factor variables at level 2. These were introduced to the base level unconditional model in two steps. In the first model, leader acculturation and leader perceptions of organizational climate were introduced after centering. The resultant model did not offer a better fit than the unconditional model. Both of these
variables were found significant and were thus omitted from further models. Hypotheses 1 and 6 were thus not found supported.

In the second stage of modelling at follower level, three L1 covariates were added to the unconditional model. These three covariates (i.e., follower perceptions of relationship with the leader, leader group prototypicality and leader stereotypicality) were grand mean centered. All three L1 covariates were found to be statistically significant (p <.001). These three covariates accounted for approximately 39%, 11% and 18% variance in the model. Accordingly, these three covariates were retained in the model.

In the next iteration of the model, just the L1 factor variables (i.e., follower demographic variables) were added to the null model. None of these follower related factors was found statistically significant. In the final model, all L1 variables (i.e., both covariates and the factor variables) were introduced to the null model. On model comparison, it was found that Model 3A (i.e., the model with just the L1 covariates) offered the best fit. The results supported hypotheses 4 and 5.

5.6 Summary of Analysis.

In this chapter, data analysis pertaining to this study was presented. Since the data was multilevel, mixed model analysis was carried out in addition to regression and analysis of variance. Hypotheses 1, 2, 4 and 5 were found supported while there was no support for Hypotheses 3 and 6. Specifically, the state of acculturation achieved by the leader was found to be correlated with perceptions of leadership effectiveness wherein all 51 leaders were found either assimilated or integrated in the destination country’s culture. The negative relationship between marginalization/ separation states of
acculturation with leadership effectiveness could not be established since none of the leaders in the sample met those conditions of acculturation.

LMX differentiation within the work group was found to be negatively correlated with leadership effectiveness as hypothesized. Similarly, group ethnic dissimilarity was found to be negatively correlated with leadership effectiveness with the correlation being weak ($R^2 = 0.03$). Follower perceptions of leader group prototypicality and leader stereotypicality were found to be strongly and positively correlated with leadership effectiveness. Finally, no support was found for the hypothesis that organizational climate will moderate the relationship between follower perceptions of LMX and follower ratings of leadership effectiveness. In the next chapter, these results are discussed along with implications.

CHAPTER 6 - RESULTS AND DISCUSSION

6.1 Introduction

The main objective of this study was to understand the relationship between leader acculturation, leader group prototypicality and stereotypicality, leader-member relations, and organizational climate with leadership effectiveness (outcome variable) in the context of small, ethnically diverse groups where the leaders were ethnically and culturally dissimilar from the mainstream culture. To holistically analyse such relationships, a multilevel study was designed in which responses were obtained both at the leader and follower levels.

The hypotheses at the level of the leader (group level) were associated with two aspects: a) the relationship between the type (or state) of acculturation achieved by
immigrant leaders and follower ratings of leadership effectiveness, and b) how did organizational climate moderate effectiveness of such leaders. Similarly, at the group member level, the four hypotheses addressed relationships concerning follower perceptions of leadership effectiveness based on a) leader’s group prototypicality; b) leader stereotypicality; c) relationship (LMX) with the leader; and d) ethnic diversity of the group. In this chapter, results of this analysis are discussed, summarized, and interpreted.

This chapter is organized in five sections. The first section deals with the findings and interpretation of each of the six hypotheses. In the following sections, theoretical and practical implications of this research, as well as the contributions made to leadership and diversity literatures, are discussed. Multiple limitations, both conceptual and methodological, faced during this investigation are listed next which are followed by recommendations for future research. The chapter is summarized and concluded thereafter.

6.2 Discussion of the findings

In this section, initially the discussion is centred on the implications of findings in each of the six hypotheses. Subsequently, these findings are summarized into a broader, holistic picture. the analysis was segmented into six hypotheses. Four of the six hypotheses (i.e., H1, H2, H4, and H5) were supported while H3 and H6 were not supported. In the following subsections, results of each of these hypotheses are discussed and interpreted.
6.2.1 Hypothesis 1.

In Hypothesis 1, the relationship between the state of acculturation achieved by an immigrant and her/his effectiveness as a leader in the workplace was evaluated. It had been posited that ratings of a leader’s effectiveness will be positively correlated to the degree of integration with the destination country’s culture. A correlation of 0.38 was obtained between leader acculturation and ratings of leadership effectiveness which implied a medium size effect. Hypothesis 1 was therefore supported.

The results indicated three significant findings. The first finding concerned the choices made, and the state of acculturation achieved, by the immigrants. Extant literature suggests that when migration occurs, acculturation is inevitable, and most immigrants experience substantial changes in their lives (Berry, 2004; Ward, Bochner, & Furnham, 2001). Recent research (e.g., David, Okazaki, & Saw, 2009) has found that immigrants experience most favorable outcomes when following strategy of integration which is associated with higher self-esteem and prosocial behavior (Chen, Benet-Martínez, & Bond, 2008; Schwartz et al., 2010). ‘Integration’ implies a high level of comfort with the destination nation culture but also concurrently retaining a significant level of connection with the country of origin culture (Berry, 2003). Thus, the finding that almost the entire sample of 51 leaders (47/51 or 92%), had effectively integrated in the Canadian culture, was in line with, and supported, the bi-dimensional theory of acculturation proposed by scholars.

A somewhat surprising corollary to this finding was that ‘assimilation’ was only chosen by four of the 51 immigrant leaders. Some earlier research has suggested that first generation immigrants try and assimilate in the destination country’s culture (e.g.,
choices made by first generation Muslim immigrants to the US: Castles, De Haas, & Miller, 2013). However, such was not the finding in the instant investigation. This could at least partly be attributed to the well articulated Canadian government policy of multiculturalism (Canadian Multiculturalism Act, 1988) which was plausibly an important impetus to the choice of integration over assimilation. Furthermore, the mean rating of leadership effectiveness of those leaders who had ‘integrated’ vs. those who had ‘assimilated’ was marginally higher. While this difference was statistically non-significant, this nevertheless pointed to the efficacy of those who had integrated.

Another important finding concerned the role of demographic differences in evaluation of leaders. Overall, leader success in the workplace was found non-contingent upon demographic differences. In spite of differences amongst leaders on multiple demographic dimensions (such as age, gender, and education), between-group differences on assessment of leadership effectiveness based on such differences were found non-significant. This finding is of particular importance concerning leader gender, as earlier literature has suggested differential perceptions of leader effectiveness based on leader demographics (e.g., gender: Eagly & Carli, 2007, and ethnicity: Ospina & Foldy, 2009).

6.2.2 Hypothesis 2.

A negative relationship between LMX differentiation and leadership effectiveness had been postulated. The results supported this hypothesis. The negative relationship between LMX differentiation and leadership effectiveness was found to be strong ($r = -0.68$), implying that higher variability in LMX within the group was detrimental to perceptions of leadership effectiveness.
While the outcome variable in this study was leadership effectiveness, this result analogously supported earlier findings which have shown that differentiated relationships within the group can diminish group effectiveness through creating divergence in leader identification, member self-efficacy, and lower group collective efficacy (e.g., Wu, Tsui, & Kinicki, 2010). In a similar fashion, in highly differentiated groups, low LMX members are likely to withhold effort to the detriment of overall group performance (Liden et al., 2006), and correspondingly reflect this in low ratings of leader effectiveness.

An additional point should be made here. While some earlier research has suggested that the relationship between LMX differentiation and group level outcomes is contingent upon gender as a demographic factor in group diversity (e.g., Stewart & Johnson, 2009), such was not the case in this study. In other words, there were no significant differences in ratings of leaders whether groups were majority males vs. majority females. More significantly, not only follower gender diversity was not an important factor, there was no significant difference between ratings of leader effectiveness based on leader gender.

6.2.3 Hypothesis 3.

In this hypothesis, group ethnic similarity to the leader was hypothesised to be related to perceptions of leadership effectiveness. Specifically, in groups which were ethnically and culturally similar to the leader, this relationship was hypothesised to be more pronounced as compared to groups that were ethnically and culturally different from the leader. There were two significant findings.
The first finding indicated that the error variance was not equal across groups. The results showed a pattern wherein group ethnic heterogeneity was found inversely related to perceptions of leadership effectiveness (i.e., ethnically more diversified groups had lower within-group variance on leader ratings as compared to less diversified groups).

Such an inverse relationship between group diversity and within-group variance on perceptions of leadership effectiveness has interesting implications. Earlier research has alluded to the fact that in ethnically more diverse groups, the criteria for judging the leader as effective (or otherwise) is not biased by group prototypicality whereas in ethnically more homogenous groups, group prototypicality plays a role (i.e., group members have similar perceptions about the leader (Kirkman, Tesluk, & Rosen, 2004).

The second finding concerned the between-subjects effect of group diversity. This result was non-significant (F = .634, p = .535) indicating that overall, the three subgroups (‘High’, ‘Medium’ or ‘Low’ diversity) did not differ significantly from each other on ratings of leadership effectiveness. Furthermore, $R^2 = 0.03$ indicated a weak effect implying that group demographic diversity as a predictor did not have a significant relationship with perceptions of leadership effectiveness. This finding highlights the point made in earlier reviews on the contradicting, and inconsistent, findings on the main effects of diversity on organizational outcomes (Williams & O'Reilly, 1998) and the possibility of reaching differing results depending upon the type of diversity under study (e.g., social diversity, value diversity, or informational diversity: Jehn, Northcraft, & Neale, 1999).
6.2.4. Hypothesis 4.

The key premise of the social identity theory of leadership is that followers look up to the leader to define group identity and prescribe follower behavior (Hogg, 2001) and that group prototypical leaders are more favorably evaluated by group members (van Knippenberg & Hogg, 2003). There is ample empirical evidence that supports this theory and concludes that leadership evaluations are significantly and positively influenced by leader group prototypicality (Van Knippenberg 2011). In a recent meta analysis, Barreto and Hogg (2017) reviewed 35 studies and found that approximately 24% of leader evaluation is attributable to leader perceived group prototypicality.

In this study, leader group prototypicality accounted for a significant proportion of variance in leadership effectiveness ($\Delta R^2 = .54, p < .001$). This level of explained variance is higher than results reported in earlier non-experimental studies (Barreto & Hogg, 2017). Thus, this investigation adds further support to the social identity theory of leadership that leaders who are perceived as group prototypical are also deemed more effective.

Given the positive relationship between leader group prototypicality and perceptions of leadership effectiveness, it can be argued that leaders who are not group prototypical will be perceived less effective as leaders as compared to those who are group prototypical. In other words, as was hypothesized in this study, the relationship between leader group prototypicality and leadership effectiveness should not be found high when the leaders are not group prototypical. Since all leaders in this study were South Asians, they were expected to be deemed non-group prototypical unless the
majority of group members were either South Asian or Asian (in which case the leader would be deemed group prototypical).

However, the results indicated that there was no significant difference in leader ratings between the two types of follower sub-groups (i.e., groups that were majority White or, alternatively, majority Asian). In other words, irrespective of group ethnic composition, all group leaders were rated as effective. This outcome has interesting implications in so far all group leaders were a) deemed group prototypical, and b) all leaders were rated highly effective. It may be recalled that most followers had identified themselves as group prototypical irrespective of their own ethnicity and minority status in the group.

It would thus appear that the notion of group prototypicality has undergone a shift in the modern workspace. Specifically, demographic diversity, while acknowledged, is not a barrier to a group member not feeling part of the group purely based on such differences. Further research is needed to establish boundary conditions for the overarching support for non-prototypical leaders and to identify organizational conditions, if any, under which non-prototypical leaders may be rated differently from prototypical leaders.

A key point concerns the quality of leader member relationship. To be effective, leaders in diverse contexts must be more relational in nature (Chen & Van Velsor, 1996). As Charbot-Mason, Ruderman, and Nishii (2013) point out, in the current milieu of globally diverse teams, “leadership is evolving in such a way that emphasizes the development of quality relationships, consensual influence, and leadership as a socially constructed process” (p.317). Across all groups, LMX valuations (as perceived by group
members) were high, indicating the strength group leaders displayed in cultivating such relationships.

Another possible explanation can be found in research that is related to fault lines within groups. The faultline model suggests that, even though demographic fault lines may adversely influence a group’s early development, demographics may be less influential as the group becomes more familiar with each other (Lau & Murnighan, 2005). To an extent, such familiarity can be expected to lessen effects of leader non-prototypicality over time. Similarly, earlier research (Harrison et al., 1998) has differentiated between effects of surface-level (demographic) and deep-level (attitudinal) diversity on group social integration and found that length of time group members spent working together weakened the effects of surface-level diversity.

Lack of adequate research in identifying moderating variables, which could potentially impact the relationship between leader group prototypicality and leader related outcome (such as leadership effectiveness), is yet another plausible explanation for this result. For example, Barreto and Hogg (2017), in their meta review, found that leader group prototypicality had a positive effect on perceptions of leadership effectiveness due to presence of trust in such leaders, but only in specific conditions. The authors found that since group prototypical leaders are trusted more, such leaders are evaluated as more effective after failure than non-prototypical leaders, whereas both prototypical, and non-prototypical leaders, received similar valuations on leadership effectiveness after success.

Another significant finding, alluded to earlier, was that irrespective of individual demographic profile, group members across all 51 groups considered themselves group
prototypical. On dimensions of group affiliations and group identification, the overall mean value of 5.7 (group means varied between 4.67 to 6.48) indicated that majority of group members identified strongly with the group they were in. This finding is significant because the diversity literature suggests that demographic differences would ordinarily create subgroup level fault lines (Carton & Cummins, 2012; Meyer et al., 2014) that would result in some group members feeling isolated as out groups. Such was not the case in this study. Two possible explanations are offered for such a finding.

Overall the demographic profile in the follower dataset in this study shows an even spread of diversity amongst followers on dimensions of age, sex, ethnicity and education within all groups. Such diversity, in the Canadian context, where demographic heterogeneity is typical of the emerging demographic trends in the Canadian workspace (Statistics Canada 2015), appears more as the norm than an exception. This finding also supports earlier work in the field of acculturation (e.g., Berry, 2001, 2006) which suggests the success of policy initiatives for creating a multicultural society in Canada, which overtly respects and supports demographic heterogeneity in the society. Contrary to much earlier research, the notion of dominant groups versus minority groups (Ethnocentrism: Bizumic et al., 2010), or the ingroup vs. outgroup theory expounded by Tajfel (1979, 2010), seems substantially negated through effective policy initiatives in the Canadian context.

The second explanation may be found in the sociometer theory (Baumeister, 1993; Sedikides & Strube, 1997). Sociometer model argues that people have a need to be socially included, and that self-esteem is a meter of successful inclusion and group belonging (Hogg, Hohman, & Rivera, 2008). People like to feel good about themselves
and, all things being equal, behave in ways that elevate self-esteem. Thus, according to sociometer theory, self-esteem is a critical index of social connectedness and, by implication, social inclusion and group belonging (Leary & Baumeister, 2000). It is thus conceivable that, irrespective of individual profile on the diversity scale, members opted for being group prototypical.

6.2.5 Hypothesis 5.

In hypothesis 5, it was posited that leaders who are more leader stereotypical will be deemed more effective. The results supported this hypothesis. The unique variance accounted for by leader stereotypicality was 35%. This is in line with earlier research that has found similar effects (Hogg et al., 1998). Inherent to this hypothesis (in the overall context of the study) was the suggestion that leaders who were ethnically and culturally different may not be deemed as stereotypical leaders in cultural settings that were not in harmony to their own culture. However, main effects on leader stereotypicality scale ratings were found to be high which did not support this argument. To rationalize such results, a few possibilities are discussed below.

Leader categorization theory posits that people have preconceptions about how leaders should behave in general, as well as in specific leadership situations (Lord, 1977, 1985; Lord, Foti, & DeVader, 1984). Similarly, according to Rosch's (1999) principles of categorization, individuals will be perceived as leaders when at least some of the typical leader-characteristics can be ascribed to them. While not specifically measured, it would appear that the leaders in this study displayed such leader-like characteristics which diluted (or completely negated) the adverse effects of ethnic
dissimilarity. This reinforces the argument that certain personal traits are universally recognized, and acceptable, in leadership roles (Antonakis & Day, 2018).

This finding also ties in with the literature on leader identity development. Leader identity refers to the “sub-component of one's identity that relates to being a leader, or how one thinks of oneself as a leader” (Day & Harrison, 2007, p. 365). Leader identity, as a type of cognitive schema, is stored information and knowledge attached to a leadership role (Lord & Hall, 2005), which directs an individual's behavior and interactions in leadership roles and processes (Day, Harrison & Halpin, 2012). Such development takes place over time. Given the age demographics, it would appear that leaders in this study had previous leadership experiences which facilitated their successful adaptation to leadership roles in the current context (Miscenko, Guenter, & Day, 2017).

Earlier research in the context of cross-cultural leadership has also identified such traits amongst leaders who can manage culturally diverse employees (House & Javidan, 2004). The competencies required for becoming successful in such globally diverse environments include the need for such leaders to be not only aware of, and be sympathetic to, other cultures but also be able to work with, and communicate with, people from all cultures (Adler & Bartholomew, 1992). The GLOBE study found that approaches to leadership style in the country cluster called Southern Asia (from where the leaders for this study were selected) are high on two dimensions: the ‘Humane Orientation’ dimension, and the ‘In-group collectivism’ dimension.

Human Orientation dimension suggests a strong concern for the welfare of other people and the willingness to sacrifice one’s own self interest to help others, with key
values centred on altruism, benevolence, kindness, compassion, and generosity. Similarly, the ‘In-group collectivism’ dimension denotes the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families. Since the leaders came with cultural values from such a background, it can be argued that higher ratings of being perceived as effective leaders was at least partially the result of higher values on these two dimensions.

A somewhat surprising finding related to there being no significant difference between male and female leaders on ratings of leader stereotypicality. This finding runs counter to previous research which indicates that women (as compared to males) are generally prejudiced against in leadership roles (Eagly & Chin, 2010; Eagly & Karau, 2002) and the social image of a successful manager shows a higher correlation to characteristics of a typical man than to those of a typical woman (Sczesny, 2005). The finding is even more remarkable considering that female leaders in this study came from a country cluster which has relatively low scores on the ‘Gender Egalitarianism’ dimension of GLOBE study. There are at least two possible explanations for this.

As brought out in analysis of earlier hypothesis concerning leader acculturation (H1), all group leaders were well integrated in the Canadian culture and had seemingly adequate skills for such roles. While not specifically evaluated, the female leaders possibly possessed personal traits (aggressiveness, social skills etc.), international experience, and cultural intelligence (Ng, Dyne, & Ang, 2009) of a high order such that they were chosen for leadership roles in the first place. In the socially constructed view of leadership (Chen & Van Velsor, 1996), leader selection is a consensual process (DeRue & Ashford, 2010) and leader ratings are reflected in how such leaders manage
themselves, operate with others, and lead the group (Charbot-Mason et al., 2013). Additionally, majority of the female leaders were first rung supervisors: gender discrimination, and the ‘glass ceiling’ effects are more visible at higher levels of leadership (Eagly & Carli, 2007).

6.2.6 Hypothesis 6.

In hypothesis 6, it was postulated that an inclusive organizational climate will have a positive effect on the relationship between leadership style and leadership effectiveness. The results of hierarchical linear regression analysis did not support this hypothesis. Organizational climate was found to be non-significant in both models 2 and 3. Indeed in model 3, not only was the effect of the moderator (the interaction term) non-significant, the relationship with leadership effectiveness was mildly negative. These effects, put together, indicate that organizational climate did not moderate the relationship between LMX and leadership effectiveness. Hypothesis 6 was thus not supported.

This result is inconsistent with earlier research that has shown positive moderating effects of organizational climate on relationship between LMX and other variables (e.g., Hofmann, Morgeson, & Gerras, 2003). While the extreme difficulty of capturing moderating effects in field studies due to the lower statistical power and moderator parameter estimates associated with such studies has been documented earlier (McClelland & Judd, 1993), the nature of non-significant and mildly negative moderating effects is not intuitive and would need further investigation.
6.3 Contributions

This study makes four main contributions. The overarching contribution of this study is to bring together the literature lying at the intersection of acculturation, leadership and diversity within the organizational context. Increasing migration into the Western nations from relatively poorer nations has been the highlight of the recent world political landscape. Culturally and ethnically dissimilar people have immigrated to such nations in large numbers. While earlier research has addressed the effects of such large-scale movements in an isolated fashion, this study has attempted to investigate the salient predictors overlapping these disparate literatures to holistically capture the issues relating to eventual success of such immigrants as leaders in the destination nations. These four contributions are briefly summarized below.

First, this study examined the relationship between leader acculturation and leader effectiveness. It seems that the initial selection of acculturation strategy chosen by an immigrant sets the stage for her/his eventual success in the workplace. While it is plausible that the immigrant, who seeks a leadership role, will have personality traits that encourage effective adaptation to the destination country’s culture, the distinction between willingly ‘assimilating’ vs. ‘integrating’ in the destination country’s culture is crucial. Western nations have either encouraged assimilation (e.g., in the USA and some European nations), or integration (e.g., in Canada). Inclusive national policies (such as multiculturalism in Canada), that do not force immigrants to cut the cultural umbilical cord with their country of origin culture, appear to provide a supportive workplace ambience in which immigrant human capital thrives. This was evident in the
results in this study wherein all but four (out of 51) respondents chose integration over assimilation.

Second, it has been suggested in earlier literature (e.g., categorization-elaboration model: Knippenberg et al., 2004) that social categorization results in inter-group biases. The results from this study did not support this view. Specifically, it was found that majority of group members, irrespective of ethnicity (one of the factors used as a basis of social categorization) identified with the groups they belonged to across varied work settings (such as government or private industry). This finding points to a possible weakening effect of categorization biases in culturally and ethnically diverse groups which are increasingly ubiquitous in countries with a high influx of immigrants (e.g., Canada).

Thirdly, the relational approach to leadership (currently considered ‘very active’: Antonakis & Day, 2018), has not empirically tested many of the influences concerning leader prototypicality in diverse contexts. Barreto & Hogg (2017) have highlighted certain areas in their meta-analytic review. The relational demography literature in the North American context, has mostly focused on management of dissimilar group members (cf. a dissimilar group leader).

Similarly, editing a special issue on diversity and leadership, Eagly and Chin (2010) had suggested that intellectual segregation of gender, ethnicity, and culture from mainstream leadership theory be reconsidered and implications of leaders who differ in demographic attributes (such as ethnicity, age, and gender) - an area which is under-analyzed - be given more attention. By evaluating the effects of group leader
dissimilarity, and its implications on workgroup dynamics, this study makes a unique contribution to this literature.

Specifically, two findings add new insights to the literature on leader group prototypicality and leader stereotypicality. Earlier research in the leadership domain, mostly anchored in social identification and self categorization theories, has highlighted the advantages that a leader may gain when being group prototypical. The findings from this study, however, suggest that leaders can be rated highly effective even when they are non-group prototypical.

More strikingly, ratings of women leaders were found to be similar to those of men, a finding that was at variance with the commonly held view about gender-based discrimination in ratings of leaders in the workplace. While evidence of ‘glass ceiling’ (Barreto, Ryan, & Schmidt, 2009) and ‘glass cliff’ (Ryan & Haslam, 2005) effects for women leaders in the workplace has been well-documented, such effects appear more pronounced under specific conditions (for example both above mentioned effects are visible for leadership roles at higher levels of organizational hierarchy). Thus, findings from this study add a more nuanced perspective to the issue of gender-based discrimination (or lack of it) in the workplace. This is a potential area for further research to identify contexts and boundary conditions under which such discrimination is more (or less) pronounced.

Fourth, organizational climate was not found to be significant as a moderator in influencing the relationship between follower perceptions of LMX and ratings of leadership effectiveness. This may be due to several factors. It could be that the sample was biased towards inclusive organizations. In other words, it is likely that the
organizations chosen by immigrant leaders were more inclusive in nature (i.e., support a more inclusive climate) thus providing a level playing field irrespective of leader ethnicity.

Finally, the relevance of appropriate levels of analysis while conducting leadership research has been well highlighted. A review study by Dionne et al. (2014) revealed that focal level of analysis (in both conceptual and empirical articles) were explicitly stated in only approximately one-third of the articles, and that multilevel data analysis techniques were found to be used in less than one-fifth of all articles published in The Leadership Quarterly in the last 25 years. By conducting a multilevel analysis, this study addresses this call for more multi-level research in the leadership literature.

6.4 Limitations and recommendations for future research

The results of this study should be interpreted within the context of the study’s limitations. Such limitations concern both theoretical and methodological issues. One potential limitation of the present study is that all data were self-reported. Self-reports of behavior can be problematic and upwardly biased (Podsakoff, MacKenzie, & Podsakoff, 2012). However, earlier leadership literature suggests that common method variance does not significantly affect results (Doty & Glick, 1998) and that the problem may be over-rated (Spector, 2006). Nevertheless, Harmon one-factor test was conducted which failed to demonstrate a single factor. Single factor loading was 24.5 which was well within the acceptable limit of 50.

This issue was also partially alleviated by designing the questionnaire wherein the demographic information was asked for at the end of the questionnaire as
recommended by Riordan (2000), thus lessening any spurious association between the demographic variables and other variables. Nevertheless, in spite of common method variance not being significant, it is acknowledged as a limitation in light of observations raised by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). Similarly, convenience sampling (as used in this study) could potentially have introduced sampling bias (i.e., systematic bias), limited generalization, and lowered external validity.

Research that is focussed on minorities, should have a well considered research design. For example, the validity of questionnaires developed in North American context being applied to a population that is culturally different could potentially bias the findings (Harkness, Van de Vijver, Mohler & Wiley, 2003). The chosen focus of this study was first generation South Asian immigrants. This may have narrowed the range of some of the results. For example, these leaders may present a narrower range of prototypicality than a more general sample of leaders overall. Additionally, the fact that over 90% of the sample of leaders from the South Asian cluster were from one country (India) may have further limiting effects on generalization of the findings even to the entire South Asian community.

Inflated leader evaluations were another concern. The fact that group members had the knowledge that their bosses were aware of subordinate participation in the study, was a potential source of bias. Even though group members were advised to remain impartial while responding and were informed that responses were collected anonymously (i.e., without bringing the leaders in the response collection/analysis loop), it is possible that some positive bias was introduced in follower responses on variables such as assessment of leadership effectiveness and perceptions of relationship with the
leader. Equally, given the assumption that group diversity measures should accurately reflect the level of diversity in a group, the fact that not all group members provided survey data means that missing data could have biased results (Allen, Stanley, Williams, & Ross, 2007).

Finally, the cross-sectional nature of the study imposes limits on causal inference needed for development of theory (Antonakis, 2015). Cross-sectional studies of attitude-behavior relationships (such as this study) are vulnerable to the inflation of correlations (Lindell & Whitney, 2001). Given the transient nature of follower perceptions of leaders and LMX ratings, which are biased by follower’s extant behavioral state at a specific time, a longitudinal design with data obtained at T2 would have significantly improved validity and causal inference. This weakness was recognized while deciding on research design but due to program time constraints as well as likely attrition of study participants between T1 and T2, a cross sectional design was chosen.

Multiple avenues are available for furthering research that lies at the intersection of acculturation, leadership, and diversity. Further investigation of the efficacy of dissimilar leaders in diverse groups is one such area of potential research. For example, it is likely that dissimilar leaders are effective because they are successful in regulating individual, social, and organizational identities (Alvesson & Willmott, 2002) as well as effectively integrating with the culture of destination country while maintaining close association with the culture of the country of origin. The effects of possessing and coping with such multiple identities on specific leader behavioral aspects (e.g., emphasis on creativity) is an area that needs more attention.
Processual issues concerning leader self-categorizing, which is inherently variable, fluid, and context dependent (Turner, Oakes, Haslam, & McGarty, 1994), as well as effects of higher levels of cultural identity integration (perceived compatibility between two cultural identities: Epitropaki, Kark, Mainemelis, & Lord et al., 2017) on leadership behavior also offer similar areas for potential research.

Leader (ethnic) dissimilarity from the group was not found to be correlated with follower perceptions of leader effectiveness, irrespective of follower ethnicity. Since this finding contrasts with the main thesis of Social Identity theory (ingroup - outgroup bias), as also with the tenets of ethnocentrism (judging another culture solely by values and standards of one’s own culture), further identification of boundary conditions under which group perceptions are enhanced or subdued in terms of ingroup - outgroup bias and/or ethnocentrism, should provide further fidelity to group dynamics and group level interactions and outcomes. This recommendation adds to a similar suggestion made earlier to capture the individual, relational, and organizational factors that influence the leadership identity construction process (DeRue & Ashford, 2010).

LMX literature has continuously endeavoured to refine the effects of those moderating factors which define the development of relationship (LMX) between leaders and followers. While earlier research had identified demographic differences as salient moderators in this respect, such was not the finding in this study. Further research is needed to investigate conditions under which demographic (and specifically ethnic) differences may affect LMX relationships at the group level.
6.5 Conclusions and Implications

As immigration increases, cultural and ethnic diversity within nations and world cultures become more interconnected and changing demographics are necessitating a review of how leadership theories intersect with multiple dimensions of diversity and increased complexity. In such a milieu, where interdependence of organizations and nations are increasingly the norm, leadership theories have become more inclusive and integrative, and “have more potential to take into account multiple dimensions of individual identities and contexts, organization cultures and subcultures, and relations between leaders and a wide range of followers” (Eagly & Chin, 2010, p.221).

An attempt was made to partially address this issue in the current investigation. Within the context of various dimensions of group diversity, leaders from minority groups, who traditionally had little access to leadership roles, were studied to expand the definitions of leadership. Minority or dissimilar leaders were, without exception, found to be rated high in leadership roles, irrespective of group demographics. The overall high ratings of leadership effectiveness for such minority groups suggests that effectiveness may not be solely linked to the demographics or cultural differences between leaders and team members.

This study has multiple implications for theory and research. Theoretically, by studying dissimilar leadership through the diversity lens, a clearer and broader understanding of leader effectiveness in the workplace is obtained. It would also appear that culture and ethnicity have limited implications in the workplace in societies that value more integrative cultural policies and practices (such as multiculturalism) both at the societal and national level. Potential researchers may note that multidisciplinary
research frameworks can initially appear challenging, but these are necessary to synthetise literatures, offer more integrated answers, and provide findings that avoid being too narrow.

From the practitioner (or business) point of view, such research can thus appear more realistic and useful. However, it may be noted that research dealing with minorities has specific challenges. It can be problematic to find required sample sizes unless such research is conducted in large metropolises. To meet time and resource constraints, the research design should accommodate such issues.

This research also has implications for organizations and policy makers. The implications for policy makers include considerations for laying guidelines for effective utilization of the potential waves of immigrants and use this human capital effectively. Though not specifically investigated, the findings (wherein the vast majority of leaders were found ‘integrated’) would appear to support the extant policy initiatives to integrate immigrants in the destination country’s societal fabric.

At the organizational level, inclusiveness was the common theme for this sample. From organizational point of view, the overarching and most significant finding was the fact that newer minority immigrants, with adequate skill sets, were perceived as effective in leadership roles (albeit this result was limited to small, supervisory group levels). This has potentially significant implications for organizations in their hiring and selection processes. For example, the absence of behavioral and/or perception bias in group level interactions suggests that demographic filters during hiring processes may be unnecessary or relegated. It should be mentioned however that this finding is limited
in scope since such immigrants who participated in this study came from a specific geographic area (South East Asia/India). Further research is needed concerning other culturally and ethnically different immigrant populations to generalize this finding.

Even though a correlation was not found between inclusive climate and effectiveness, it appears that such effectiveness was arguably due to the prevalence of an inclusive climate across all sampled organizations. The takeaway for organizations is the awareness that regardless of demographic composition, promotion of inclusive policies (including, but not restricted to, training and sensitization of senior managers towards inclusiveness) can help improve organizational effectiveness by maximising the diverse human capital existing within an organization.

For the potential immigrant leader/manager, at least two findings appear very relevant. The first concerns a new immigrant’s attitude towards adapting to cultures and values of the destination nation. The positive implications of successfully integrating with the destination country’s culture were evident from the fact that all leaders forming part of the study were successful in integrating into the Canadian multicultural milieu. It may also be noted that those few, who chose to be ‘assimilated’ (viz-a-viz being ‘integrated’), did not get any additional benefits (such as being rated more effective as leaders) irrespective of the ethnic composition of the group (i.e., even when the group members were mostly from the destination country’s culture). Significantly, women leaders received ratings at par with their male colleagues. This is at variance with the long-held stereotype concerning leadership effectiveness of female leaders as compared to male leaders.
REFERENCES


Travis, D. J., & Mor Barak, M. E. (2010). Fight or flight? factors influencing child welfare workers' propensity to seek positive change or disengage from their jobs. Journal of Social Service Research, 36(3), 188-205.


## APPENDICES

### Appendix A: Summary of variables and scales used in the study

**Table 1:** Summary of variables and scales used in the study

<table>
<thead>
<tr>
<th>Construct</th>
<th>Variable</th>
<th>Measurement Level</th>
<th>Scale</th>
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<td>Assimilation</td>
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<td>Marginalization</td>
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Appendix B: Sociocultural Adaptation Scale (SCAS)
(Ward & Kennedy, 1999, p. 670)

Participants (Leaders) were asked to respond to each item on a 5-point scale (5 = Describes me extremely well to 1 = Does not describe me)

1. Making friends
2. Making yourself understood
3. Going to social events/ gatherings/ functions
4. Talking about yourself with others
5. Understanding jokes and humor
6. Dealing with someone who is unpleasant/ cross/ aggressive
7. Following rules and regulations
8. Dealing with people in authority
9. Dealing with the bureaucracy
10. Making yourself understood
11. Communicating with people of different ethnic groups
12. Relating to members of the opposite sex
13. Understanding the local’s world view
14. Adapting to the local etiquette
15. Understanding the local political system
16. Taking a local perspective on culture
17. Understanding the local value system
18. Understanding cultural differences
19. Being able to see two sides of an intercultural issue
20. Seeing things from the local’s point of view
Appendix C: The Six-Item Multigroup Ethnic Identity Measure

(Homma, Zumbo, Saewyc, & Wong, 2014)

Participants (Leaders) were asked to respond to each item on a 7-point scale (7 = strongly agree to 1 = Strongly disagree)

**Exploration**

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs
2. I participated in cultural practices of my own group, such as special food, music, or customs
3. I have often talked to other people in order to learn more about my ethnic group

**Commitment**

1. I have a strong sense of belonging to my own ethnic group
2. I understand what my ethnic group membership means to me
3. I feel a strong attachment towards my own ethnic group
Appendix D: LMX Multidimensional Measure (LMX - MDM)
(Liden & Maslyn, 1998, p. 670)

Participants were asked on a 7-point scale (1 = Strongly disagree and 7 = Strongly agree).

1. I respect my manager’s knowledge of and competence on the job
2. My supervisor would defend me to others in the organization if I made an honest mistake.
3. My supervisor is the kind of person one would like to have as a friend
4. I do not mind my working hardest for my manager
5. My supervisor would come to my defense if I were "attacked" by others.
6. I like my manager very much as a person
7. I do work for my supervisor that goes beyond what is specified in my job description.
8. I admire my manager’s professional skills
9. My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.
10. My supervisor is a lot of fun to work with.
11. I am willing to apply extra efforts, beyond those normally required, to further the interests of my work group.
12. I am impressed with my supervisor’s knowledge of his/her job.

Appendix E: Leader group prototypicality, and leader stereotypicality scales

In this appendix, following measures, which were presented to followers, are mentioned.
a) Group salience
b) Social identification scale
c) Leader group prototypicality scale
d) Leader stereotypicality scale

**Group Salience**

(Hains, Hogg, & Duck, 1997)

Participants were asked on a 7-point scale (1 = *Strongly disagree* and 7 = *Strongly agree*).

1) How committed do you feel towards your group (commitment)?
2) How happy are you with your choice of the group (in low salience, their personal position on the group)?
3) How similar do you feel in your group (similar)?
4) How much do you like your group (like)?
5) How well do you fit in your group (fit)?
6) How cohesive do you feel is your group? (cohesive)
7) How important is your group to you? (Importance)
8) How much do you identify with the group (identify)?
9) How glad are you to be with the group (glad)?
10) How much do you see yourself belonging to the group (belong)?
11) How well do you match the representative position of your group? (self-prototypicality)
12)
Social Identification Scale
(Modified from Mael and Ashforth, 1992)

Participants were asked on a 7-point scale (1 = Strongly disagree to 7 = Strongly agree).

1. When someone criticizes (my group), it feels like a personal insult
2. I am very interested in what others think about (my group)
3. When I talk about (my group), I usually say ‘we’ rather than ‘they’
4. When someone praises (my group), it feels like a personal compliment

Leader group prototypicality Scale
(Platow and van Knippenberg, 2001. P.1512)

Participants were asked on a 7-point scale (1 = Strongly disagree to 7 = Strongly agree).

1. This team leader is a good example of the kind of people that are members of my team
2. This team leader has very much in common with the members of my team
3. This team leader represents what is characteristic about the team
4. Is not representative of the kind of people who are members of this team.
   (Reverse coded)
5. This team leader is very similar to the members of my team
Stereotypical leadership behavior
(Hains, Hogg & Duck, 1997)

The following 5 items are based on superordinate categorisation of a leader (Cronshaw & Lord, 1987). This scale was initially shown to the subordinates to reinforce construct definition of a stereotypical leader:

1. Carefully plans on what to do
2. Emphasizes group goals
3. Coordinates group activities
4. Lets other members know what is expected of them
5. Takes prompt decisions

These behaviors are considered sufficiently descriptive of general properties of a stereotypical leader of a small group in an organizational context. To establish their mental schema of a stereotypical leader, the participants were initially given this information. The participants were then asked to respond to the following 3 questions on a 7-point scale (1= Not my image of an effective leader to 7 = my image of an effective leader) to get their ratings of the leader:

1. How well does this profile describe your own leadership style (self-stereotypicality)?
2. How much would you prefer a leader who had this profile? (stereotypical leader preference)
3. How much would you prefer a leader who had the opposite profile (non-stereotypical leader preference).
Appendix F: Perceptions of inclusion-Exclusion and Diversity

Perceptions of Inclusion-Exclusion Scale
(Mor Barak, 2005, pp. 293-299)

The 15 items evaluate a person’s sense of inclusion in the organizational context in relation to the following five system levels:

a. Work group (questions 1-3)

b. Organization (questions 4-6)

c. Supervisor (questions 7-9)

d. Higher management (questions 10-12)

e. Social/informal (questions 13-15)

The respondents (leaders) were asked to evaluate their inclusion in the following:

a. The decision-making process (questions 1, 4, 7, 10, 13)

b. Information networks (questions 2, 5, 8, 11, 14)

c. Level of participation/involvement (questions 3, 6, 9, 12, 15).

Leader participants were asked to rate the following items on a 7-point scale (1 = Strongly disagree and 7 = Strongly agree).

1. I have influence in decisions taken by my work group regarding our tasks.

2. My coworkers openly share work-related information with me.

3. I am typically involved and invited to actively participate in work-related activities of my work group.

4. I am able to influence decisions that affect my organization.

5. I am usually among the last to know about important changes in the organization (R).
6. I am usually invited to important meetings in my organization.
7. My supervisor often asks for my opinion before making important decisions.
8. My supervisor does not share information with me.
9. I am invited to actively participate in review and evaluation meetings with my supervisor.
10. I am often invited to contribute my opinion in meetings with management higher than my immediate supervisor.
11. I frequently receive communication from management higher than my immediate supervisor (i.e., memos, emails).
12. I am often invited to participate in meetings with management higher than my immediate supervisor.
13. I am often asked to contribute in planning social activities not directly related to my job function.
14. I am always informed about informal social activities and company social events.
15. I am rarely invited to join my coworkers when they go out for lunch or drinks after work.
The Diversity Perceptions Scale
(Mor Barak, 2005)

The diversity perception scale examines employees’ views about the diversity climate in the organization. It includes 16 items with two dimensions: organizational and the personal, each containing two factors as follows:

Organizational dimension

a. Organizational fairness (items 1-6)

b. Organizational inclusion factors (items 7-10)

Personal dimension

c. Personal diversity value factor (items 11-13)

d. Personal comfort with diversity (items 14-16)

The organizational dimension refers to the perception of management’s policies and procedures that affect members of minority groups and women – such as discrimination or preferential treatment in hiring and promotions procedures (factor A). It also refers to management’s actions that affect inclusion or exclusion of women and members of minority groups – such as membership programs or preservation of the “old boys” network (factor B). The personal dimension refers to individual’s views of the importance of diversity to work groups and to the organization (factor C) and their level of comfort in interactions with members of other groups (factor D).

The 16 scale items are summed to create a composite diversity perception score with four inverse scored questions (items 1, 9, 15, 16, noted by the letter R next to them) to prevent response sets in answering the questions. Higher scores on the scale reflect a more positive perception of the diversity climate. The dimensions and factors
can be summed and analysed separately to gain more insight into the composition of employees' views of the diversity climate.

Leader participants were asked to rate the following items on a 7-point scale (1 = Strongly disagree and 7 = Strongly agree). Items 11-13 were omitted from the questionnaire since these were not relevant to leader perceptions of organizational diversity.

Items:

1. I feel that I have been treated differently here because of my race, gender, sexual orientation, religion, or age (R).

2. Managers here have a track record of hiring and promoting employees objectively, regardless of their race, gender, sexual orientation, religion or age.

3. Managers here give feedback and evaluate employees' race, gender, sexual orientation, religion, age, or social background.

4. Managers here make layoff decisions fairly, regardless of factors such as employees' race, gender, sexual orientation, religion, age, or social background.

5. Managers interpret human resource policies (such as sick leave) fairly for all employees.

6. Managers give assignments based on the skills and abilities of employees.

7. Management here encourages the formation of employee network support groups.

8. There is a mentoring program in use here that identifies and prepares all minority and female employees for promotion.

9. The “old boys’ network” is alive and well here (R).
10. The company spends enough money and time on diversity awareness and related training.

11. Knowing more about cultural norms of diverse groups would help me be more effective in my job.

12. I think that diverse viewpoints add value.

13. I believe diversity is a strategic business issue.

14. I feel at ease with people from backgrounds different from mine.

15. I am afraid to disagree with members of other groups for fear of being called prejudiced (R).

16. Diversity issues keep some work teams here from performing to their maximum effectiveness (R).
Appendix G: Perceived leadership effectiveness
(Hains, Hogg, & Duck, 1997)

Participants (followers) were asked to rate the following items on a 7-point scale (1 = Strongly disagree and 7 = Strongly agree).

To what extent the leader:

1. Has qualities for good leadership (qualities)
2. Matches your image of a good leader (fit image)
3. Behaves as a leader should (behave)
4. Would be an effective leader (effective)

Followed by the following questions:

1. Do you like your leader (like leader)?
2. Overall goodness of the leader (good leader)
3. Support for the leader (support leader)
4. Endorsement of the leader (endorse)
5. Willingness to defer to the leader (defer)
6. Expectations of being influenced by the leader (influence)
Appendix H: GLOBE Study: A Summary Comparison of South Asian and Anglo Culture Clusters on the nine ‘As is’ and ‘Should be’ cultural dimensions
Dear Respondent,

My name is Harinder Chhina and I am a PhD student at Sprott School of Business, Carleton University, Ottawa. I, under supervision of my supervisors, am conducting research pertaining to South Asian immigrants into Canada who are currently employed in leadership roles in Government or private organizations. This research involves investigating the effects of a South Asian immigrant’s effectiveness as a leader in the workplace, and how such leadership effectiveness is influenced not only the way the immigrant has adapted to the destination country’s culture but also by situational factors such as the ethnic composition of subordinates as well as how inclusive (or otherwise) the organizational culture is. At present there is no clear understanding as to how this dynamic unfolds. This research is aimed to address these questions.

It is our understanding that you (as a South Asian immigrant) are currently holding a leadership role and are thus in a position to offer valuable inputs towards this research. By completing a questionnaire, which will require 15-20 minutes of your time, you will help us understand the aforementioned interactions. Results from this research will benefit not only such future immigrants but also others such as business leaders and policy makers so as to maximise the potential of such immigrants in their new chosen ‘home’.

Appendix I – Cover letter
Please be assured that your responses will be held in complete confidence. No one in your organization will see the questionnaire given to you, or your subordinates. Only the summary results from the entire study will be presented in the final report.

We will be sending you the surveys in about a week’s time. Detailed instructions will be included in the survey on how to complete it. If you have any questions or comments about this study, we would be happy to interact with you. Please email me at harry.chhina@carleton.ca, or either of my supervisors Dr. Steven Murphy at murphy@ryerson.ca or Dr. Linda Schweitzer at linda.schweitzer@carleton.ca

Thank you very much for helping with this important study.

Sincerely,

(Names of Candidate and supervisors)