

**GROWING UP IN CANADA: YOUTH ETHNIC IDENTITY  
AND CANADIAN IDENTITY**

by

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## **Abstract**

The present study examined early (grades 6-7) and middle adolescents' (grades 8-9) sense of belonging to school and to Canada. Belonging entails feelings of connectedness to our families, friends, schools, communities, and nations. Several studies have investigated adolescents' sense of belonging to school but few have examined whether youths' belonging to school varied as a function of ethnicity, time lived in Canada, ethnic discrimination, and ethnic identity. Moreover, early and middle adolescents' belonging to Canada has never been studied. Thus, the primary objective of the present study was to examine the role of youths' 1) time in Canada, 2) ethnicity, 3) their experiences with peer ethnic discrimination at school and 4) ethnic identity in explaining their sense of belonging to school and to Canada, respectively. The secondary objective of this study was to examine two distinct dimensions of ethnic identity – private regard and public regard – within a Canadian context. Early and middle adolescents enrolled in schools in Vancouver lower mainland participated in the present study. The first group included 158 students in grades 6 and 7 and the second group included 340 students in grades 8 and 9. Students in grades 6-7 were interviewed individually. Students in grades 8-9 were asked to complete a paper-and-pencil survey during a single group testing session. Results showed that discrimination was linked to both private and public regard. Additionally, for middle adolescents, the link between discrimination and public regard varied as a function of ethnicity. Years lived in Canada was linked to belonging to Canada, with students who have lived in Canada for six years or less reporting lower levels of belonging than their peers who have lived in Canada all their life. Higher levels of ethnic discrimination were associated with lower levels of school belonging but not lower levels

of Canadian belonging. As hypothesized, positive levels of private and public regard were associated with their sense of belonging to school and to Canada. Importantly, years lived in Canada significantly moderated the link between ethnic regard and belonging. The present study demonstrated the complexity of studying ethnic regard and Canadian belonging during adolescence.

## **Preface**

The author was responsible for all the aspects entailed in developing the study, including: the conceptualization and design of the study, collecting and analyzing the data, and reporting the findings.

Ethics approval for this research was obtained from the Behavioral Research Ethics Board at the University of British Columbia (certificate number: H12-01612).

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## **Dedication**

*To Lara and Ali*

## 1 Introduction

*“I think that nobody liked me because I was different. Everyone was calling me names. No matter what I did, I couldn’t fit. I was lonely, very lonely. I just sat there and watched them. Sometimes I tried to talk to them, but they didn’t understand what I was saying.”*

(Luka, 8-year-old from former Yugoslavia, as cited in Kirova, 2001, p.263)

A sense of belonging is a basic and universal human need (Baumeister & Leary, 1995). We develop a sense of belonging to our families, friends, communities, schools, and nations because it is crucial to our well-being. Belonging involves feelings of connectedness, positive relationships, and “complex performances of identity” (Caxaj & Berman, 2010, p. 21). Sometimes, however, developing a sense of belonging is a struggle complicated by certain challenges such as the unfamiliarity of an environment or groups of people, experiences with injustice in the form of ethnic discrimination, and negative perceptions of our personal and/or social identities. Adolescents who are newcomers to a country of resettlement may be especially vulnerable to such struggle (Caxaj & Berman, 2010). Against this backdrop, the primary objective of the present study was to examine adolescents’ sense of belonging, particularly to their schools and to Canada, while focusing on the association between belonging and: 1) time in Canada, 2) ethnicity, 3) peer ethnic discrimination, and 4) ethnic identity. The secondary objective of this study was to examine two dimensions of ethnic identity – public regard and private regard - as a critical source of belonging. In particular, the present study focused on public regard within the school context.

*Ethnic identity* is a complex and multidimensional concept, involving awareness of one’s ethnic group membership along with the value and emotional significance of this membership (Phinney, 1990, 1992). Ethnic regard, one of the important dimensions of



ethnic identity, is its evaluative component. It involves one's negative or positive attitude towards their group and it includes two types: private regard and public regard. Private regard is defined as the extent to which an individual has a positive perception of her/his ethnic group<sup>1</sup>. Public regard is defined as one's perceptions of how socially valued her/his ethnic group is by others in the broader society (see Ashmore, Deaux, McLaughlin-Volpe, 2004). Public regard has not received the empirical attention that private regard has received. Some researchers (e.g., Ho & Sidanius, 2010) have attributed this discrepancy to the absence of reliable and valid measures with which to evaluate public regard. Nonetheless, despite the obstacles in measuring public regard, recently researchers have emphasized the need to study public regard (e.g., Rivas-Drake, Hughes, & Way, 2009; Hughes, Way & Rivas-Drake, 2011). Notably, some researchers have suggested that it may be worthwhile to study public regard within specific contexts because "it is at the nexus of the individual and the contexts, in which, ... ethnicity and race are made salient to them" (Hughes et al., 2011). Such contexts include schools, the focus of public regard in this study.

To my knowledge, the nature of the relation between public regard and belonging to Canada has not been studied, at least not within the published literature. In contrast, several studies (to be reviewed below), mostly conducted with African American youth, have examined the connection between public regard and school belonging. To date, however, no study has examined the link between public regard, specifically within the school context, and school belonging. Thus, the present study extended the existing

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<sup>1</sup> Private regard was examined in this study though it was of secondary interest.

literature by assessing the extent to which public regard was associated with belonging to school and to Canada, respectively.

Furthermore, ethnic differences and length of time lived in Canada have not been studied in relation to youths' sense of belonging to school or to Canada among early and middle adolescents. However, the findings from the few existing studies (to be reviewed in detail below) suggest that youth who are born outside Canada have a weaker sense of belonging than youth who are born in Canada (e.g., Lee & Hébert, 2006). Indeed, the first study to examine belonging to Canada, as an outcome, revealed that, among Canadians of 15 years of age and older, immigrants who reported living in Canada for less than ten years expressed a lower sense of belonging than Canadian-born respondents (Wu, Hou, & Schimmele, 2011). However, the authors did not find ethnic differences in reported belonging to Canada. The present study explored whether years lived in Canada moderated the association between regard and sense of belonging to school and to Canada, respectively.

Unlike public regard, experiences with peer ethnic discrimination among children of Canadian immigrants, particularly newcomers, have been documented (e.g., Khanlou, Koh, & Mill, 2008; Li, 2009; Salehi, 2010), indicating that newcomer youth do not only feel excluded by peers from other ethnic groups but also from others of the same ethnicity who were born in Canada. Discrimination has also been linked to ethnic regard. In fact, several studies conducted with ethnic minorities in the US have shown that ethnic discrimination and private and public regard are negatively correlated and a few have demonstrated that higher levels of discrimination contributed to lower levels of private regard as well as public regard (e.g., Rivas-Drake et al., 2009). To date, however, no

study has examined whether ethnicity moderates the link between discrimination and private regard and public regard, respectively.

Early adolescents in grades 6-7 enrolled in elementary/ and middle adolescents in grades 8-9 enrolled in secondary schools participated in the present study. Most of the existing literature on ethnic regard and belonging has focused on middle to late adolescents and young adults. It is only recently that researchers have turned their attention to early adolescents. Thus, our understanding of early adolescents, their ethnic identity and its connection to belonging, particularly national belonging<sup>2</sup>, is in its early stages and far from conclusive (see Hughes, Way, & Rivas-Drake, 2011; Pahl & Way, 2006; Rivas-Drake et al., 2009).

Against this backdrop, the present exploratory study had three objectives: 1) to extend the literature on ethnic regard, particularly public regard within school, by examining the construct in a new (Canadian) context (the majority of extant studies have been conducted in the US with African Americans), 2) to examine how time in Canada, ethnicity, discrimination, and private regard and public regard within school contribute to students' feelings of belonging both to their school and to Canada, 3) to examine the extent to which years lived in Canada and ethnicity, respectively, moderated the link between ethnic discrimination and private regard and public regard within school, and 4) to determine whether years lived in Canada and ethnicity moderated the link between private regard and public regard within school and belonging to school and to Canada, respectively.

This document includes the following sections:

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<sup>2</sup> Belonging to a country of resettlement is also defined as national identity.

**1a) Literature review:** First presented is an overview of recent research and theory on ethnic identity, a detailed discussion of ethnic regard including a review of the development of measures evaluating private regard and public regard, an overview of the ethnic differences and its connection to discrimination and belonging, and a summary of the literature on belonging to school and to Canada, respectively, and a brief statement to highlight the significance of including length of time in Canada as a factor in the study.

**1b) Statement of the problem:** Following the review of literature, the focus of the present study is described, including the rationale for and significance of the study, and the research questions to be addressed.

**2) Methodology:** This section describes the participants in the study, the procedures involved and the measures used.

**3) Results:** This section presents the findings of the study.

**4) Discussion:** The last section interprets the findings of the study as well as limitations and future directions.

## **2 Review of Literature**

The literature reviewed below is divided into several parts. The first part reviews the theoretical background of ethnic identity, the conceptualization of private and public regard, ethnic differences in regard, as well as their connection to discrimination. The second part examines the universal need to belong. Of particular interest was research on belonging to school and belonging to Canada. The last section provides a brief overview of the significance of studying the effects of time lived in countries of resettlement. Against this backdrop, a statement of the problem is outlined, highlighting the objectives and research questions that guide the present investigation.

### **2.1 Ethnic identity**

Ethnic identity involves one's psychological relationship with her/his own ethnic group (Phinney, 1990), including one's attitudes about her/his ethnic group. Ethnic identity has long captured the interest of theorists (see Ashmore, Deaux, & McLaughlin-Volpe, 2004; Fuligni et al., 2005; Kiang & Fuligni, 2009a, b; Phinney, 1990; Yip & Fuligni, 2002 for a review). Two theories that have profoundly shaped the study of ethnic identity in developmental research are Erikson's Theory of Identity Development (1968) and Tajfel's Social Identity Theory (SIT) (1974, 1981; Tajfel & Turner, 1979).

#### **2.1.1 Ethnic identity during adolescence: Theoretical overview**

In developmental research, Erikson's (1968) theory of ego identity development continues to impact current studies of ethnic identity during adolescence. According to this theory, identity development is of particular relevance during adolescence, a time of heightened questioning about the self and one's uniqueness, and examination of one's values, traditions, and history (Kiang & Fuligni, 2009b). Ethnic identity during

adolescence involves questioning, exploring, and eventually ascertaining and committing to a sense of self and social identity (see Phinney, 2003).

In a review of identity processes among ethnic/racial minorities in the US, Spencer and Markstrom-Adams (1990) argue that identity development is a challenging task for all adolescents, but that it is particularly complex for ethnic minorities in the US, given the social and functional significance of ethnicity and its salience from the perspective of the larger, dominant society. Like the US, the identity development of youth of minority backgrounds in Canada may be further complicated as a function of skin color, values, language, physical appearance and their difference from the dominant society. In contrast, for White youth, whose ethnicity in the US and Canada has been a majority, ethnic identity has not been considered salient; therefore frequently not of research interest. However, given that ethnic diversity is on the rise, the ethnic identity of White youth has been receiving scholarly attention (e.g., Brown, Spatzier, & Tobin, 2010).

Whereas Erikson's theory highlights adolescence as a formative time for ethnic identity, Tajfel's theory explores the meaning of identifying with a group. Tajfel's (1974, 1981) social identity theory (SIT) has been frequently used in the examination of ethnic identity among school-aged children although the theory has focused mainly on adults. According to Tajfel, social identity, including ethnic identity, is "that part of an individual's self-concept which derives from her/his knowledge of her/his membership of a social group (or groups) together with the emotional significance attached to the membership" (p. 69). SIT gave significance to the evaluative aspect of ethnic identity (see Crocker, Luhtanen, Blaine, & Broadnax, 1994; Luhtanen & Crocker, 1992). In other

words, the theory recognized the importance of how one privately views their group and how one believes others to perceive their group. This evaluative aspect of ethnic identity, also known as ethnic regard, is one of the important dimensions of ethnic identity.

### **2.1.2 Ethnic regard: A critical component of ethnic identity**

Ethnic identity is recognized as dynamic, multidimensional, and contextual (Ashmore et al., 2004; Fuligni et al., 2005; Kiang & Fuligni, 2009b; Liebkind, 2006; Phinney, 1990, 1992; Phinney & Ong, 2007; Sellers, Smith, Shelton, Rowley, & Chavous, 1998; Yip & Fuligni, 2002). Some of the components of ethnic identity include self-categorization (labeling oneself as a member of a certain social group); belonging (the extent to which an individual feels emotionally connected to the social group); centrality (the extent to which group membership is seen as important to an individual); and regard (the person's evaluation/attitude towards their own group).

As noted previously, researchers (e.g., Crocker & Luhtanen, 1992; Sellers, Rowley, Chavous, Shelton, & Smith, 1997) have considered two types of ethnic regard: private regard and public regard. Private regard refers to one's positive or negative evaluation of one's own ethnic group; to what extent do I view my ethnic group positively or negatively? Public regard, on the other hand, refers to one's perception of how others evaluate his/her ethnic group. In other words, to what extent do I think others perceive my group positively or negatively (Ashmore et al., 2004)? In comparison to private regard, public regard has been an understudied dimension of ethnic identity (Ashmore et al., 2004; Hughes et al., 2011; Rivas-Drake et al., 2009). As indicated by the low to moderate correlations between private regard and public regard documented in several studies (see Ashmore et al., 2004; Crocker et al., 1994; Hughes et al., 2011),

one's public regard beliefs do not necessarily have to be in agreement with one's own attitudes towards their group. Public regard, specifically public regard within the school context, was of particular interest in this study. Private regard, examined in this study as well, was of secondary interest.

**Assessing private and public regard.** In order to understand the concepts of public and private regard, it is important to consider how these constructs have been operationalized in research. Crocker and Luhtanen's (e.g., 1990; Crocker, Luhtanen, Blaine, & Broadnax, 1990; Luhtanen & Crocker, 1992) research on collective self-esteem and Sellers et al.'s Multidimensional Model of Racial Identity (MMRI; Sellers et al., 1997; Sellers, Smith, Shelton, Rowley, & Chavous, 1998), which only focused on African Americans, have shaped the conceptualization and operationalization of private and public regard. However, both bodies of work have been conducted primarily with college students and/or adults in the US. The private regard and public regard of school-aged children has emerged only recently as an area of research interest.

Following the principles of SIT, Luhtanen and Crocker (1992) developed a collective self-esteem (CSE) scale in order to measure the extent to which individuals generally viewed their social group positively. Luhtanen and Crocker (1991, 1992) argued that there are stable individual differences in collective self-esteem just as there are stable individual differences in personal self-esteem. Private CSE and Public CSE were two of the subscales they developed. The Private CSE subscale, which was developed to tap private regard, was developed to determine one's judgment of their social group or groups. To tap private regard, Luhtanen and Crocker (1992) developed the following items: "I often regret that I belong to some of the social groups I do"; "In



general, I'm glad to be a member of the social groups I belong to"; "Overall, I often feel that the social groups of which I am a member are not worthwhile"; "I feel good about the social groups I belong to". Among college students, Crocker, Luhtanen and their colleagues reported good internal reliabilities for Private CSE, ranging from  $\alpha = .71$  to  $\alpha = .80$  (see Crocker et al., 1994; Luhtanen & Crocker, 1992).

The Public CSE subscale, which was tapped to measure public regard, was developed to assess how individuals believed others viewed their social group or groups, suggesting that one's perceptions of their group are strongly linked to how they thought others perceived their group. To tap public regard, Luhtanen and Crocker (1992) used four items: "Overall, my social groups are considered good by others"; "Most people consider my social groups, on the average, to be more ineffective than other social groups"; "In general, others respect the social groups that I am a member of"; and "In general, others think that the social groups I am a member of are unworthy". Using the subscale with college students, Crocker, Luhtanen and their colleagues reported good internal reliability for Public CSE, ranging from  $\alpha = .78$  to  $\alpha = .88$  (see Crocker et al., 1994; Luhtanen & Crocker, 1992).

Crocker et al.'s work heavily informed MMRI's conceptualization of regard (Sellers et al., 1997, 1998). Sellers et al. developed the MMRI as a theoretical framework to recognize the importance of race in the self-concepts of African Americans and the qualitative meaning of being an African American. MMRI considered the historical and cultural experiences that were unique to African Americans, given that their history in the US differs from that of other ethnic minorities (Sellers et al., 1997; 1998). Private regard and public regard were two of the dimensions that emphasized what it meant to be

African American. To operationalize the MMRI, Sellers et al. developed the Multidimensional Inventory of Black Identity (MIBI). Private regard and public regard were included as subscales of MIBI and the initial development of their items were influenced by Crocker and Luhtanen's Public CSE. Specifically, Sellers, Rowley, Chavous, Shelton, and Smith (1997) developed private regard and public regard items based on the items from the Private CSE and Public CSE subscales.

In the initial version of the MIBI (Sellers, 1997), private regard was tapped using seven items, with the authors introducing three additional items to the four they modified from the Private CSE, replacing "social groups" with "Black people". The authors, however, were not satisfied with the performance of the Private Regard subscale ( $.55 < \alpha < .61$ ). After further revisions, Sellers et al. (1998) published a Private Regard Subscale with six items: "I feel good about Black people"; "I am happy that I am Black"; "I feel that Blacks have made major accomplishments and advancements"; "I often regret that I am Black"; "I am proud to be Black"; "I feel that the Black community has made important contributions". These items were first tested with a group of college students indicating acceptable internal consistency ( $\alpha = .78$ ). Later studies further modified the original items proposed by Sellers et al. (1998). For example, Chavous, Bernat, Schmeelk-Cone, Caldwell, Kohn-Wood, and Zimmerman (2003) used three items to tap private regard (e.g., "I am proud of Black people"), reporting an  $\alpha$  of .67, indicating adequate but not exceptional internal consistency for their 3-item measure.

Sellers et al. measured public regard by adapting the four items of the Public CSE, by replacing "social group" with "Blacks", but found that the subscale's internal consistency was extremely weak,  $\alpha = .20$ . Sellers et al. (1997) attributed the poor

performance of the earlier public regard subscale to the small number of items and to the applicability of the construct for African Americans. Upon further investigation, Sellers et al. (1998) presented a different version of public regard with additional items. The six items were: “Overall, Blacks are considered good by others”; “In general, others respect Black people”; “Most people consider Blacks, on the average, to be more ineffective than other racial groups”; “Blacks are not respected by the broader society”; “In general, other groups view Blacks in a positive manner”; and “ “Society views Black people as an asset” (Sellers et al., 1998). These items, when first tested with a group of college students, yielded acceptable internal consistency:  $\alpha = .78$ .

Subsequent studies tended to modify Sellers et al.’s (1998) public regard subscale, using it mostly with African American students in their late adolescence (e.g., Chavous et al., 2003; Seaton, 2009; Sellers et al., 2006). For example, Chavous et al. (2003) used a shorter version of the MIBI and tapped private regard using three items. Sample items included “I am happy that I am Black” and “I am proud of Black people” ( $\alpha = .67$ ). Public regard was assessed with two items only: “In general, other groups view Blacks in a positive manner” and “Overall, Blacks are considered good by others”,  $r = .46$ . Using the Spearman-Brown equation, the authors reported that their correlation corresponded a Cronbach alpha of .84 for six items. Seaton (2009), as well, used a shortened version of the MIBI Private Regard and Public Regard Subscales with African American adolescents and demonstrated adequate internal consistency (i.e.,  $\alpha = .67$  for private regard and  $\alpha = .69$  for public regard).

In 2008, Scottham, Sellers, and Nguyễn (2008) published MIBI-Teen, a shorter version of the MIBI designed specifically for adolescents. The measure included three

items for each type of regard. The private regard subscale included three items: “I am happy that I am Black”; “I am proud to be Black”; and “I feel good about Black people” and showed good internal consistency ( $\alpha = .76$ ). The public regard subscale, also including three items -- “Most people think that Blacks are as smart as people of other races”; “People think that Blacks are as good as people from other races”; “People from other races think that Blacks have made important contributions” showed adequate internal consistency ( $\alpha = .66$ ).

Shortly after Scottham et al. (2008), researchers began to assess private regard and public regard, not only among African Americans, but also among Asian and Latin Americans (e.g., Hughes et al., 2011; Rivas-Drake et al., 2008, 2009). Notably, these studies focused on early and middle adolescents. For example, Rivas-Drake et al. (2008) used three items to measure private regard and three items to measure public regard that were modified from MIBI and MIBI-Teen with Chinese American sixth graders. Both subscales demonstrated good internal reliabilities (private regard,  $\alpha = .77$ , and public regard,  $\alpha = .80$ ) (see also Hughes et al., 2011)<sup>3</sup>.

Taken together, these studies suggest that the internal reliabilities of regard measures have been acceptable but not excellent and that the measurement of regard has posed some challenges to researchers over the past decade. In fact, several researchers have noted that the measurement of private regard has often overlapped with the measurement of ethnic centrality and ethnic belonging, despite their conceptual differences (e.g., Ashmore et al., 2004; Sellers et al., 1997). Additionally, the

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<sup>3</sup> In a recent study co-authored by Hughes and Way (McGill, Hughes, Alicea, & Way, 2012), the authors disclosed that the public regard items they were provided from R. M. Sellers in 2003 were different from the three public regard items that were eventually published in Scottham et al., (2008).

measurement of public regard has not been consistent. For example, some studies have tapped youths' beliefs about respect for their ethnic group (e.g., Chavous et al., 2003), whereas other studies tapped youths' belief about how others perceive their group's accomplishments and success (e.g., Scottham et al., 2008), and some tapped both (e.g., Sellers et al., 1998). Also, it is unclear why the three public regard items that were developed by Scottham et al. (2008) for teens have not been used in studies of adolescents.

These methodological challenges in assessing public and private regard were taken into consideration in the present study. In particular, given that the present study explored private and public regard among ethnically diverse samples of adolescents in Canada, initial efforts focused on adapting items from previous scales in developing self-report indices of private and public regard among grades 6-9 students from a range of ethnic backgrounds (E.g., Chinese, Vietnamese, Indian, European) and evaluating the psychometric properties of these adapted scales. Specifically, in the present study, items that were common between Private/Public CSE (Luhtanen & Crocker, 1992), MIBI (Sellers et al., 1998) and MIBI-T (Scottham et al., 2008) as well as items that may have been unique to only one of original scales were considered in the present study. Principal component analyses were conducted to examine whether the data of the present study produced components that were similar to those obtained in previous studies.

As mentioned earlier, although the works of Crocker and Luhtanen (e.g., Crocker & Luhtanen, 1990, Luhtanen & Crocker, 1992) and Sellers et al. (1997, 1998) have contributed to efforts to conceptualize and operationalize measures of private regard and public regard as dimensions of ethnic identity, more recent research has explored the

significance of studying the public regard of school aged-children and adolescents, as described in the next section.

### **2.1.3 Recent research on private regard and public regard of youth**

Studies conducted with adolescents (as reviewed below) have shown that private regard and public regard vary as a function of ethnicity and are linked to discrimination and various indices of well-being.

**Private regard.** Studies examining ethnic differences in ethnic private regard have generally indicated that White youth report lower private regard than their minority peers. For example, using their Private CSE scale with college students, Crocker et al. (1994) found that White and Asian college students reported lower private regard for their ethnic group than did their Black peers for their ethnic group. A decade later, Fuligni and his colleagues (2005) demonstrated that European Americans reported lower levels of ethnic private regard than did Chinese or Mexican Americans, who did not differ from one another. Rivas-Drake and her colleagues (2009b) found that White, Black, and Chinese (and Dominican) youth did not differ from one another in reports of private regard, although White youth reported lower ethnic private regard than their Puerto Rican peers. Unlike ethnic minorities, most White youth of European descent have lived in the US or Canada all their lives and were born into families who have lived in the US and Canada for generations, thus feeling proud of an ethnic group that they might have not been exposed to may be irrelevant to them. To our knowledge, no study has examined the impact of years lived in a country of resettlement, such as the US or Canada, on youth private regard. One focus of the present study was to examine whether there was a link between years lived in Canada and youth private regard.

The buffering role of private regard has also been examined previously. Specifically, several studies have assessed the extent to which private regard protected youth from the negative effects of discrimination in terms of their self-esteem and school adjustment. For example, Crocker et al. (1994) found that higher levels of private regard were linked to higher levels of self-esteem and greater life satisfaction. Furthermore, Chavous et al. (2003) found that higher levels of private regard were positively correlated with reports of school attachment among African American youth in twelfth grade. However, so far, no study has investigated Canadian belonging as an outcome among early and middle adolescents and no study has specifically examined whether years lived in Canada moderated this link.

**Public regard.** Although research on different dimensions of ethnic identity in school-aged children has grown in the past few years, public regard remains an understudied construct (Ashmore et al., 2004; Hughes et al., 2011; Rivas-Drake et al., 2009). Recently, however, the construct has captured the interest of developmental researchers (e.g., Hughes et al., 2011) have noted that public regard may provide new insights into youth perceptions of inter-ethnic experiences because prejudice is not only portrayed through youth reports of isolated incidents of discrimination. Rather, it is also portrayed through their perceptions of society's views of their ethnic group and their beliefs about where their ethnic group ranks in the constructed social hierarchy (Hughes et al., 2011; also see Verkuyten & Kinket, 2000).

Using their scale to examine differences in public CSE among African American, Asian, and White college students, Crocker et al. (1994) specifically asked their participants to think of their race in responding to the public CSE items. Their findings

demonstrated that public CSE varied as a function of the respondent's ethnic background. Specifically, Crocker et al. found that Black students reported lower public regard than Asian and White students, and that Asian students reported lower public regard than White students. Thus, White youth had the highest public CSE. Similarly, in a recent study with sixth graders, Rivas-Drake, Hughes, and Way (2009) found that African American early adolescents reported the lowest ethnic public regard, followed by Chinese youth who reported lower levels of ethnic public regard than did White, Dominican, and Puerto Rican participants who did not differ from one another. However, in another study, Rivas-Drake et al. (2008) found no significant differences in public regard between Chinese American sixth graders and their African American peers.

The positive public regard of White youth in the US can be linked to their privilege as a majority in the larger society and their dominance throughout US history. In contrast, African Americans have had a tumultuous history in the US where they experienced injustice and oppression for a long time. Although other ethnic minorities have been victims of injustice in the US, what African Americans have endured in the US is unique to their group (see Sellers et al., 2008).

In a recent longitudinal study (Hughes, Way, & Rivas-Drake, 2011) that followed students annually from sixth to eighth grade, results showed that Puerto Rican and Dominican youth reported higher levels of public regard than their African American peers. Moreover, the levels of public regard reported by Chinese youth, initially, did not differ significantly from those of their African American peers. However, over time the public regard of Chinese youth tended to increase, while the public regard of African American, Puerto Rican, and Dominican youth decreased. Post hoc group comparisons



revealed that, for African American, Puerto Rican, and Dominican youth, the declining slopes of public regard over time were not different from each other but differed from those of their Chinese peers.

Interpreting the patterns of their findings, Hughes et al. suggested that taking the context into account is important, highlighting the role of stereotypes and other people's expectations. For example, they explained how the influence of the "model minority" myth, which posits that certain ethnic minorities (e.g., Chinese, Korean) attain higher levels of achievement than the general population (e.g., American, Canadian population), could gain prominence as Chinese youth enter middle school and are placed in advanced level classes. In contrast, African American and Latin American youth are more often tracked in lower level classes. Differences such as these could influence youths' beliefs on others' perceptions of their ethnic group. Given these findings, Hughes et al. (2011), emphasizes the role of context in public regard, asserting that youths' public regard in specific contexts, such as school, may contribute to how they think society views them. Thus, they suggested that future studies examine public regard in a particular context as opposed to society in general: "Public regard beliefs lie at the nexus of the individual and the contexts, in which as numerous theorists have noted, ethnicity and race are made salient to them" (Hughes et al., p. 8, 2011).

To our knowledge, only one study to date has examined public regard within a specific context. Rivas-Drake (2011) studied Latina/o youth's (14-19 years old) public regard from adults at school and its relation to school engagement and academic achievement. She also examined the relationship between public regard by adults at school (e.g., "A lot of adults at school don't expect my ethnic group to do well in life")

and personal support received from adults (unrelated to ethnic group: e.g., “Adults at school care about me”). Results showed that public regard from adults at school was positively linked to student grades, self-reported academic competence, and behavioral engagement. Interestingly, however, there was no correlation between public regard from adults at school and general support, suggesting that the two variables were qualitatively different from one another (Rivas-Drake, 2011).

Taking into consideration the recent findings by Hughes et al. (2011) and Rivas-Drake (2011), the present study examined public regard within the Canadian school context specifically. In particular, among grade 6 and 7 students, public regard from “others” at school was investigated, and among grade 8-9 students, public regard from adults at school and public regard from students at school, respectively, were examined.

Public regard has been studied as a predictor of self-esteem and other indices of well-being and social adjustment (e.g., Chavous et al., 2003; Crocker et al., 1994). For example, Crocker et al. (1994) found that public regard was linked to several indices of well-being (for Americans of European and Asian descent), including positive associations with life satisfaction, and negative associations with depression and hopelessness. In a study of African American twelfth graders, Chavous, Bernat, Schmeelk-Core, Caldwell, Kohn-Wood, and Zimmerman (2003) reported that participants who reported a more positive public regard also reported better achievement and attachment to school. Similarly, a recent study of Chinese sixth graders (Rivas-Drake et al., 2008) showed that a more positive public regard was linked to lower level of depressive symptoms. To date, no study has examined the possible link between public regard within the school context specifically, and one’s sense of connectedness to school

or to Canada. Examining this connection was one of the central objectives of the present study.

#### **2.1.4 Private regard, public regard, and discrimination**

Only a handful of studies have investigated the association between private/public regard and discrimination (e.g., Rivas-Drake et al., 2008, 2009; Sellers et al., 2006; Sellers & Shelton, 2003). Several qualitative studies have revealed that, as a result of prejudice, discrimination and fewer opportunities, youth from minority groups longed to be part of a high-status group (see Phinney, 1989; Way et al., 2008). Quantitative studies examining the links between private regard and reported discrimination, however, have yielded mixed findings. In one recent study, Rivas-Drake et al. (2009) found that higher levels of discrimination were linked to lower levels of private regard among minority youth, although in another study comparing youth of Chinese descent with African American youth, Rivas-Drake et al. (2008) found that private regard and discrimination were not correlated for Chinese American youth or for African American youth. Indeed, among African American youth and young adults, Sellers and his colleagues (Caldwell, Kohn-Wood, Schmeelk-Cone, Chavous, & Zimmerman, 2004; Sellers et al., 2003; Sellers et al., 2006) have consistently found that private regard was not correlated with discrimination. In contrast, results of a study by Rivas-Drake et al. (2009) that included youth from several ethnic minority backgrounds, including African American, showed a negative correlation between private regard and discrimination, with lower levels of private regard associated with higher levels of discrimination.

Unlike the inconsistent associations observed between discrimination and private regard, the link between public regard and discrimination has been consistently found to

be negative. For example, in a study that included Chinese American youth, Rivas-Drake et al. (2008) found a negative correlation between public regard and peer discrimination at school. Sellers and his colleagues also found a consistent negative correlation between public regard and discrimination with African American youth (Caldwell et al., 2004; Sellers et al., 2003; Sellers et al., 2006).

Presently, only Rivas-Drake et al. (2009) have examined discrimination as a predictor of public regard, arguing that discrimination could be important predictors of both private regard and public regard, especially during early adolescence. Considering a sample that included Black, Puerto Rican, Dominican, Chinese, and White youth, Rivas-Drake et al. found that perceived peer discrimination contributed to lower levels of public regard (lower levels of respect from society towards one's group) as well as private regard. In other words, the more students reported experiencing peer discrimination, the less positively they viewed their own ethnic group (private regard) and the more negatively they thought others viewed their ethnic group (public regard). Accordingly, one focus of the present study was to examine the link between discrimination and public regard within the school context to further corroborate the findings of Rivas-Drake et al. (2009), albeit in a Canadian context.

One thing that remains missing in the literature is information on whether one's ethnicity moderates the link between discrimination and private regard and public regard within the school context. In other words, is peer discrimination more detrimental to certain ethnic groups' feelings of private/public regard than others? Extant research indicates that youth are aware of interethnic divides and hierarchies well before adulthood (e.g., Li, 2009; Tatum, 1997; Verkuyten & Kinket, 2000). For example,

Verkuyten and Kinket (2000), in the Netherlands, found that a group of 10 to 12-year-olds of Dutch origin who ranked ethnic groups from most favored to least favored accurately matched the constructed social hierarchy in wider society. In other words, children could accurately report the social status of the different ethnic groups in the Netherlands' social hierarchy. Although the present study did not directly identify a social hierarchy, it was designed to shed light on how discrimination may contribute to the feelings of youth from certain ethnic groups about the perceptions of their group by others around them (e.g., peers at school). Specifically, building on the extant literature, the present study examined whether higher levels of discrimination contributed to lower levels of private regard and whether ethnicity moderated this relation.

In addition to furthering our understanding of the connection between public regard, discrimination, and ethnicity, one other objective of the present study was finding out how belonging to school and belonging to Canada, respectively, are connected to youth perceptions of regard within the school context.

## **2.2 Sense of belonging: A universal need**

The need to belong has been identified as a basic human motivation (Baumeister & Leary, 1995). According to Anant (1966), belongingness is “a sense of personal involvement in a social system so that the persons feel themselves to be an integral and indispensable part of the system” (p.21). A sense of belonging involves reciprocity. It entails feeling that one matters and is of value to their society or community and that the society or community is of value to the individual (Faircloth & Hamm, 2005; also see Caxaj & Berman, 2010; Hagerty, Williams, Coyne, Early, 1996). One's sense of belonging also includes feelings that they fit and share characteristics that facilitate them

being part of a group (Caxaj & Berman, 2010; Hagerty et al., 1996). As children grow, they do not only develop a sense of belonging to their family but also to their community, country, and social groups (Kestenberg & Kestenberg, 1998). In the present study, youths' sense of belonging to school and to Canada, respectively, was investigated.

### **2.2.1 Sense of school belonging**

In the literature, a sense of school belonging is identified as a student's level of attachment, commitment, involvement and belief in their school (Kia-Keating & Ellis, 2007; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). One way that youth develop a sense of belonging to school is through positive teacher-student and student-student relationships (Osterman, 2000; Zins, Weissberg, Wang, & Walberg, 2004). School belonging has been positively linked to several indices of well-being and academic achievement, including a higher self concept, improved social skills, higher academic achievement and motivation, and lower depression and social distress (Battistich, Solomon, Watson, & Schaps, 1997; Goodenow, 1993; Hagborg, 1998; Roeser, Midgley, & Urdan, 1996). In fact, Fine (1991) found that a lack of school belonging was a direct cause for dropping out high school. School belonging was explored in the present study because schools mirror the values and beliefs of a society, making it one of the most powerful socialization forces for children and youth outside of the family.

Although the significance of school belonging is well documented, the role ethnic identity and immigration-related factors, such as time in country of settlement and/or experiences with discrimination, have not been adequately explored in relation to school belonging. A few studies, however, have examined perceptions of school belonging among ethnic minority youth, mostly African Americans (e.g., Booker, 2006; Fordham &

Ogbu, 1986). In one study that explored school belonging for youth of African, Asian, Latina/o, and European descent, Faircloth and Hamm (2005) found that indicators of school belonging, including friendship nominations, time spent in extracurricular activities, bonding with teacher, and perceived discrimination based on ethnic group membership, were important to youth of European and Latina/o descent. For African American and Asian American youth, on the other hand, friendship nominations were not a significant indicator of school belonging, suggesting that youth of different ethnic backgrounds may experience school belonging differently. Ethnic differences were also demonstrated in a recent Canadian study (Gagné, 2009) that found that youth of European descent reported a stronger sense of school belonging than their Asian peers.

In the one Canadian study to date that has specifically investigated the link between years lived in Canada and students' sense of school belonging, Gagné (2009) reported no significant relation between years lived in Canada and youth reports of school belonging. Nonetheless, the few qualitative studies that have looked at the significance of positive relationships at school for newcomer youth underscore the significance of school belonging, especially for this group of youth (e.g., Li, 2009; Suárez-Orozco, Pimentel, & Martin, 2009). For example, in a qualitative study of youth of Chinese origin in Vancouver, Li (2009) found that Chinese youth who had recently moved to Canada did not only find themselves different from their White peers and youth of other ethnic groups, but also from their Chinese peers who have been living all their life in Canada. Fitting in was a challenge to these youth. Against this backdrop, the connection between years lived in Canada and belonging to school was examined in the present study in order to extend the limited literature in the area.

In one study (Chavous, Bernat, Schmeelk-Cone, Caldwell, Kohn-Wood, & Zimmerman, 2003) that examined the connection between public regard and attachment to school among twelfth grade, African American youth, participants who reported higher levels of private regard and public regard also reported higher levels of school attachment and school relevance. However, overall public regard was tapped and not public regard within the school context and the study did not include youth of other ethnic backgrounds. In the present study, the extent to which public regard within the school context contributed to school belonging above and beyond discrimination, ethnicity, and time in Canada was examined.

### **2.2.2 Sense of belonging to Canada**

A sense of belonging to Canada entails feeling valued, safe, and “at home” in Canada (Wu et al., 2011). Belonging to Canada is an aspect of national identity, or Canadian identity, that is understudied, especially during early and middle adolescence. In fact, a sense of belonging to Canada, as an outcome, was never studied before Wu et al. (2011). However, they only focused on individuals who were 15 years or older (mean age was 43 years) and they did not examine the role of the school context. Additionally, the connection between sense of belonging to Canada and public regard, to our knowledge, has never been investigated.

Despite the dearth of literature, the little we know about belonging to Canada suggests that a closer examination is warranted. For example, using data from Statistics Canada’s 2002 Ethnic Diversity Survey (EDS- a nationally representative survey of 42,476 Canadians 15 years and older), Wu et al. (2011) found that individuals who were born in Canada reported significantly higher levels of belonging to Canada than did those



been living in Canada between 11-20 years or over 20 years, although ethnic differences in reported sense of belonging to Canada were negligible. In contrast, in a previous study with American youth, Phinney, Cantu, and Kurtz (1997) found that White youth reported the highest levels of American belonging and that African American and Latina/o youth reported lower levels of American belonging.

In one recent qualitative study that focused on what it meant to be Canadian for immigrant youth who were born outside Canada with at least one parent born outside Canada (over 68% of Latin, Asian, South Asian, and Middle Eastern origin), and for non-immigrant youth (over 43% of European descent), Lee and Hébert (2006) found that 40% of non-immigrant youth and 15% of immigrant youth reported their enthusiasm for being Canadian, expressing their strong positive feelings towards the country. Discussing their findings, the authors stated that non-immigrant youth were more enthusiastic and confident in expressing their Canadian identity than their immigrant peers, who provided more rational statements connected to Canada being peaceful and caring. Taken together, these two studies suggest that time lived in Canada may be an important factor to consider in early and middle adolescents' sense of belonging to Canada. Moreover, we do not know if sense of belonging to Canada is influenced by youth perceptions of how others perceive their own ethnic group. To that end, the present study examined the interaction between youths' time in Canada and public regard within the school context.

### **2.2.3 Grade and sex differences in ethnic regard and belonging**

Recent studies examining private and public regard among ethnic minority youth have been mostly cross-sectional, focusing on a single grade-level and have considered private and public regard as predictors of other outcomes (see Rivas-Drake et al., 2009).

Similarly, the only study (Rivas-Drake, 2010) that has examined public regard within the school context did not examine grade differences in public regard because it was a predictor and not an outcome of interest in the study. In a longitudinal study, Hughes et al. (2011) found that private regard did not increase from sixth to eighth grade, although changes in public regard were linked to one's ethnicity, with the public regard of Chinese American students increasing over time while the public regard of African American, Dominican American, and Puerto Rican American youth decreased over time. Thus, although these studies shed some studies on grade differences in regard, we still know very little. Grade differences in belonging to Canada have not been examined to date and younger students have been found to report higher levels of school of belonging than older students (e.g., Newman, Newman, Griffen, O'Connor, & Spas, 2007).

Although several experts have hypothesized that girls would have stronger ethnic identities than boys, given the females' traditional role of preserving cultural values, several studies have demonstrated very weak or no sex differences in ethnic identity (e.g., Costigan et al., 2009, Fuligni et al., 2008, Fuligni et al., 2005; Pahl & Way, 2006). The examination of sex differences in ethnic identity (including private and public regard), and especially, Canadian identity remains scarce but sex differences in school belonging have been reported in several studies, indicating that girls have a higher sense of school belonging than boys (e.g., Furrer & Skinner, 2003; Ma, 2003; Roeser, Midgley, & Urdan, 1996). Accordingly, grade and sex differences were included in the preliminary analyses of the present study.

## **2.4 Length of time lived in Canada**

Researchers studying the academic achievement of immigrant youth in the US argue that the experiences of immigrant adolescents who are second or third generation do not accurately depict the experiences of those who have just arrived (e.g., Suárez-Orozco et al., 2010). Indeed, numerous studies have documented the differences in school achievement and motivation between youth who are born outside their homes of resettlement and their peers who are native-born (e.g., born in Canada or the US) (e.g., Fuligni, 1997; Kao & Thompson, 2003; Kao & Tienda, 1995). Suarez-Orozco (2009) highlighted that adolescents who have been in the US for five years or less face unique challenges such as language acquisition that may be unique to their status as newcomers in comparison to their peers who have moved to the US before adolescence or were born in the US.

Of particular interest in the present study was exploring the effects of time lived in Canada on youths' private regard, public regard within the school context, belonging to school, and belonging to Canada. The work of Wu et al. (2011) with individuals 15 years of age and older suggests that the length of time lived in Canada may influence youths' sense of belonging to school and to Canada, respectively. We do not know whether time influences youths' private or public regard. The present study sought to explore this connection between length of residence in Canada and belonging to school and to Canada, respectively, and the extent to which length of residence in Canada moderated the relation between public regard and belonging.

## **2.5 Statement of the problem**

The present study investigated feelings of belonging, both to school and to Canada, among early and middle adolescents, as a function of their perceptions of ethnic regard, both private and public. The associations between belonging and ethnic regard are explored within the school context, in terms of variations in demographic characteristics (grade level, sex), experiences of discrimination, ethnicity, and the length of time lived in Canada. In particular, our understanding of youth public regard within the school context, and the extent to which it may contribute to different levels of belonging to school and to Canada is a relatively unexplored research topic. As a secondary objective, the present study also examined the correlates of private regard and public regard within the school context. We know very little about private regard and public regard, which are believed to be critical components of ethnic identity, and their correlates during early adolescence (see Rivas-Drake et al., 2009).

The dearth of Canadian literature on youth private and public regard and belonging to school and to Canada is surprising given that multiculturalism is a basic tenet of Canadian society. In Canada, youth of ethnic minority backgrounds and/or youth who are new to Canada have the freedom to hold on to their ethnic background while developing a sense of belonging to Canada (see Coelho, 1998). Exploring the role of public regard within the school context and its link to belonging may be of particular significance to multiculturalism because it has the potential to elucidate youths' perceptions of the subtle, yet pervasive, messages and views of their surroundings on their ethnic group. Do they feel that their ethnic group is respected and valued in Canada where multiculturalism is an official policy? Although instances of discrimination should

not be overlooked, they only portray isolated incidences and represent only one aspect of prejudice (see Hughes et al., 2011).

Accordingly, the present exploratory study first sought to address issues of measurement, considering the following research questions. The first two research questions addressed issues of measurement.

- 1) Do the private regard, public regard within the school context, national belonging, and ethnic discrimination scales that have been developed and primarily used within an American context and with late adolescents measure ethnic and national identity and ethnic discrimination within a Canadian context among early and late adolescents?
- 2) Do private regard, public regard within the school context, discrimination, sense of belonging to school, and sense of belonging to Canada vary as a function of:
  - a) Grade level and sex of the respondents?
  - b) Time in Canada youth have spent in Canada?
  - c) Ethnicity of youth?

After exploring issues of measurement, a second objective of the present study was to examine the correlates of private regard and public regard. To date, only Rivas-Drake et al. (2009) have investigated ethnic discrimination as a predictor of private and public regard among early adolescents. Given the paucity of research on private regard and, especially, public regard within the school context among early and middle adolescents, the present study was also designed to examine variations in private regard and public regard within the school context as a function of experiences with peer discrimination, controlling for time in Canada and ethnicity. Specifically,

- 3) Does discrimination explain private regard and public regard within the school context?
- 4) Does the association between discrimination and private regard and between discrimination and public regard within the school context vary as a function of time in Canada and ethnicity, respectively?

Finally, the primary objective of the present study was to find out whether private regard and public regard within the school context are linked to belonging to school and, more importantly, to belonging to Canada, which has never been examined as outcome among early and middle adolescents. In particular, the study addressed the following:

- 5) How do youths' time in Canada, experiences with discrimination, perceptions of private regard, and perceptions of public regard within the school context predict their sense of belonging to school and to Canada, respectively, after controlling for grade level and sex<sup>4</sup>?
- 6) Does the time youth have lived in Canada moderate the link between private regard and belonging to school, or between public regard within the school context and belonging to school? Does the time youth have lived in Canada moderate the link between private regard and belonging to Canada, and between public regard within the school context and belonging to Canada?

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<sup>4</sup> Ethnic differences were included initially in examining correlates of belonging. However, they were eliminated because analyses showed that ethnicity was not linked to belonging to school or to Canada.

### **3 Methods**

#### **3.1 Rationale for studying adolescents**

The present study focused on students between early and middle adolescence (grades 6-9). Students in grades 6-7 were enrolled in one elementary and one middle school and students in grades 8-9 were enrolled in two secondary schools. This period of development, particularly early adolescence (grades 6-7), represents a unique time for the study of ethnic identity and Canadian belonging for a number of reasons.

First, there is a dearth of research on public regard during early adolescence, grades 6-7 in particular. Despite a burgeoning interest in the study of ethnic identity among adolescents, the majority of the scholarly work (for an exception, see Rivas-Drake et al., 2009) has not investigated public regard, *per se*, and/or has studied middle (mostly grade 9) to late adolescents (e.g., Chavous et al., 2003; Fuligni, Witkow, & Garcia, 2005; Kiang & Fuligni, 2009a) and young adults (e.g., Kiang & Fuligni, 2009b). Very few studies (e.g., French et al., 2006; Hughes, Way, & Rivas-Drake, 2011) have examined the differences in ethnic regard as students make the transition from early to middle adolescence or from elementary to secondary school. Although this study was not longitudinal, i.e., tracking the experiences of the same group of students over time, it did explore the nature of ethnic identity and belonging to Canada by examining the experiences of youth in between grades 6-9. Moreover, the existing studies on public regard with early adolescents have used very few items to tap public regard.

Second, despite research evidence showing that ethnic identity exploration (students questioning what it means to be a member of a group) does not become more stable until middle to late adolescence (see Pahl & Way, 2006), there is also evidence

indicating that feelings about ethnic group membership precede exploration and seem to increase with time (Pahl & Way, 2006). In other words, we cannot dismiss youths' feelings about their ethnic group until they have completed their exploration stage because they evaluate and develop feelings and attitudes about their group membership, generally, and ethnic group membership, specifically, well before adolescence and at an early age (Aboud & Doyle, 1995; Spencer & Markstrom-Adams, 1995). For example, as mentioned earlier in the introduction, Verkuyten and Kinket (2000) found that children between the ages 10 and 12 could accurately figure out the social status of the different ethnic groups in the Netherlands' social hierarchy.

Third, between early and middle adolescence, peers in school gain precedence in the lives of youth. "Fitting in" with the peer group becomes a priority. Indeed, studies reviewed earlier depict the significance of peers during this developmental stage (Rivas-Drake et al., 2009). Last, given that students in Canadian schools typically start secondary school in eighth grade, ethnic regard for students in Canada may not develop similarly to their American peers, where secondary school starts in ninth grade.

### **3.2 Procedure**

Four schools took part in the study: one elementary school, one middle school, and two secondary schools. The two secondary schools were in the same school district. In the elementary and middle schools, students enrolled in grades 6-7 were individually interviewed. In the two secondary schools, students in grades 8-9 completed a pencil-and-paper survey. Data was first collected with grade 6-7 students. The interviews with these younger students shed a light on which questions may have been challenging, thus informing what needed to be modified for participants in grades 8-9. Moreover, because



private regard and public regard within the school context have not been examined with grades 6-7 students in Canada, the interviews helped in understanding the extent to which early adolescents were developmentally ready to think about these two aspects of ethnic regard (a critical component of ethnic identity) and their belonging to Canada. Upon the completion of the grades 6-7 student interviews, data collection in grades 8-9 was undertaken.

### **3.2.1 Procedures: Grades 6-7 participants**

During the early stages of planning the research, two schools, with a diverse student body and many students born outside Canada, expressed interest in the topic of the present study. After receiving approval for the study from the University of British Columbia Behavioral Ethics Board and from their respective districts' review boards and one additional district's review board (approval from three school districts in total), these two schools were contacted by the author regarding participation in the present study. The author visited five s 6-7 classrooms in the middle school and the three grades 6-7 classrooms in the elementary schools to introduce the study, invite students to participate, explain the importance of getting parent/guardian written consent for their participation, and give them the parent/guardian consent forms. Translated parent consent forms were made available if requested by the school. Students who returned the signed forms had their names entered into a school-wide draw for a \$100 gift card from Future Shop. The draw was set up to encourage students returning the signed parent permission forms regardless of whether the parents/guardians consented to or declined their participation.

After consulting with the principals of the two schools, the author decided to have one-on-one individual interviews with the students to complete the survey. Interviews

were preferred because the principals expressed that some students might have an easier time answering the questions if the items were read to them. Additionally, this allowed for asking the students to express their reasoning for choosing their answers.

The author, along with trained research assistants conducted the one-on-one interviews. On average, an interview took 30 minutes. Only students who had parent/guardian consent (Appendix A) and who themselves provided assent (Appendix B) took part in the interviews. The study was conducted during school hours at a time approved by the classroom teacher. Each interview took place in a private, secluded space in the school and was presented as a paper-and-pencil survey that included multiple-choice questions. The interviewer read each item to the student out loud. After signing the assent form and before starting the interview, each student was given a bookmark that included the contact numbers of agencies that the youth can call (seven days a week/twenty four hours a day) in case of distress. Also, the last page of the survey included a form for the student to fill out if she/he felt the need to talk to a counselor.

### **3.2.2 Procedures: Grades 8-9 participants**

After obtaining ethics approval from the University of British Columbia Behavioral Ethics Board and three Vancouver Lower Mainland school districts' review boards, the author contacted 13 secondary school principals via e-mail to inquire about participating in the present study. Two secondary schools expressed interest in the study. The author visited 16 classrooms in the first school and research assistants trained by the author visited the second school and conducted two assemblies over two days (with grade 8 students on the first day and grade 9 students on the second day). Students in both schools were given a description of the study and invited to participate. The author and

research assistants distributed consent forms to be signed by the parents/guardians and asked the students to return the forms on a specific date (see Appendix C). Similar to students in grades 6-7, students in the two secondary schools were informed that if they returned their signed parent permission forms, regardless of whether their parents/guardians accepted or declined their participation, their names would be entered into a school-wide draw for a 100\$ gift card from Future Shop. Translated parent consent forms were made available upon request by the school. Some teachers chose not to include their classrooms in the study.

Grades 8-9 students who obtained parental consent and who themselves agreed to participate in the study were asked to complete a paper-and-pencil survey during a single group testing session (see Student Assent Form in Appendix D). Testing took place during school hours for 60 minutes. Most students completed the survey in approximately 45 minutes.

### **3.3 Sample**

#### **3.3.1 Sample: Grades 6-7 participants**

Grades 6 and 7 students in one elementary school and one middle school in the Lower Mainland of British Columbia took part in the 30-50 minute individual interview. In the elementary school, 68% of the students returned their consent forms and 58% of the total number of students in grades 6-7 at that school took part in the study ( $N = 36$ ). The lower participation rate in this school could be attributed to the fact that a substantial proportion of the students were from refugee families. The forms were translated into several languages that the principal suggested, three waves of consent forms were sent to parents/guardians, and extras were made available in each of the three participating

classrooms. Nevertheless, the teachers conjectured that the parents could have been reluctant to have their students share their experiences. Many of these children came from politically unstable parts of the world, including the Middle East (e.g., Iraq) and Africa (e.g., Liberia). In the middle school, 93% of the students returned their consent forms and 84% of the total number of students in grades 6-7 at that school took part in the study ( $N = 122$ ), bringing the total number of participants to 158 students. The average age of the participants was 11.60 ( $SD = 0.6$ ) years old, ranging from 10 to 13 years of age. There were 76 (48%) girls and 82 (52%) boys.

Students came from diverse ethnic backgrounds: 2 (1%) Aboriginal, 51 (32%) Asian, 9 (6%) South Asian, 11 (7%) Southeast Asian, 14 (9%), West Asian, 2 (1%) Caribbean, 3 (2%) Black/African, 13 (8%) White, 7 (4%) Arab/Middle Eastern, 8 (5%) Latin American, and 38 (24%) reported other or mixed ethnic backgrounds. Given that the study focused on the experiences of students from immigrant backgrounds, Aboriginal students were excluded from the analyses<sup>5</sup>. Almost half of the students were born in Canada (53%). Of the students born in Canada, 24% were third generation. In other words, they were born in Canada, as were the parents they live with. The other 76% were second generation. These youth were born in Canada but their parents were born outside Canada<sup>6</sup>.

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<sup>5</sup> Prior to data collection, looking at the experiences of Aboriginal youth separately as a follow-up was considered. However, given the very few students who reported being of Aboriginal background, the decision of not including them in the analyses was made.

<sup>6</sup> Immigrant status was not included in the analyses because there were no differences between second (students born in Canada; at least one parent born outside Canada) and third generation youth (students and parents born in Canada). In addition, including immigration status with years lived in Canada increased multicollinearity ( $VIF > 5$ ).

### **3.3.2 Sample: Grades 8-9 participants**

A total of 340 students in grades 8-9 took part in the study. The mean age of students was 13.70 years old ( $SD = 0.85$ ). Of these students, 203 (60%) were girls and 136 (40%) were boys. Based on British Columbia's (BC) Ministry of Education report on student statistics for 2012-2013

([http://www.bced.gov.bc.ca/reports/pdfs/student\\_stats/prov.pdf](http://www.bced.gov.bc.ca/reports/pdfs/student_stats/prov.pdf)), our sample did not represent the proportion of females and males in BC schools (there is an almost equal split between females and males in BC schools; 49% female and 51% male).

Additionally, data from a previous district-wide study that included the two schools have corroborated the BC Ministry of Education data. Therefore, sex differences were examined before answering the research questions and results were interpreted taking this fact into consideration.

Student participation rate was 43% in one of the two schools (62% of parent permission forms were returned and 78% of those returned indicated parental consent); in the other school, 30% participated (approximately 50% of the parent permission forms were returned and 62% of those returned indicated parental consent). Although the return rates were low, they were not a surprise for secondary schools. For example, in the recent (and only) study that examined public regard-at school, Rivas-Drake (2011) reported that only 37% of secondary school students took part in the study. In fact, several researchers who work with middle to late adolescents have noted the low participation rate of youth, especially when active consent is required (e.g., Esbensen, Melde, Taylor, & Peterson, 2008; Wolfenden, Kypri, Freund, & Hodder, 2009). Consequently, caution was exercised in interpreting the findings.

Participants reported wide range of ethnic backgrounds: 162 (48%) students were Asian, 65 (19%) students were South East Asian, 42 (12%) were South Asian, 2 (1%) were White, 9 (3%) students were of West Asian, Arab, Caribbean, African, and Latin American descent, and 58 (17%) students were of mixed or other backgrounds. Only one student reported being of Aboriginal background. The majority (71%) of participants were born in Canada to parents (at least one parent) who were born outside Canada. Only 5% of the students were born in Canada to parents who were also born in Canada. The rest (23%) were born outside of Canada.

### **3.4 Rationale for examining early adolescents and middle adolescents separately**

The experiences of participants in grades 6-7 and participants in grades 8-9 were analyzed separately for a number of reasons. First and foremost, data for the two age groups were collected sequentially and differently. Specifically, students in grades 6-7 completed their survey in a one-on-one individual interview with a researcher at the recommendation of principals of the schools for this age group who were concerned that students may need assistance in understanding some of the items. Of additional interest was verifying student understanding of the survey questions, with input from students in these individual interviews providing suggestions for improvement. Students in grades 8-9, on the other hand, completed a paper-and pencil survey individually in group sessions held in the regular classroom setting (as described below). Second, the evaluation of public regard, one of the primary variables examined in the present study, was modified for students in grades 8-9. As described in greater detail below, students in grades 6-7 were asked to report on their public regard from people at school in general, whereas students in grades 8-9 were asked to evaluate public regard separately with regard to

adults and peers in school (see Section 3.5.2). Accordingly, the decision to analyze both groups separately seemed more viable than combining both samples.

### **3.5 Measures/Variables**

There were a few differences between the measures used with participants in grades 6-7 and those used with participants in grades 8-9. The differences are highlighted here, before describing the measures. First, with grades 6-7 students, the measure of public regard-at school was developed to tap youth experiences with how others at school, in general (not specifying peers or adults at school), perceived their ethnic group. For grades 8-9, public regard at school was assessed in two parts. One part assessed students' perceptions of how *adults* at school view their ethnic group; the other part assessed students' beliefs of how *students* (peers) at school view their ethnic group. The decision not to split public regard-at school for grade 6-7 participants was made to make the survey shorter and simpler for this younger group of participants.

The second difference involved questions that tapped public regard and sense of belonging to Canada. For grades 6-7, these questions were answered on a four-point scale. For grades 8-9, they were answered on a five-point scale. This change was made in response to interviews with the grade 6-7 participants. Our public regard measures were adapted from the original measures developed by Luhtanen and Crocker (1992), and Sellers et al. (1998), who utilized 7-point response formats that were considered too complex for our younger participants, and by Scottham et al., (2008), who used a five-point scale (really agree to really disagree), with a neutral midpoint. In order to avoid the ambiguity of a neutral option, it was initially decided to exclude the neutral option from the scale and to utilize a four-point scale (1 = strongly agree to 4 = strongly disagree).

During our interviews with the early adolescents, however, the research assistants and author found that the students would have liked an in-between option between agree and disagree. Thus, the third point “somewhat agree” was introduced to the public regard and belonging to Canada measures for the subsequent, grade 8-9 sample.

### **3.5.1 Categorical variables: Grades 6-7 participants**

**Demographic information.** The first pages of the survey (see Appendix E) included items that asked students about the name of their school, age, grade, sex, country of birth, years lived in Canada, ethnic background, parents’ country of birth, and parents’ country of work and residence.

**Years lived in Canada.** One item was used to assess how long students had lived in Canada. On this item, students selected one of six options: a) less than a year, b) one to two years, c) two to four years, d) four to six years, e) more than six years, f) all my life. Because examining the experiences of youth who are newcomers to Canada was of interest, the first four choices were grouped together. This division of groups is similar to that utilized in previous studies that have focused on newcomer youth (e.g., Suarez-Orozco, 2009) and considered youth who have lived in the US for five years or less as newcomers. Therefore, years lived in Canada was analyzed as a three-category variable: a) between less than a year and up to six years, b) more than six years, c) all my life.

**Student ethnicity.** Although students were asked to select their ethnic background in the demographic portion of the study (item 7), an additional survey item, item 14 (see Appendix E) asked them to specifically identify what *they consider* their ethnic background to be (“*In terms of ethnicity or ethnic group, who do you consider yourself to be?*”). This question was completed prior to responding to items tapping



private and public regard because students had to refer to their perceived ethnic group for public regard items. Students were instructed to write down only one ethnic group, either including only the national origin or ethnicity (e.g., Chinese or Asian) or national origin or ethnicity hyphenated with Canadian (e.g., Chinese Canadian or Asian Canadian). If students expressed that they had more than one national origin or ethnicity, they were asked to write down the background with which they identified more strongly.

### **3.5.2 Continuous measures/variables: Grades 6-7 participants**

*Factor analysis.* Exploratory factor analyses rather than confirmatory factor analyses were conducted in order to evaluate the measures used in the present study for a number of reasons, most of them related to the exploratory nature of the study. First, private regard and public regard have not been examined within a Canadian youth sample. Thus, it was not clear whether the number of factors obtained in previous American studies would be found with a Canadian sample. Second, although the present assessments were based on measures and items used in previous research, none were direct or simple adaptations of existing measures. This was especially true for the present assessment of public regard, which included a wide range of different items that have been used in previous research on public regard. Relatedly, in confirmatory factor analysis, the number of factors to be obtained must be specified a priori, but exploratory factor analysis does not involve this requirement (Hair, Black, Babin, Anderson, & Tatham, 2007). Consequently, exploratory factor analysis was more appropriate for the present study. Third, the construct of public regard within the school context has only emerged recently as a variable of interest and the construct did not stem directly from a

theory, which is a requirement for confirmatory factor analysis, making exploratory factor analysis more appropriate for the study (see Hair et al., 2007).

Similar arguments for using exploratory factor analyses for other measures used in the present study. Specifically, peer discrimination was tapped using a modification of the Peer Discrimination Distress Subscale (Fisher, Wallace, & Wenton, 2000), one of three subscales that make up the Adolescent Discrimination Distress Index. Given that, two items were added to the subscale for the present study, exploratory factor analysis was considered more suitable because it was not clear how the addition of the two items would change the original subscale. Similarly, belonging to Canada was tapped by adding two items to the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). Again, exploratory factor analyses were deemed more appropriate for this scale.

Exploratory factor analysis includes both principal component analyses (PCA) and common factor analysis (CFA) (Hair, Black, Babin, Anderson, & Tatham, 2007). In the present investigation, PCA was favored because of the exploratory nature of the study (see Pallant, 2007, Tabachnick & Fidell, 2007)<sup>7</sup>.

Specifically, principal component analysis with an oblimin rotation was performed on items tapping: 1) private regard (elementary), 2) public regard-at school (elementary), 3) belonging to Canada (elementary), 4) ethnic discrimination (elementary), 5) private regard (secondary), 6) public regard-respect (secondary), 7) public regard-smart, 8) public regard-successful (secondary), 9) belonging to Canada (secondary), and 10) ethnic discrimination (secondary). Some of the items of these measures have been

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<sup>7</sup> CFA, particularly Principal Axis Factoring extraction and Oblimin rotation, produced results similar to PCA for all variables.

modified from their original wording (e.g., public regard was used within the school context).

Items tapping private regard, public regard, belonging to Canada, and ethnic discrimination, respectively, were subjected to principal component analysis (PCA) with oblimin rotation. First, the fitness of the data for factor analysis was assessed by examining: 1) the inter-item correlations for each scale, 2) Barlett's test of sphericity, and 3) the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. According to Tabachnick and Fidell (2007), if the correlation matrix shows that a few of the items in the correlation matrix have a correlation greater .3, then factor analysis might not be appropriate. Moreover, Barlett's test of sphericity should be significant ( $p < .05$ ) and the KMO (ranges from 0 to 1) should be a minimum of .60 for the data to be fit for factor analysis (see Tabachnick & Fidell, 2007). The PCA of each variable/measure, except school belonging, is included as part of its description.

*Internal consistency assessments.* Zumbo, Gadermann, and Zeisser (2007) suggested the use of ordinal alpha rather than coefficient alpha when using Likert-type scale/ordinal scales, such as those used in the present study. One of the advantages of ordinal alpha is that it is not affected by skewness, unlike coefficient alpha. Following the recommendation of Zumbo et al. (2007), ordinal alpha was calculated for all continuous variables in the present study.

**Private regard.** Private regard was tapped using four items that were adapted (terms were simplified for early and middle adolescents; e.g.: "I often regret I was from my ethnic group" (Sellers et al., 1997) was modified to "I would prefer to belong to a different ethnic group") from Private CSE (Luhtanen & Crocker, 1992), MIBI (Sellers et

al., 1998) and MIBI-T (Scottham et al., 2008). Most of the inter-correlations among the items were greater than .30, Barlett's test of sphericity was statistically significant ( $p < .05$ ) and the KMO was .63 (slightly higher than the .60 minimum). PCA revealed the presence of one component with an eigenvalue of 1.90, explaining 48% of variance<sup>8</sup>. Given its low communality value (Se), item 17 was eliminated from the private regard composite that was created. Inter-item reliability analysis was acceptable: coefficient  $\alpha = .70$  (ordinal  $\alpha = .82$ ) for items 15, 16, and 21.

**Table 3.1 Communalities matrix for PCA with oblimin rotation of one factor solution of private regard items**

Item	Communalities
15. I feel good about people in my ethnic group.	.54
16*. I would prefer to belong to a different ethnic group.	.60
17*. I feel that my ethnic group contributes less to society than other ethnic groups.	.02
21. I feel proud to be from my ethnic group.	.74

*Note.* \* Negatively worded items reverse-scored. Items in grey were removed.

Initially, a four-point scale (1 = strongly disagree to 4 = strongly agree) was used to measure the extent to which youth felt pride in their ethnic group membership.

Negatively-worded items were reverse scored in order to ensure that higher scores on all items indicated higher levels of private regard. However, to facilitate the comparison of grades 6-7 to grades 8-9, the private regard measure was recalculated into a 1-5 scale using the following equation:  $(4/3C - 1/3)$ , where C is the original value of each private regard item. This equation provided a way of changing the four-point scale into a five-point scale while maintaining the same relative distance between each of the four points

<sup>8</sup> PCA was run with and without item 17. The variance explained increased to 63% when item 17 was excluded.

(1, 2, 3, and 4, were changed to 1, 2.33, 3.67, and 5). This recalculation produced the same inter-item reliabilities and principal component analysis results and did not change any of the relations between private regard and the other variables. The composite score for private regard was calculated as the average of the new values obtained on items 15, 16, and 21<sup>9</sup>.

**Public Regard-At School.** Public regard-at school was tapped using seven items that were modified from Public CSE (Luhtanen & Crocker, 1992), MMRI (Sellers et al., 1998) and MIBI-T (Scottham et al., 2008). Specifically, in the present study, simpler terms were used for early and middle adolescents. For example, “Overall, Blacks are considered good by others” (Sellers et al., 1998) was adapted to “Others at my school think that my ethnic group is good”. The inter-correlations among the items showed that few items had a correlation greater than .30 (see Appendix G), Barlett’s test of sphericity was statistically significant ( $p < .05$ ) and the KMO was .67 (exceeding the .60 minimum). Given that most of the inter-correlations were lower than .30, public regard was not considered in any further analyses for the grades 6-7 sample.

Different conceptual approaches, based on the extant literature, were also considered for grouping the items. For example, we examined the inter-item correlation of the two public regard items that were similar to those used in Chavous et al. (2003) to tap public regard (“In general, other groups view Blacks in a positive manner”; “Blacks are considered to be good by society”;  $r = .46$ ). The correlation of the two similar items in our study was lower,  $r = .39$ ; thus deemed unsuitable for examination. Moreover, we tried

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<sup>9</sup> Note that the new mean for private regard does not change whether it is calculated by averaging the means of the recalculated items or by applying the equation to the composite score obtained from the original (1- 4) values.

to examine the three items that were similar to three that were presented in Scottham et al. (2008). As well, these items had low internal consistency,  $\alpha = .55^{10}$ . Accordingly, public regard-at school was not included in the analyses of results for grades 6-7 students.

**Sense of belonging to Canada.** Phinney's Affirmation and Belonging subscale of the MEIM scale (1992) was modified to measure youths' sense of belonging to Canada by two items to the original 5-item subscale ("*I am proud to live in Canada*"; "*I consider myself Canadian*"). The majority of inter-correlations among the seven items were higher than .40. Barlett's test of sphericity was statistically significant ( $p < .05$ ) and the KMO was .86 (exceeded the minimum of .60). Thus, the items were suitable for factor analysis. Principal component analysis revealed the presence of one component with an eigenvalue of 3.59, explaining 51% of the variance. Table 3.2 presents the values of the communalities matrix. Based on these results, a composite score for belonging to Canada was calculated; internal consistency of the composite measure was high (coefficient  $\alpha = .83$ ; ordinal  $\alpha = .91$ ) for the present sample.

**Table 3.2 Communalities matrix for PCA with oblimin rotation of one factor solution of sense of belonging to Canada items**

Item	Communalities
29. I am happy that I live in Canada.	.48
30. I feel that I belong in Canada.	.60
31. I am proud to live in Canada.	.58
32. I have a lot of pride in the achievements of Canada.	.34
33. I feel strongly attached to Canada.	.62
34. I feel good about being in Canada.	.57
35. I consider myself Canadian.	.41

<sup>10</sup> Low internal reliabilities in scales are especially problematic when a measure is used for categorical moderated multiple regression, which was used in the present study. According to Aguinis and Gottfredson (2010), when using categorical moderated multiple regressions, the reliability of the interaction term (predictor x moderator) is negatively affected when the internal consistency of the predictor is low.

The seven items of the scale were rated on a four-point Likert scale, from strongly disagree (1) to strongly agree (4), were used to determine the extent to which each participant felt a sense of belonging to Canada. Like the items tapping private regard, items on belonging to Canada scale were transformed into a 1 to 5 scale using the formula  $(4/3C - 1/3)$ , where C was the original 1- 4 value given on each item. Responses to these seven items (using the new values) were averaged in order to compute a composite of feelings of belonging to Canada, with higher scores indicating a stronger sense of belonging to Canada.

**Ethnic discrimination.** To measure ethnic discrimination, Fisher et al.'s (2000) Peer Discrimination Distress Subscale, one of the three subscales that make up the Adolescent Discrimination Distress Index, was adapted by simplifying the wording of a few of the items to make them easier for early and middle adolescents. As well, two items (see items 56 and 57 in Table 3.3) were added to the subscale's five original items, for a total of seven items. The inter-correlations among the seven items showed that several of the items had a correlation higher than .30. Barlett's test of sphericity was statistically significant ( $p < .05$ ) and the KMO was .70 (exceeded the minimum of .60). Thus, the items were suitable for factor analysis. PCA revealed the presence of two components with eigenvalues of 2.76 and 1.10, respectively, and explaining 55% of the variance. Items 55 and 56 were excluded from the scale because of their low values ( $< .30$ ). Internal consistency was higher (coefficient  $\alpha = .75$ ; ordinal  $\alpha = .92$ ) when item 55 and 56 were excluded ( $\alpha = .67$  when item 55 and 56 were included). Each item of the discrimination measure was converted into a binary variable (0 = never; 1 = at least once).

**Table 3.3 Pattern and structure matrix for PCA with oblimin rotation of two factor solution of discrimination items**

Item	Pattern Coefficients		Structure Coefficients		Communalities
	Component 1	Component 2	Component 1	Component 2	
How often have you had experiences with:					
51. Other students calling you insulting names because of your ethnicity?	<b>.73</b>	.14	<b>.75</b>	.29	.59
52. Other students excluding you from their games and activities because of your ethnicity?	<b>.76</b>	-.07	<b>.74</b>	.10	.56
53. Other students threatening you because of your ethnicity?	<b>.58</b>	.15	<b>.61</b>	.27	.39
54. Other students discouraging you from joining a group because of your ethnicity?	<b>.73</b>	-.04	.72	.12	.52
55. Other students thinking you didn't know English very well because of your ethnicity?	.16	<b>.68</b>	.31	<b>.72</b>	.54
56. Other students thinking you're the teacher's pet because of your ethnicity?	-.12	<b>.83</b>	.06	<b>.80</b>	.66
57. Other students saying you look/dress funny or weird because of your ethnicity?	<b>.80</b>	-.12	<b>.77</b>	.05	.61

*Note.* Items in grey were removed.

Students rated each item on a 5-point, Likert scale ranging from never (1) to several times a week (5). However, due to restricted range (72% of students reported never experiencing discrimination) and low variability, we followed previous studies' (e.g., Rivas-Drake et al., 2008, 2009) approach of: 1) recoding each item into a binary item (0 = never, 1 = at least once), then 2) adding the scores of the items so that we obtain a total score that is an indicator of the number of instances of discrimination the



youth has experienced. The resulting composite scores ranged from 0 (no instances of discrimination) to 5 (all 5 types of discrimination were reported).

**Sense of school belonging.** The school belonging measure developed by Goodenow (1993) was used to measure school belonging in the present study. Specifically, 18 items, each rated on a five-point, Likert scale, ranging from strongly disagree (1) to strongly agree (5), were averaged to create a composite index of school belonging (e.g., *“I feel like a real part of this school”*; *“I feel proud of belonging to this school”*; coefficient  $\alpha = .89$ ; ordinal  $\alpha = .91$ ). Negatively worded items were reverse scored (e.g., *“It is hard for people like me to be accepted here”*). Higher scores indicated higher levels of school belonging. Given that Goodenow’s measure has been used extensively in the literature across different student populations with robust results, PCA was not reported.

### **3.5.3 Categorical measures/variables: Grades 8-9 participants**

**Demographic information.** Similar to students in grades 6-7, students in grades 8-9 were asked to answer items about the name of their school, age, grade, sex, country of birth, years lived in Canada, ethnic background (item 7, multiple choice), parents’ country of birth, and parents’ country of work and residence (see Appendix F).

**Years lived in Canada.** One item was used to assess how long students had lived in Canada. Students were asked to choose one of six options: a) less than a year, b) one to two years, c) two to four years, d) four to six years, e) more than six years, f) all my life. As described above for students in grades 6-7, years lived in Canada was analyzed as a three-category variable: a) between less than a year and up to six years, b) six years or more, c) all my life.

**Student ethnicity.** This item was identical to the item on student ethnicity that students in grade 6-7 answered. Although students were asked to select their ethnic background in the demographic portion of the study (item 7), this item (item 14) asked them to specifically identify “*what they consider their ethnic background to be*”. This question was completed prior to answering the items on public regard because students had to refer to the identified ethnic group when answering questions on public regard. Students were instructed to write down only one ethnic group, either including only the national origin or ethnicity (e.g., Chinese or Asian) or national origin or ethnicity hyphenated with Canadian (e.g., Chinese Canadian or Asian Canadian). If students had more than one national origin or ethnicity, they were asked to write down the background with which they identified more strongly. Despite the instructions, a few students included more than one ethnic group. Those students were excluded from the analyses. The answers students provided for this item were slightly different from the answers they provided for the multiple-choice question (item 7) that tapped ethnic background in the demographic questions section. For example, only 2 students selected European/White when answering the multiple-choice question. However, the fill in the blanks question (item 14) revealed that 14 students thought of themselves as “European/White”.

#### **3.5.4 Continuous measures/variables: Grades 8-9 participants<sup>11</sup>**

**Private regard.** Private regard was tapped using the same four items (see Table 3.4) that were used with the early adolescent sample of the present study (grades 6-7).

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<sup>11</sup> Ordinal alpha was also calculated for the continuous variables used with students in grades 8-9. The results were the following: ordinal alpha for private regard = .74, ordinal alpha public regard-respect = .89; ordinal alpha public regard-smart = .77; ordinal alpha public regard successful like others = .80; ordinal alpha belonging to Canada = .95; ordinal alpha discrimination = .87; ordinal alpha belonging to school = .93.

Most of the inter-correlations among the items were found to be greater than .3. Barlett's test of sphericity was statistically significant ( $p < .05$ ) and the KMO was .70 (exceeding the .60 minimum). Thus, the items were suitable for PCA. Results of the PCA revealed the presence of one component with an eigenvalue of 1.98 explaining 50% of variance<sup>12</sup>. Item 17 was excluded given its low communalities value and its low inter-correlation values with the other items. Following the results of PCA, a private regard composite was calculated by averaging student's scores on items 15, 16, and 32, coefficient  $\alpha = .68$  and ordinal  $\alpha = .74$ , (see Table 3.4). Responses were on a five-point scale (1 = strongly disagree to 5 = strongly agree) with negatively worded items reverse scored in order to ensure that all higher scores on all items indicated higher levels of private regard.

**Table 3.4 Communalities matrix for PCA with oblimin rotation of one factor solution of private regard items**

Item	Communalities
15. I feel good about people in my ethnic group.	.51
16*. I would prefer to belong to a different ethnic group. (R)	.59
17*. I feel that my ethnic group contributes less to society than other ethnic groups.	.24
21. I feel proud to be from my ethnic group.	.64

*Note.* \* Negatively worded items thus reverse-scored. Items in grey were removed.

**Public regard.** Seven items tapped public regard from adults at school and seven similarly worded items tapped public regard from students. The items were adapted from Public CSE (Luhtanen & Crocker, 1992), the MMRI (Sellers et al., 1998) and MIBI-T (Scottham et al., 2008); specifically, a few of the terms were reworded to be simpler for

<sup>12</sup> PCA was run with and without item 17. The variance explained increased to 61% when item 17 was excluded.

the study's age group. Inter-correlations among the items (see Appendix H) showed that several of the items had a correlation greater than .3. Barlett's test of sphericity was statistically significant ( $p < .05$ ) and the KMO was .84 (exceeded the minimum of .60). Thus, the items were suitable for factor analysis. PCA revealed the presence of three components exceeding 1, with eigenvalues of 5.22, 1.70, and 1.31, explaining a total of 59% of the variance. Table 3.5 presents the pattern and structure coefficients. Given that research in public regard among early and middle adolescence is in its early stages and given the lack of consistency in the measurement of public regard in the literature, all three components were retained and three separate composite scores were computed based on the mean of relevant items: **1) Public regard-respect** (coefficient  $\alpha = .86$ ; ordinal  $\alpha = .89$ ; items: 24, 25, 26, 28, 31, 32, 33, 35), **2) Public regard-smart** (coefficient  $\alpha = .73$ ; ordinal  $\alpha = .77$ ; items: 22, 27, 29, 34), and **3) Public regard-successful like others** (coefficient  $\alpha = .74$ ; ordinal  $\alpha = .80$ ; items: 23, 30).

Public regard-adult items and public regard-students items were also examined separately using PCA. The separate analyses also produced a respect component for adults (items 24, 25, 26, 28) and students (items 31, 32, 33, 35), respectively. The correlation between the items that tapped public regard-respect from adults at school and public regard-respect from students was high,  $r = .65$ . Thus multicollinearity was anticipated<sup>13</sup>. To avoid multicollinearity, public regard-adults items and public regard-students items were examined together for PCA and selected for analyses in the present study. Items in the three subscales (public regard-respect, public regard-smart, and public regard-successful) were rated on a five-point Likert scale, ranging from strongly disagree

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<sup>13</sup> Regression analyses with public regard-adult (respect items) and public regard-student (respect items) as separate variables. Results verified that multicollinearity was a threat.

(1) to strongly agree (5). Negatively worded items were reverse-scored to ensure that higher scores indicated more positive public regard.

Specifically, the first aspect, “public regard-respect” was calculated by averaging the eight items that tapped the extent to which students believed that adults *and* other students in their school respected their ethnic group (e.g., “*Adults at my school respect my ethnic group*”; “*Students at my school think that my ethnic group is good*”; coefficient  $\alpha = .86$ ; ordinal  $\alpha = .89$ ).

The second composite of public regard included the mean of four items and tapped youth perceptions of the extent to which they believed that adults and students at their school saw them as smart (e.g., “*Adults (Students) at my school think that my ethnic group is smart*”; coefficient  $\alpha = .73$ ; ordinal  $\alpha = .77$ ). Higher scores indicated more positive perceptions of how smart one’s ethnic group is perceived to be by adults and students at their school.

The last two items tapped “public regard-success”, assessing the extent to which youth believed that adults and students at their school perceived their ethnic group to be as successful as other ethnic groups. The two items included in this composite: “*Adults at my school consider my ethnic group to be less successful than other ethnic groups*”, “*Students at my school consider my ethnic group to be less successful than other ethnic groups*”, coefficient  $\alpha = .74$ ; ordinal  $\alpha = .80$ . Both items were reverse-scored and an index of public regard-successful was computed by averaging the scores of the two items, with higher scores indicating more positive perceptions of the extent to which youth believed adults and students at school perceived their ethnic group as successful as other ethnic groups.

**Table 3.5 Pattern and structure matrix for PCA with oblimin rotation of three factor solution of discrimination items**

Item	Pattern Coefficients			Structure Coefficients			Communalities
	Components			Components			
	1	2	3	1	2	3	
22. Adults at my school expect my ethnic group to do well in life.	-.02	<b>.75</b>	-.32	.09	<b>.71</b>	-.20	.60
23*. Adults at my school consider my ethnic group successful.	.14	-.06	<b>.76</b>	.37	.07	<b>.80</b>	.66
24. Adults at my school respect my ethnic group.	<b>.73</b>	-.14	-.07	<b>.67</b>	.06	.15	.47
25. Adults at my school think that my ethnic group has made important contributions.	<b>.42</b>	.37	-.06	<b>.51</b>	.49	.12	.39
26. Adults at my school have a positive view of my ethnic group.	<b>.75</b>	.16	-.04	<b>.79</b>	.37	.22	.64
27. Adults at my school think that my ethnic group is smart.	.19	<b>.74</b>	.02	.41	<b>.80</b>	.17	.67
28. Adults at my school think that my ethnic group is good.	<b>.68</b>	.25	-.08	<b>.72</b>	.43	.17	.58
29. Students at my school expect my ethnic group to do well in life.	-.07	<b>.68</b>	.34	.23	<b>.70</b>	.39	.59
30*. Students at my school consider my ethnic group successful.	.05	.04	<b>.84</b>	.33	.15	<b>.86</b>	.74
31. Students at my school respect my ethnic group.	<b>.76</b>	-.22	.07	<b>.72</b>	.01	.29	.57
32. Students at my school think that my ethnic group has made important contributions.	<b>.58</b>	.09	.15	<b>.65</b>	.28	.35	.46
33. Students at my school have a positive view of my ethnic group.	<b>.76</b>	-.03	.13	<b>.79</b>	.20	.37	.64
34. Students at my school think that my ethnic group is smart.	.07	<b>.60</b>	.42	.38	<b>.67</b>	.51	.64
35. Students at my school think that my ethnic group is good.	<b>.68</b>	.09	.13	<b>.75</b>	.30	.36	.58

*Note.* \* Negatively worded items thus reverse-scored; Public regard-respect items: 24, 25, 26, 28, 31, 32, 33, 35; Public regard-smart items: 22, 27, 29, 34; Public regard-successful items: 23 and 30

**Sense of belonging to Canada.** Phinney's Affirmation and Belonging subscale of the MEIM scale (1992) was modified by simplifying the wording of a few items and by replacing "ethnic group" with "Canada" to measure youth belonging to Canada. Also, two items were added to the original 5-item subscale. Most of the inter-correlations among the seven items were higher than .50. Barlett's test of sphericity was statistically significant ( $p < .05$ ) and the KMO was .93 (exceeded the minimum of .60). Thus, the items were suitable for factor analysis. PCA revealed the presence of one component with an eigenvalue of 4.95, explaining 71% of the variance. Table 3.6 presents the values of the communalities matrix. A composite score for Belonging to Canada was created using all items. Internal consistency was high,  $\alpha = .93$  ordinal  $\alpha = .95$ .

**Table 3.6 Communalities matrix for PCA with oblimin rotation of one factor solution of sense of belonging to Canada items**

Item	Communalities
36. I am happy that I live in Canada.	.77
37. I feel that I belong in Canada.	.75
38. I am proud to live in Canada.	.83
39. I have a lot of pride in the achievements of Canada.	.61
40. I feel strongly attached to Canada.	.72
41. I feel good about being in Canada.	.74
42. I consider myself Canadian.	.52

Each of the seven items, rated on a five-point, Likert scale from strongly disagree (1) to strongly agree (5), were averaged to compute an overall index of the extent to which one felt a sense of belonging to Canada ("*I am happy that I live in Canada*"; "*I feel that I belong in Canada*"). Higher scores indicated a stronger sense of belonging to Canada.

**Ethnic discrimination.** To measure ethnic discrimination, Fisher et al.'s (2000) Peer Discrimination Distress Subscale, one of the three subscales that make up the Adolescent

Discrimination Distress Index, was modified by changing a few of the terms to make them easier for early and middle adolescents. Several of the inter-correlations among the seven items were higher than .30. Barlett's test of sphericity was statistically significant ( $p < .05$ ) and the KMO was .78 (exceeded the minimum of .60). Thus, the items were suitable for factor analysis. PCA revealed the presence of one component with an eigenvalue of 2.86, explaining 41% of the variance. Because PCA produced only one component, Table 3.7 presents the values of the communalities matrix (there were no pattern matrix or structure matrix). Item 63 was excluded from the scale because of its low value. Moreover, reliability analysis indicated that reliability was higher when item 63 was excluded (coefficient  $\alpha = .73$ ; ordinal  $\alpha = .87$ )

**Table 3.7 Communalities matrix for PCA with oblimin rotation of one factor solution of ethnic discrimination items**

Item	Communalities
How often have you had experiences with:	
58. Other students calling you insulting names because of your ethnicity?	.39
59. Other students excluding you from their games and activities because of your ethnicity?	.55
60. Other students threatening you because of your ethnicity?	.42
61. Other students discouraging you from joining a group because of your ethnicity?	.55
62. Other students thinking you didn't know English very well because of your ethnicity?	.40
63. Other students thinking you're the teacher's pet because of your ethnicity?	.19
64. Other students saying you look/dress funny or weird because of your ethnicity?	.38

*Note.* Items in grey were removed.

Students rated each item on a 5-point Likert scale ranging from never (1) to several times a week (5). Initially, responses to all six items were averaged to create an overall composite index of ethnic discrimination. Higher scores indicated more frequent experiences of ethnic discrimination. Similar to grades 6-7, due to restricted range (scores



ranges from 1.00 to 3.33) and low variability, we followed previous studies' (e.g., Rivas-Drake et al., 2008, 2009) approach of: 1) recoding each item into a binary item (0 = never, 1 = at least once), then 2) adding the scores of the items so that we obtain a total score that is an indicator of the number of instances of discrimination the youth has experienced. The scores ranged from 0 (no instances of discrimination) to 6 (all 6 types of discrimination were reported).

**Sense of school belonging.** Similar to grades 6-7 students, students' feelings of school belonging were assessed using a scale developed by Goodenow (1993). Each of the 18 items included in this scale were rated on a five-point, Likert scale, ranging from strongly disagree (1) to strongly agree (5), (e.g., *"I feel like a real part of this school"*; *"I feel proud of belonging to this school"*; coefficient  $\alpha = .91$ ; ordinal  $\alpha = .93$ ). Negatively-worded items were reverse scored (e.g., *"It is hard for people like me to be accepted here."*) and student responses to all 18 items were averaged to compute an overall index of school belonging, with higher scores indicating higher (more positive) levels of school belonging. Given that Goodenow's measure has been used extensively in the literature across different student populations with robust results, PCA was not conducted.

### 3.5.5 Summary of PCA results

Principal component analyses of private regard, public regard, belonging to Canada and discrimination revealed a few differences between grades 6-7 and grades 8-9 students. Specifically, disparities were evident in the present assessment of public regard and discrimination. First, for grades 6-7, the factor loadings were low. Moreover, the composites derived were not found to be internally consistent ( $\alpha < .60$ ). Accordingly, public regard was not considered in analyses involving the grades 6-7 participants. For participants in grades 8-

9, public regard from adults at school and public regard from students were tapped separately. However, results of the PCA conducted with both adult and student items, grouped together, revealed three components that did not differentiate between adults and students at school. Rather, the components that were produced seemed to reflect the lack of consistency in measuring public regard in the literature (see Ho & Sidanius, 2010). In particular, three different composite scores or subscales were computed: 1) public regard-respect, 2) public regard-smart, and 3) public regard-successful like others. The items that tapped public-regard-respect were similar to the original Public CSE items that Luhtanen and Crocker (1992) developed to measure Public CSE (see Table 3.8).

Previous researchers have also identified some issues with the current measures of public regard. Indeed, Ho and Sidanius (2010) claimed that public regard did not receive as much attention as other dimensions of ethnic identity because of the low internal consistency of the construct. Scottham et al. (2008) have published a three-item measure of public regard for adolescents, although the three-item measure has not been used in other studies (e.g., McGill, Hughes, Alicia, & Way, 2012). The few studies that have been conducted with early adolescents have assessed public regard using both MIBI and MIBI-Teen (e.g., Hughes et al., 2011; Rivas-Drake, 2011; Rivas-Drake et al., 2008; 2009) without clearly identifying which items were included from these scales (typically only examples of items were provided).

**Table 3.8 Public regard items**

<b>Luhtanen and Crocker (1992)</b>	<b>Study Items (grades 8-9 participants)</b>
In general, others respect the social groups that I am a member of.	24. Adults (Students) at my school respect my ethnic group.
Most people consider my social groups, on the average, to be more ineffective than other social groups.	25. Adults (Students) at my school think that my ethnic group has made important contributions.
In general, others think that the social groups I am a member of are unworthy.	26. Adults at my school have a positive view of my ethnic group.
Overall, my social groups are considered good by others.	28. Adults at my school think that my ethnic group is good.

Peer ethnic discrimination loaded on two components for students in grades 6-7 and one component for students in grades 8-9. However, a closer examination indicated that the item loadings for both age groups were similar (see Table 3.9). For grades 6-7 participants, the items tapping youth being teased for their bad English or for being the teacher's pet because of their ethnicity were excluded because they did not load on the first factor. For grades 8-9 participants, the item tapping youth being teased for being the teacher's pet because of their ethnicity was excluded because it loaded poorly on factor 1. Thus, for grades 6-7 students the mean of five items was calculated to obtain a composite score for ethnic discrimination and for grades 6-9 students the mean of six items was calculated to obtain a composite score for ethnic discriminations.

Half of the students interviewed were not born in Canada, specifically in countries where English is not their first language. Thus, it is possible that these students did not perceive "thinking that one's English was not very good because of their ethnicity" as discrimination because they thought their peers were just questioning their English comprehension and not trying to hurt them. Moreover, their peers' assumption about their English skills may not be intended to hurt because many of their peers are not native speakers

as well. Additionally, that item, unlike most items, was not an action. It involved students “thinking” one’s English was not good. Last, during the interviews many students who said their peers assumed they did not know English very well were quick to say they were not trying to be mean; they really did not know.

**Table 3.9 Peer ethnic discrimination between early and middle adolescents**

<b>Grades 6-7 Participants</b>	<b>Grades 8-9 Participants</b>
How often have you had experiences with:	How often have you had experiences with:
51. Other students calling you insulting names because of your ethnicity?	58. Other students calling you insulting names because of your ethnicity?
52. Other students excluding you from their games and activities because of your ethnicity?	59. Other students excluding you from their games and activities because of your ethnicity?
53. Other students threatening you because of your ethnicity?	60. Other students threatening you because of your ethnicity?
54. Other students discouraging you from joining a group because of your ethnicity?	61. Other students discouraging you from joining a group because of your ethnicity?
55. Other students thinking you didn’t know English very well because of your ethnicity?	62. Other students thinking you didn’t know English very well because of your ethnicity?
56. Other students thinking you’re the teacher’s pet because of your ethnicity?	63. Other students thinking you’re the teacher’s pet because of your ethnicity?
57. Other students saying you look/dress funny or weird because of your ethnicity?	64. Other students saying you look/dress funny or weird because of your ethnicity?
$\alpha=.75$	$\alpha=.73$

*Note.* Items in grey were removed.

## **4 Results**

This section includes separate subdivisions focusing on each sample's results (grades 6-7 students as one sample; grades 8-9 students as another sample). The Statistical Package for Social Sciences (SPSS) versions 20 and 21 were used to run all data analyses.

### **4.1 Data screening**

Before proceeding with the analyses, the data were screened. The results of data screening for participants in grades 6-7 are presented first.

#### **4.1.1 Data screening: Grades 6-7 participants**

Before proceeding with answering the study's research questions, missing data, outliers, and univariate and multivariate statistical assumptions were examined. First, descriptive analyses were run to find any items that had values outside the possible score range. None of the items had out of range scales. Few items had missing data. Specifically, only one item had 1.3% missing data (2 missing values) and most of the other items had no more than 0.6 % missing data (1 missing value). Due to the low amount of missing data, list-wise deletion was used to handle them.

Boxplots and standardized scores of each variable were examined to detect univariate outliers. According to Hair et al. (2006) univariate outliers are standardized scores (z-scores) with an absolute value that is equal to or greater than four. Very few scores in the data set had a standardized score greater than the absolute value of four. Hair et al. (2006) state that outliers need to be examined within the context of the analyses as they can potentially represent a real part of the population. Following Hair et

al., upon closer inspection of the outliers, the decision was made to retain them because it was observed that these outliers were not procedural errors and reflected students' personal experiences with discrimination. Although most students reported very few instances of discrimination, a few students reported experiencing frequent incidents. Deleting these outliers would have limited the opportunity to portray the experiences of youth who are victimized at higher levels. Additionally, most of these experiences were reported by youth who were from ethnic minority backgrounds. Last, these reports were made during one-on-one interviews in which students provided detailed accounts of their experiences with discrimination.

Skewness and kurtosis were examined to test the univariate normality of the data. Mild to moderate violations of normality were found in all variables. Transformation slightly improved skewness in discrimination but it remained significant. However, the decision to use the non-transformed data was deemed appropriate because changing the measure to a categorical scale did not change the results<sup>14</sup>. Also, Tabachnick and Fidell (2007) recommend using the original data when there is no advantage to transformation. The skew in both dependent variables improved using squared and/or cubed transformation. Furthermore, when statistical analyses were run with non-transformed and transformed variables, similar results were obtained. Only the analyses and results for the non-transformed are presented in this study because they are easier to interpret.

Bivariate correlations indicated no threats of multicollinearity as none of the correlations reached .90 (the highest correlation was .50). Additionally, scatterplots revealed no curvilinear relationships or heteroscedasticity. Scatterplots of standardized

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<sup>14</sup> Discrimination was examined both as a binary and a three-category scale (never, at least once, several times). Results were not different from those in the present study.

predicted values against standardized residuals were produced to assess multivariate normality, linearity, and homoscedasticity. The plots did not indicate extreme violations of these assumptions.

#### **4.1.2 Data screening: Grades 8-9 participants**

Missing data, outliers, and the assumptions for multiple regression (normality, linearity, homoscedasticity, and multicollinearity) were also examined for data collected from grades 8-9 students before proceeding with data analyses. First, descriptive analyses indicated that none of the questionnaire items had scores outside the possible score range. Only one item had 1.5% missing data (5 missing values) and most of the other items with missing values had no more than 0.3% missing data (1 missing value). Given the low amount of missing data, list-wise deletion was used for handling missing data.

Boxplots and standardized scores for each variable were examined to detect univariate outliers. As mentioned earlier, according to Hair et al. (2006) univariate outliers are standardized scores (z-scores) with an absolute value that is equal to or greater than four. Hair et al. also state that outliers need to be examined within the context of the analyses and assessed based on the information they can potentially offer. Several scores in the data set had a standardized score greater than the absolute value of four. Careful examination of each outlier revealed that these scores were not due to error. In fact, many of these scores were reported by students who are numerically ethnic minorities in their schools (e.g., Indo-Canadian, Vietnamese-Canadian students) and/or students who were born outside Canada. Because the univariate outliers in this study were considered representative of the experiences of some youth in the population, they were not deleted. In fact, deleting these outliers would have eliminated the perspectives

of some ethnic groups or immigrant groups (e.g., newcomers) who have been understudied in the literature and undermined the purpose of this study.

Skewness and kurtosis were examined to test the univariate normality of the data. Extreme violations of normality were not found. Most variables showed mild to moderate skew and kurtosis that were all fixed by transforming the data. Analyses that were run with non-transformed and transformed data yielded similar results. As before, only the analyses and results of the non-transformed are presented in this study because they are easier to interpret.

Bivariate correlations indicated no threats of multicollinearity as none of the correlations reached .90 (the highest correlation was .49). Additionally, scatterplots revealed no curvilinear relationships or heteroscedasticity. Scatterplots of standardized predicted values against standardized residuals were plotted to assess multivariate normality, linearity, and homoscedasticity. The plots did not indicate extreme violations of these assumptions.

### **4.3 Preliminary analyses: Demographics**

As described previously, two questions, a multiple-choice question and an open-ended question, tapped students' perceptions of their ethnic backgrounds/national origins. The multiple-choice question (item 7) asked students to select their ethnic background and national origin from a list of different options. Students were not restricted to one background and could select more than one option if applicable. This question was not used in the analyses presented below. Rather, the open-ended question (item 14, Appendix E and F) immediately preceding the questions on ethnic identity was used for subsequent analyses



because it focused on what students *considered themselves* to be<sup>15</sup>. Following previous studies that examined ethnic regard of youth of different national origins (Chinese) rather than the wider ethnic background (Asian) was used (e.g., McGill et al., 2012; Rivas-Drake, 2011; Rivas-Drake et al., 2008, 2009) to avoid sweeping categorization of groups of people who do not share languages, history, values and traditions (e.g., including Chinese, Indian, Japanese, Pakistani, Filipino and Vietnamese under “Asian”). Those who expressed more than one background were not included in the analyses that focused on ethnic differences. Demographic results for grades 6-7 are presented first. Note that, although national background was used to examine differences, in presenting the results, the term “ethnic group” or “ethnic differences” was used.

#### **4.3.1 Demographics: Grades 6-7 participants**

Around half of the students in the total sample (N = 158) were born in Canada, 75 (48%) of them lived in Canada all their life, 45 (28%) of them reported living in Canada between one and six years, and 38 (24%) reported living in Canada for more than six years. Out of 158 students, 106 (67%) identified with a national origin, such as Chinese or Chinese Canadian. Accordingly, all analyses examining ethnic differences (e.g., in private regard, ethnic discrimination, belonging to school, and belonging to Canada), were conducted using a subsample of the total Grade 6-7 sample that included 79 students, who self-identified as belonging to a particular ethnic group (based on item 14, the open-ended question). For these analyses, only national groups that had ten or more cases were considered, including Chinese

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<sup>15</sup> Although item 7 was not used in the analyses, students’ answers to item 14 were compared to their answers to item 7 in order to ensure that they were consistent. For example, if one students selected being of Caucasian origin item 7 but identified her/himself as South Asian (or Chinese) in item 14, they were not included in the study.

(n = 30, 38%), Filipino (n = 10, 13%), Persian/Iranian (n = 14, 18%) and European descent (n = 25, 32%).

#### **4.3.2 Demographics: Grades 8-9 participants**

The majority (n = 255, 75%) of the students reported living in Canada all their life. Another 49 (14%) reported living in Canada between one and six years; only 36 (11%) reported living in Canada for more than six years.

Students who identified with a national origin were included in the preliminary analyses that examined whether ethnic differences contributed to different levels of ethnic regard (private and public), ethnic discrimination, belonging to school, and belonging to Canada. The subsample that was created to assess ethnic differences in ethnic regard (based on item 14, the open-ended question), discrimination, belonging to school, and belonging to Canada included a total of 263 (77%) students. Of these students, 149 (44%) identified as Chinese, 39 (11%) identified as Filipino, 34 (10%) identified as Indian, 27 (8%) identified as Vietnamese, and 14 (4%) identified as European.

#### **4.3.3 Descriptive analyses: Grades 6-7 participants**

The first set of analyses examined the bivariate correlations among the present study's explanatory variables for the Grade 6-7 sample, including private regard, ethnic discrimination, belonging to school, and belonging to Canada. As shown in Table 4.1, students who reported greater feelings of belonging to school also reported greater feelings of belonging to Canada. Reported peer discrimination was associated with somewhat lower feelings of school belonging but was not related to reported belonging to Canada nor to feelings of private regard for one's ethnic group. However, students who reported more positive feelings of private regard also reported greater belonging to both school and Canada.

**Table 4.1 Correlation between variables (N = 158)**

	<b>Mean (SD)</b>	<b>Private Regard</b>	<b>Discrimination</b>	<b>Belong- School</b>	<b>Belong- Canada</b>
Private Regard	4.27 (0.62)	-	-.03	.40**	.29**
Discrimination	0.56 (1.10)	-	-	-.16**	.05
Belong-School	4.11 (0.46)	-	-	-	.51**
Belong-Canada	4.30 (0.54)	-	-	-	-

*Note.* \*  $p < .05$ ; \*\*  $p < .01$

Question: Do private regard, discrimination, belonging to school, and belonging to Canada vary as a function of grade and sex?

Preliminary analyses examined grade and sex differences in private regard, ethnic discrimination, belonging to school, and belonging to Canada among students in the Grade 6-7 sample. Specifically, a series of four 2 (sex) by 2 (grade) analysis of variance was conducted, with private regard, discrimination, school belonging, and Canadian belonging serving as dependent variables. Results, as presented in Table 4.2, indicated no significant sex or grade differences for any of the dependent variables. The sex by grade interaction was also non-significant. Grade and sex were included in subsequent analyses as control variables.

**Table 4.2 Grades 6-7 (N = 158) sample: Grade and sex differences across variables**

	Grade	
	6 M (SD)	7 M (SD)
Private Regard	4.28 (0.66)	4.26 (0.59)
Discrimination	0.56 (1.12)	0.51 (1.09)
Belong-School	4.15 (0.43)	4.07 (0.48)
Belong-Canada	4.36 (0.50)	4.24 (0.57)
	Sex	
	Girl M (SD)	Boy M (SD)
Private Regard	4.22 (0.71)	4.32 (0.52)
Discrimination	0.46 (0.89)	0.66 (1.07)
Belong-School	4.10 (0.51)	4.12 (0.39)
Belong-Canada	4.33 (0.59)	4.26 (0.49)

Question: Do private regard, discrimination, belonging to school, and belonging to Canada vary as a function of years lived in Canada?

The next set of preliminary analyses consisted of a one-way (Time in Canada: three levels) ANOVA that examined the extent to which private regard, discrimination, belonging to school, and belonging to Canada varied as a function of years lived in Canada<sup>16</sup>.

Significance level was adjusted to  $p < .0125$  using the Bonferroni correction ( $.05/\text{number of analyses conducted with same predictors: } .05/4 = .0125$ ). Results indicated that youths' sense of belonging to Canada varied as a function of their time in Canada,  $F(2, 151) = 1.21, p < .01, \eta^2 = 0.13$ . Post-hoc analysis using Tukey<sup>17</sup> indicated that youth who have lived in Canada for six years or less expressed a lower sense of belonging to Canada than their peers who lived in

<sup>16</sup> Due to the unequal sample sizes and cells having as few as five participants grade and sex were not examined with time lived in Canada.

<sup>17</sup> Other post-hoc tests, including Bonferroni, LSD, and Scheffe, were performed to examine whether their results were similar. The results of these tests were significant and similar to those obtained when using Tukey post hoc tests.

Canada all their lives (see Table 4.3). Private regard, discrimination, and belonging to school did not vary significantly as a function of years lived in Canada.

**Table 4.3 Grades 6-7 (N = 158) sample: Years lived in Canada differences across variables**

	<b>Years in Canada</b>		
	<b>&lt; 6 years in Canada M (SD)</b>	<b>&gt; 6 years in Canada M (SD)</b>	<b>All my life in Canada M (SD)</b>
<b>Private Regard</b>	4.16 (0.79)	4.40 (0.57)	4.27 (0.51)
<b>Discrimination</b>	0.44 (0.78)	0.92 (1.53)	0.45 (0.96)
<b>Belong-School</b>	4.02 (0.55)	4.13 (0.37)	4.16 (0.43)
<b>Belong-Canada</b>	4.04 (0.54) <sup>a</sup>	4.22 (0.57)	4.49 (0.45) <sup>b</sup>

*Note.* Different superscripts across rows within a spanner of the table reflects significant differences, as indicated in post hoc analyses (Tukey) at  $p < .0125$ .

Question: Do private regard, discrimination, belonging to School and belonging to Canada vary as a function of ethnic group?

A subset of the total sample was used to examine whether there were any ethnic origin differences in private regard, discrimination, belonging to school, and belonging to Canada. Specifically, the 79<sup>18</sup> students of Chinese, Filipino, European, or Persian descent were included in the analyses. Ethnic differences in peer ethnic discrimination, belonging to school, and belonging to Canada origin were not significant. Ethnic differences in private regard, though not significant, approached significance,  $F(3, 75) = 2.85, p < .05$  (see Table 4.4).

<sup>18</sup> Given the small sample size, including grade and sex was not feasible. However, separate analyses for each variable were conducted and there were no differences in either.

**Table 4.4 Grades 6-7 (n = 79) sample: Ethnic group differences across variables**

	<b>Ethnic Group</b>			
	<b>Chinese M (SD)</b>	<b>Filipino M (SD)</b>	<b>European M (SD)</b>	<b>Persian M (SD)</b>
<b>Private Regard</b>	3.98 (0.64)	4.56 (0.36)	4.31 (0.48)	4.40 (0.96)
<b>Discrimination</b>	0.47 (0.82)	0.70 (1.25)	0.76 (1.27)	0.57 (1.09)
<b>Belong-School</b>	3.98 (0.55)	3.94 (0.53)	4.13 (0.46)	4.22 (0.43)
<b>Belong-Canada</b>	4.24 (0.57)	4.13 (0.39)	4.48 (0.44)	4.42 (0.58)

#### **4.3.4 Descriptive analyses: Grades 8-9 participants**

The first set of descriptive analyses included bivariate correlations between the present study's continuous variables, including private regard, public regard-respect, public regard-smart, public regard-successful, discrimination, belonging to school, and belonging to Canada. Pearson product moment correlations were computed to examine the degree of association among the variables in the study. The results, presented in Table 4.5, showed that virtually all the bivariate correlations were significant. However, the correlation between private regard and belonging to Canada was positive but weak. The correlations between discrimination and public regard-respect and discrimination and public-regard-success were significant and negative but there was no correlation between discrimination and public regard-smart. Moreover, the association between discrimination and belonging to Canada was significant but weak. As expected, the correlations between belonging to Canada and public regard-respect and belonging to Canada and public regard-successful were positive. However, they were not strong. Although belonging to Canada and belonging to school were positively correlated, their correlation was only moderate. Both were negatively correlated with discrimination.

**Table 4.5 Grades 8-9 (N = 340) sample: Correlations among variables**

	Mean (SD)	Private Regard	Public- Respect	Public- Smart	Public- Success	Discrim- ination	Belong School	Belong Canada
Private Regard	4.04 (0.69)	-	.42**	.13**	.11*	-.17**	.41**	.18**
Public- Respect	3.56 (0.55)	-	-	.44**	.40**	-.21**	.49**	.26**
Public- Smart	3.41 (0.70)	-	-	-	.25**	.06	.25**	.06
Public- Success	3.93 (0.74)	-	-	-	-	-.31**	.33**	.17**
Discrim- ination	1.35 (1.47)	-	-	-	-	-	-.32**	-.15**
Belong- School	3.64 (0.60)	-	-	-	-	-	-	.35**
Belong- Canada	4.28 (0.70)	-	-	-	-	-	-	-

\*  $p < .05$ ; \*\*  $p < .01$

Question: Do private regard, public regard within the school context (respect, smart, and successful like others), discrimination, belonging to school, and belonging to Canada vary as a function of grade and sex?

A two-way ANOVA (Grade X Sex) was conducted to find out whether private regard, public regard-respect, public regard-smart, public regard-success, discrimination, belonging to school, and belonging to Canada varied as a function of grade and sex (see Table 4.6). Due to the number of analyses conducted, significance was adjusted so  $p$  was adjusted to .007, using the Bonferroni correction. Results indicated significant grade differences in student reports of private regard,  $F(1, 335) = 13.47$ ,  $p < 0.001$ ,  $\eta^2 = 0.04$ , with students in grade 8 reporting higher levels of private regard than students in grade 9. There was no significant sex main effect or sex by grade interaction. Grade differences in student perceptions of public regard-respect were also significant  $F(1, 332) = 10.40$ ,  $p < 0.001$ ,  $\eta^2 = 0.03$  showing that grade 8 students reported higher public regard-respect than

did grade 9 students. There was no significant main effect for sex or interaction effect for grade by sex. There were no grade or sex differences in students' report of public regard-smart, public regard-successful, discrimination, belonging to school, and belonging to Canada. Grade and sex were included in subsequent analyses as control variables.

**Table 4.6 Grades 8-9 (N = 340) sample: Grade and sex differences across variables**

	Grade	
	8 M (SD)	9 M (SD)
Private Regard**	4.15 <sup>a</sup> (0.67)	3.89 <sup>b</sup> (0.70)
Public Regard-Respect**	3.63 <sup>a</sup> (0.58)	3.46 <sup>b</sup> (0.47)
Public Regard-Smart	3.43 (0.66)	3.38 (0.76)
Public Regard-Successful	3.90 (0.75)	3.98 (0.73)
Discrimination	1.32 (1.49)	1.40 (1.44)
Belong-School	3.71 (0.60)	3.53 (0.60)
Belong-Canada	4.32 (0.72)	4.21 (0.66)
	Sex	
	Girl M (SD)	Boy M (SD)
Private Regard	4.00 (0.71)	4.10 (0.67)
Public Regard-Respect	3.61 (0.52)	3.49 (0.58)
Public Regard-Smart	3.34 (0.68)	3.51 (0.74)
Public Regard-Successful	3.97 (0.70)	3.88 (0.81)
Discrimination	1.23 (1.49)	1.53 (1.42)
Belong-School	3.61 (0.64)	3.68 (0.54)
Belong-Canada	4.26 (0.69)	4.30 (0.72)

Note. \*\*  $p < .001$

Question: Do private regard, public regard within the school context (respect, smart, and successful like others), discrimination, belonging to school and belonging to Canada vary as a function of years lived in Canada and grade?



The second set of descriptive analyses consisted of a 3x2 ANOVA (Time lived in Canada x Grade) that examined the extent to which private regard, ethnic discrimination, belonging to school, and belonging to Canada varied as a function of years lived in Canada (three levels: six years or less, more than six years, and all my life) and grade (two levels: grade 8 and grade 9). Significance level was adjusted to  $p < .007$  using the Bonferroni principal ( $.05/\text{number of analyses conducted with same predictors: } .05/7 = .007$ ). Results (see Table 4.7) indicated that private regard varied as a function of grade,  $F(1, 334) = 23.38, p < .01, \eta^2 = 0.07$ . Specifically, youth in grade 9 reported lower levels of private regard than youth in grade 8. Moreover, private regard also varied as a function of the interaction between grade and years lived in Canada,  $F(2, 34) = 6.42, p < .01, \eta^2 = 0.04$ . To gain a better understanding of the interaction between grade and years lived in Canada, grade differences in private regard were examined within each level of time in Canada separately. Results indicated that ninth grade youth ( $M = 3.53, SD = 0.94$ ) who have been living in Canada for six years or less reported significantly lower levels of private regard than eighth grade youth ( $M = 4.38, SD = 0.51$ ) who have been living in Canada for six years or less,  $F(1, 47) = 16.82, p < .001, \eta^2 = 0.26$ . For youth who have been living in Canada for more than six years, grade differences in private regard approached significance,  $F(1, 34) = 5.22, p = .03, \eta^2 = 0.13$ , with youth in grade 9 ( $M = 3.79, SD = 0.72$ ) reporting lower levels of private regard than youth in grade 8 ( $M = 4.36, SD = 0.73$ ). There were no significant grade differences in private regard among youth who have lived in Canada all their life.

Furthermore, public regard-respect varied as a function of grade,  $F(1, 328) = 9.90, p < .007, \eta^2 = 0.03$ . Specifically, students in grade 9 reported lower levels of public regard-respect than students in grade 8. Main effects for time in Canada were not detected. Also, there were

no significant interactions contributing to differences in public regard-respect. Results also indicated that reports of discrimination varied as a function of time lived in Canada,  $F(2, 332) = 5.73, p < .007, \eta^2 = 0.03$ . Post hoc analyses (Tukey)<sup>19</sup> indicated that youth who lived in Canada for six years or less reported higher levels of discrimination than youth who have lived in Canada all their life. Main effects for grade were not detected and there were no significant interactions.

Results also showed that belonging to Canada varied as a function of time in Canada,  $F(2, 331) = 13.37, p < .001, \eta^2 = 0.08$ . Specifically, post hoc analyses (Tukey)<sup>20</sup> showed that youth who have lived in Canada for six years or less reported lower levels of belonging to Canada than youth who have lived in Canada all their life. Main effects for grade were not detected and there were no significant interactions. Moreover, public regard-smart, public regard-successful, and belonging to school did not vary as a function of grade or years lived in Canada and there were not significant interactions<sup>21</sup>.

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<sup>19</sup> Other post-hoc tests, including Bonferroni and LSD, were performed to examine whether their results were similar. The results of these tests were significant and similar to those of Tukey. Results using Scheffe approached significance ( $p < .009$ ).

<sup>20</sup> Other post-hoc tests, including Bonferroni, LSD, and Scheffe, were performed to examine whether their results were similar. The results of these tests were significant and similar to those of Tukey.

<sup>21</sup> A 3x2 ANOVA (Time in Canada x Sex) was examined and none of the variables varied as a function of sex or an interaction of time in Canada and sex. Sex was not included in the analyses with time in Canada and grade due to small cell sizes.

**Table 4.7 Grades 8-9 (N = 340) sample: Years lived in Canada and grade differences across variables**

	<b>Years in Canada</b>		
	<b>&lt; 6 years in Canada M (SD)</b>	<b>&gt; 6 years in Canada M (SD)</b>	<b>All my life in Canada M (SD)</b>
Private Regard	4.08 (0.79)	4.03 (0.77)	4.04 (0.66)
Public-Respect	3.64 (0.62)	3.60 (0.51)	3.54 (0.54)
Public-Smart	3.42 (0.59)	3.47 (0.65)	3.40 (0.73)
Public-Success	3.86 (0.76)	3.90 (0.79)	3.95 (0.73)
Discrimination	1.90 (1.60) <sup>a</sup>	1.67 (1.66)	1.20 (1.39) <sup>b</sup>
Belong- School	3.71 (0.58)	3.61 (0.77)	3.63 (0.58)
Belong- Canada	3.82 (0.70) <sup>a</sup>	4.19 (0.71)	4.38 (0.66) <sup>b</sup>
	<b>Grade</b>		
	<b>8 M (SD)</b>	<b>9 M (SD)</b>	
Private-Regard	4.15 (0.67) <sup>a</sup>	3.89 (0.70) <sup>b</sup>	
Public-Respect	3.63 (0.58) <sup>a</sup>	3.46 (0.47) <sup>b</sup>	
Public-Smart	3.43 (0.66)	3.38 (0.76)	
Public-Success	3.90 (0.75)	3.98 (0.73)	
Discrimination	1.32 (1.49)	1.40 (1.44)	
Belong- School	3.71 (0.60)	3.53 (0.60)	
Belong- Canada	4.32 (0.72)	4.21 (0.66)	

*Note.* Different superscripts across rows within a spanner of the table reflects significant differences, as indicated in post hoc analyses (Tukey) at  $p < .007$ .

Question: Do private regard, public regard within the school context (respect, smart, and successful like others), discrimination, belonging to school and belonging to Canada vary as a function of ethnicity and sex?

To examine ethnic differences in private regard, public regard-respect, public regard-smart, public regard-successful, discrimination, belonging to school, and belonging to Canada, a subsample was used because it included the students who identified with a national origin ( $n = 263$ ). The subsample included students of Chinese, Indian, Vietnamese, Filipino, and

European descent. A series of two-way ANOVA's (Ethnicity X Sex) were conducted<sup>22</sup>. Significance level was adjusted at  $p < .007$  using the Bonferroni correction.

The results showed significant ethnic differences in students reports of public regard-respect,  $F(4, 248) = 4.30, p < 0.007$ . However, post-hoc (Tukey) analyses indicated that although differences between some ethnic groups were close to significance, none of them reached significance<sup>23</sup>.

The main effect for ethnic differences in students' reports of public regard-smart was significant,  $F(4, 251) = 12.01, p < 0.001, \eta^2 = 0.16$ . Tukey<sup>24</sup> post-hoc analyses showed that students of Chinese descent reported significantly higher levels of public regard-smart than their peers in other ethnic groups. There were no significant differences between the other groups.

Ethnic differences were also reported for students' reports of public regard-success,  $F(4, 253) = 7.447, p < 0.001, \eta^2 = 0.10$ . Tukey<sup>25</sup> post-hoc analyses indicated that the differences in public regard-success reported by youth of Indian descent and youth of European descent were significantly lower than the levels reported by their peers of Chinese descent. Sex

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<sup>22</sup> Given that a few cell sizes had few subject grade was not included with ethnicity and sex. However, a two-way ANOVA (ethnicity x grade) was conducted. There were no significant grade differences or an interaction between ethnicity and grade.

<sup>23</sup> Other post-hoc tests, including Bonferroni, LSD, and Scheffe, showed similar results.

<sup>24</sup> Other post-hoc tests, including Bonferroni and LSD, were performed to examine whether their results were similar. The results of these tests were significant and similar to those of Tukey. Results using Scheffe were significant for youth of Indian and European backgrounds and the others approached significance.

<sup>25</sup> Other post-hoc tests, including Bonferroni and LSD, were performed to examine whether their results were similar. The results of these tests were significant and similar to those of Tukey. Results using Scheffe showed similar results for youth of Indian descent. The difference between youth of Chinese descent and youth of European descent approached significance ( $p < .02$ ).

differences in public regard-success were not detected and none of the interactions were significant.

There were no significant differences in ethnic background or sex in student reports of private regard, discrimination, belonging to school, and belonging to Canada. As well, ethnic group by sex interactions were not found (see Table 4.8).

**Table 4.8 Grades 8-9 (N = 340) sample: Ethnic group and sex differences**

	<b>Ethnic Groups</b>				
	<b>Chinese</b>	<b>Indian</b>	<b>Vietnamese</b>	<b>Filipino</b>	<b>European</b>
	<b>M (SD)</b>	<b>M (SD)</b>	<b>M (SD)</b>	<b>M (SD)</b>	<b>M (SD)</b>
Private Regard	3.98 (0.70)	4.13 (0.85)	4.21 (0.56)	4.21 (0.57)	4.14 (0.50)
Public-Respect	3.64 (0.47)	3.48 (0.72)	3.48 (0.55)	3.71 (0.55)	3.18 (0.56)
Public-Smart	3.62 <sup>a</sup> (0.67)	3.21 <sup>b</sup> (0.65)	3.00 <sup>b</sup> (0.65)	3.21 <sup>b</sup> (0.58)	2.95 <sup>b</sup> (0.53)
Public-Success	4.12 <sup>a</sup> (0.50)	3.57 <sup>b</sup> (0.96)	3.93 (0.96)	3.79 (0.79)	3.43 <sup>b</sup> (0.76)
Discrimination	1.39 (1.56)	1.56 (1.76)	0.77 (1.76)	1.49 (1.54)	1.29 (1.20)
Belong-School	3.67 (0.51)	3.78 (0.76)	3.46 (0.76)	3.62 (0.65)	3.35 (0.66)
Belong-Canada	4.27 (0.71)	4.42 (0.82)	4.43 (0.82)	4.21 (0.68)	4.05 (0.74)
	<b>Sex</b>				
	<b>Girls</b>	<b>Boys</b>			
	<b>M (SD)</b>	<b>M (SD)</b>			
Private Regard	4.03 (0.72)	4.11 (0.63)			
Public-Respect	3.65 <sup>a</sup> (0.51)	3.50 <sup>b</sup> (0.57)			
Public-Smart	3.31 (0.66)	3.55 (0.73)			
Public-Success	3.98 (0.70)	3.89 (0.83)			
Discrimination	1.24 (1.59)	1.53 (1.43)			
Belong-School	3.61 (0.66)	3.68 (0.54)			
Belong-Canada	4.28 (0.70)	4.29 (0.74)			

*Note.* Different superscripts across rows within a spanner of the table reflects significant differences, as indicated in post hoc analyses (Tukey) at  $p < .007$ .

#### 4.3.5 Comparison of participants in grades 6-7 and participants in grades 8-9 correlation analyses

The results obtained for the grades 6-7 and 8-9 samples indicated that the two groups share some similarities. For example, in both groups of adolescents reported, there was a moderate positive correlation between private regard and belonging to school and a weaker positive correlation between private regard and belonging to Canada. That is, at all grade levels, the more students reported perceiving their own ethnic group positively, the more they reported feeling that they belonged, both in their school and in Canada. Fisher's  $z$  transformations were executed (see Table 4.9) to examine whether the differences in correlations between students in grades 6-7 and students in grades 8-9 were significant (public regard was excluded because it was not measured for grades 6-7 students). Results showed that the correlation between discrimination and belonging to Canada was significantly stronger for middle adolescents than for early adolescents and that the correlation between belonging to school and belonging to Canada was significantly stronger for early adolescents than for middle adolescents.

**Table 4.9 Fisher's  $r$  to  $z$  transformation for students in grades 6-7 and students in grades 8-9: differences between correlations**

Correlations compared:	Grades 6-7	Grades 8-9	Fisher's $z$
Private Regard and Discrimination	-.03	-.17**	1.46
Private-Regard and Belong-School	.40**	.41**	-0.12
Private Regard and Belong-Canada	.29**	.18**	1.20
Discrimination and Belong-School	-.16**	-.32**	1.75
Discrimination and Belong-Canada	.05	-.15**	2.07*
Belonging-School and Belong-Canada	.51**	.35**	2.03*

*Note.* \*  $p < .05$ ; \*\*  $p < .01$

#### **4.4 Correlates of private and public regard**

The second objective of the study was to extend the narrow literature on private regard and public regard and their correlates. Accordingly, the first five sets of regression analyses conducted in the present study (sections 4.4.1- 4.4.5) were conducted to explore this connection. For grades 6-7 students, only private regard was examined. For participants in grades 8-9, private regard, public regard-respect, public regard-smart, and public regard-successful were examined. Because public regard was not included for grades 6-7 students, the research questions for grades 6-7 students were slightly different than those presented in the Statement of the Problem section. Following Aiken and West (1991), ethnic discrimination was centered to avoid multicollinearity between the main effect of discrimination and its interaction term.

##### **4.4.1 Private regard: Grades 6-7 participants**

Question: Does discrimination explain private regard above and beyond ethnic group and years lived in Canada?

Because a sample of 79 was too small for running multiple regressions that included discrimination, ethnicity, and years lived in Canada, two sets of individual multiple regressions were run. The first multiple regression used the subsample of 79 grades 6-7 students because it allowed for examining ethnic differences. Using the Bonferroni correction significance level was adjusted to  $p < .025$ .

The first multiple regression examined the extent to which discrimination contributed to different levels of private regard above and beyond the contributions of ethnicity to perceptions of private regard. Given that ethnicity was categorical, consisting of 4 groups, three dummy variables were created representing youth of Filipino, European, and Persian

descent. As the largest subgroup considered, youth of Chinese origins were used as the reference group. Step 1 included the three ethnic groups, Filipino, European and Persian. In Step 2, discrimination was entered. However, given results of earlier analyses showing that discrimination and private regard were not correlated, it was expected that the results of the regression would not reject the null hypothesis. As anticipated, discrimination did not predict different levels of private regard above and beyond ethnic differences. In fact, the overall model was non significant. However, the link between ethnicity and private regard approached significance,  $F(3, 75) = 2.85, p = .04$ . Specifically, the differences between youth of Filipino descent and youth of Chinese descent was significant,  $\beta = .29, p < .025$ , with youth of Filipino descent reporting higher levels of private regard than youth of Chinese descent. As well, the differences between youth of Persian descent and youth of Chinese descent leaned towards significance,  $\beta = .24, p = .05$  (see Table 4.10). However, given that the overall model was not significant, the interaction term between discrimination and ethnicity was not pursued for youth in grades 6-7.

**Table 4.10 Grades 6-7 (n = 79) sample: Moderated multiple regression of ethnic group and discrimination on private regard**

	<b>B</b>	<b>SE</b>	<b><math>\beta</math></b>	<b>t</b>	<b>R<sup>2</sup></b>	<b>Adj R<sup>2</sup></b>	<b><math>\Delta R^2</math></b>
Step 1					.10	.06	.10
Filipino	.58	.23	.29	2.47*			
European	.33	.17	.23	1.90			
Persian	.42	.21	.24	2.02			
Step 2					.10	.06	.00
Discrimination	-.03	.07	-.04	-0.39			

Note. \*  $p < .025$

The entire sample, N = 158, was used to run the multiple regression analyses to examine whether years lived in Canada predicted different levels of private regard and



whether discrimination was linked to private regard above and beyond years lived in Canada. Significance level was set at  $p < .016$ . Given that years lived in Canada was categorical variables that had three different levels, two dummy variables were created with students who have lived in Canada all their life as the reference group. The overall model was not significant (see Table 4.11).

**Table 4.11 Grades 6-7 (N = 158) sample: Moderated multiple regression of years lived in Canada and discrimination on private regard**

	<b>B</b>	<b>SE</b>	<b><math>\beta</math></b>	<b>t</b>	<b>R<sup>2</sup></b>	<b>Adj R<sup>2</sup></b>	<b><math>\Delta R^2</math></b>
Step 1					.01	-.00	.01
Grade	.00	.10	.00	0.10			
Sex	.11	.01	.09	1.07			
Step 2					.03	.00	.02
< 6 years	-.10	.12	-.07	-0.80			
> 6 years	.13	.12	.09	1.06			
Step 3					.03	-.00	.03
Discrimination	-.04	.05	-.06	-0.78			

#### **4.4.2 Private regard: Grades 8-9 participants**

Question: Does discrimination explain private regard above and beyond time in Canada and ethnicity? (For the analyses examining regard (section 4.4.2-4.4.5) as an outcome among grades 8-9, significance level was adjusted to  $p < .007$  using the Bonferroni correction).

For these analyses a subset of the total sample ( $n = 263$ ) was used in order to examine the effects of one's ethnic group on their reports of private regard. The subsample included youth who reported being of Chinese, Indian, Vietnamese, Filipino, and European backgrounds. Other groups were not included because they were too few in

number or reported identifying with more than one ethnic group. Step 1, which included grade and sex as explanatory variables of private regard, was significant (Table 4.12),  $\Delta F(2, 258) = 5.52, p < .007$  and contributed 4% to the variance in private regard.

Specifically, grade differences in youths' report of private regard were significant with youth in grade 9 reporting significantly lower levels of private regard than youth in grade 8. Step 2, however, was not significant. The addition of perceived ethnic discrimination in Step 3 was significant contributing an additional 5% to the variance in private regard,  $\Delta F(1, 251) = 13.32, p < .001$ .

Given the significance of the model up to Step 3, the follow up research question was examined: Does the association between discrimination and private regard vary as a function of time in Canada and ethnicity?

To explore whether ethnic discrimination interacted with time lived in Canada or ethnicity, a fourth step was added to the model examining the interaction terms between ethnic discrimination and years lived in Canada and ethnic discrimination and ethnicity, respectively. Given that ethnicity was a categorical variable, youth identifying as Chinese (largest group) were used as a reference variable to assess the experiences of other ethnic groups in comparison to the experiences reported by their Chinese peers. Years lived in Canada were also dummy coded with students living all their life in Canada as the reference group. Step 4 was not significant. The overall model, however, was significant,  $F(15, 245) = 2.78, p < .001$ , and explained a total of 15% of the variance in private regard.

**Table 4.12 Grades 8-9 (n = 263) sample: Moderated multiple regression of years lived in Canada, ethnic group and discrimination on private regard**

	B	SE	$\beta$	t	R <sup>2</sup>	Adj R <sup>2</sup>	$\Delta R^2$
Step 1					.04	.03	.04*
Grade (Grade 9)	-.2	.09	-.20	-3.23**			
Sex (Male)	.07	.09	.05	0.80			
Step 2					.07	.04	.03
< 6 years	.11	.14	.05	0.81			
> 6 years	.06	.14	.03	0.46			
Indian	.14	.13	.07	1.10			
Vietnamese	.31	.14	.14	2.13			
Filipino	.20	.13	.10	1.55			
European	.19	.19	.06	1.03			
Step 3					.12	.09	.05**
Discrimination	-.10	.03	-.22	-3.65**			
Step 4					.15	.09	.03
Discrimination x < 6	-.08	.08	-.07	-0.98			
Discrimination x > 6	-.09	.08	-.08	-1.11			
Discrimination x Indian	-.12	.07	-.11	-1.65			
Discrimination x Vietnamese	.09	.13	.05	0.69			
Discrimination x Filipino	.10	.09	.08	1.13			
Discrimination x European	.15	.16	.06	0.97			

*Note.* Grade 8 reference group for grade; female reference group for sex; all my life reference group for time in Canada; Chinese reference group for ethnicity

\*  $p < .007$ ; \*\*  $p < .001$

#### **4.4.3 Public regard-respect: Grades 8-9 participants**

Question: Does discrimination explain public regard-respect above and beyond time in Canada and ethnicity?

Similar to the preceding analysis that examined private regard among grades 8-9, a subset of the sample (n = 263) was used in order to examine the effects of one's ethnic group on their reports of public regard-respect. Step 1, which included grade and sex as control variables of public regard-respect, was significant (Table 4.13),  $\Delta F(2, 253) =$

6.46,  $p < .007$  and contributed 5% to the variance in public regard-respect. Specifically, grade differences in youths' report of public regard-respect were significant with youth in grade 9 reporting significantly lower levels of private regard than youth in grade 8. Step 2, approached significance,  $\Delta F(6, 247) = 2.23, p < .05$ . Specifically, youth of European origins reported lower levels of public regard-respect than youth of Chinese origins. The addition of perceived ethnic discrimination in Step 3 was significant contributing an additional 5% to the variance in private regard-respect,  $\Delta F(1, 246) = 12.70, p < .001$ .

Given the significance of the model up to Step 3, the follow up research question was examined: Does the association between discrimination and public regard-respect vary as a function of time in Canada and ethnicity?

To explore whether ethnic discrimination interacted with time lived in Canada or ethnicity, a fourth step was added to the model examining the interaction terms between ethnic discrimination and years lived in Canada and ethnic discrimination and ethnicity, respectively. Step 4 was significant,  $\Delta F(6, 240) = 3.26, p < .007$ , indicating that the negative link between ethnic discrimination and public regard-respect was worse for youth of Indian backgrounds in comparison to youth of Chinese backgrounds (see Figure 4.1). Specifically, for youth of Indian backgrounds higher levels of discrimination were associated with lower levels of public regard-respect. The overall model was significant,  $F(15, 240) = 4.16, p < .001$ , and explained a total of 21% of the variance in public regard-respect (adjusted  $R^2 = 17\%$ ).

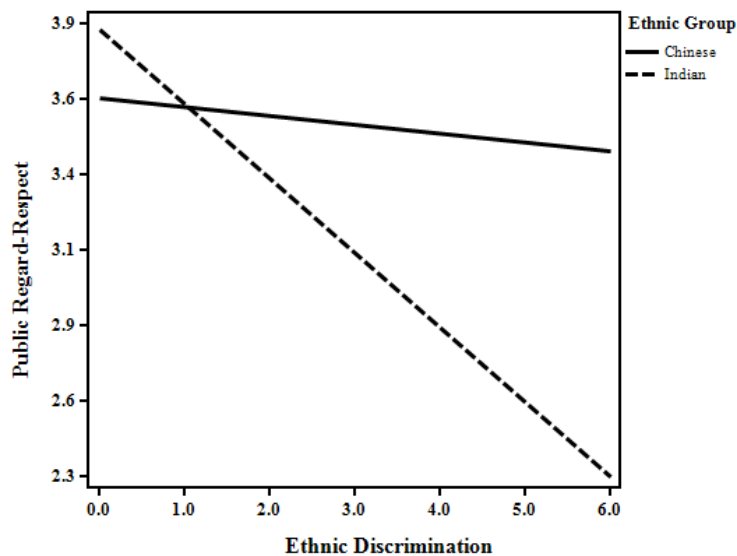
**Table 4.13 Grades 8-9 (n = 263) sample: Moderated multiple regression of years lived in Canada, ethnic group and discrimination on public regard-respect**

	<b>B</b>	<b>SE</b>	<b><math>\beta</math></b>	<b>t</b>	<b>R<sup>2</sup></b>	<b>Adj R<sup>2</sup></b>	<b><math>\Delta R^2</math></b>
Step 1					.05	.04	.05**
Grade (Grade 9)	-.19	.07	-.18	-2.86*			
Sex (Male)	-.15	.07	-.13	-2.16			
Step 2					.10	.07	.05
< 6 years	.13	.11	.08	1.24			
> 6 years	.06	.11	.03	0.54			
Indian	-.14	.10	-.09	-1.38			
Vietnamese	-.10	.11	-.05	-0.84			
Filipino	.03	.10	.02	0.30			
European	-.41	.15	-.17	-2.79*			
Step 3					.14	.11	.04**
Discrimination	-.08	.02	-.22	-3.56**			
Step 4					.22	.17	.08**
Discrimination x < 6	.05	.06	.06	0.82			
Discrimination x > 6	-.03	.06	-.04	-0.53			
Discrimination x Indian	-.22	.06	-.26	-3.83**			
Discrimination x Vietnamese	.06	.10	.04	0.63			
Discrimination x Filipino	.05	.07	.06	0.77			
Discrimination x European	-.05	.12	-.03	-0.45			

*Note.* Grade 8 reference group for grade; female reference group for sex; all my life reference group for time in Canada; Chinese reference group for ethnicity

\*  $p < .007$ ; \*\*  $p < .001$

**Figure 4.1: Interaction of perceived ethnic discrimination x ethnicity on public regard-respect**



#### 4.4.4 Public regard-smart: Grades 8-9 participants

Question: Does discrimination explain public regard-smart above and beyond time in Canada and ethnicity?

Similar to the preceding analyses, a subset of the sample ( $n = 263$ ) was used in order to examine the effects of one's ethnic group on their reports of public regard-smart. Step 1, which included grade and sex as explanatory variables of public regard-smart, was significant (Table 4.14),  $\Delta F(2, 257) = 5.23, p < .007$  and contributed 4% to the variance in public regard-smart. Specifically, sex differences in youths' report of public regard-smart were significant with boys reporting higher levels of public regard-smart than girls. Step 2 was significant, explaining an additional 17% of the variance in public regard-smart,  $\Delta F(6, 251) = 6.83, p < .001$ . Specifically, youth of Indian, Vietnamese, Filipino, and European origins reported lower levels of public regard-smart than youth of Chinese origins. The addition of perceived ethnic

discrimination in Step 3 was not significant. In other words, there was no evidence supporting a significant association between ethnic discrimination and public regard-smart. Nonetheless,

Given the significance of the model up to Step 3, despite public regard-smart being non-significant, the follow up research question was examined: Does the association between discrimination and public regard-smart vary as a function of time in Canada and ethnicity?

Step 4 explored whether ethnic discrimination interacted with time lived in Canada and ethnicity, respectively. Step 4 was significant,  $\Delta F(6, 244) = 3.01, p < .007$ , explaining an additional 6% of the variance in public regard-smart. Specifically, the negative link between ethnic discrimination and public regard-smart was worse for youth of Indian origins in comparison to youth of Chinese backgrounds. In fact, Figure 4.2 suggests that for youth of Indian origins higher levels of ethnic discrimination were linked to lower levels of public regard-smart while for youth of Chinese origins higher levels of ethnic discrimination were linked to higher levels of public regard-smart. The overall model was significant,  $F(15, 244) = 4.89, p < .001$ , and explained a total of 23% of the variance in public regard-smart (adjusted  $R^2 = 18\%$ ).

**Table 4.14 Grades 8-9 (n = 263) sample: Moderated multiple regression of years lived in Canada, ethnic group and discrimination on public regard-smart**

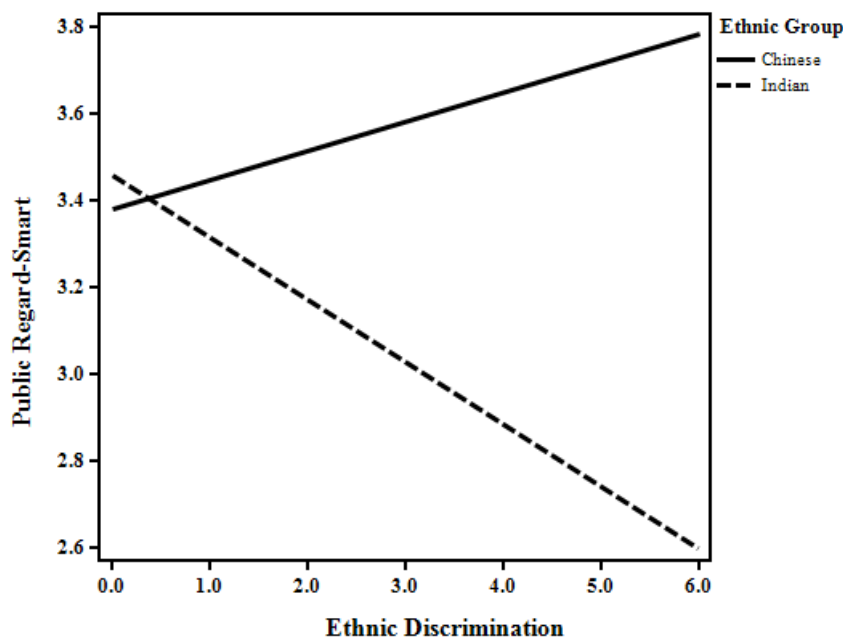
	B	SE	$\beta$	t	R <sup>2</sup>	Adj R <sup>2</sup>	$\Delta R^2$
Step 1					.04	.03	.04*
Grade (Grade 9)	-.15	.09	-.11	-1.77			
Sex (Male)	.23	.09	.17	2.71*			
Step 2					.17	.15	.14**
< 6 years	.10	.13	.05	0.75			
> 6 years	-.02	.13	-.01	-0.11			
Indian	-.43	.12	-.21	-3.51**			
Vietnamese	-.59	.14	-.26	-4.29**			
Filipino	-.42	.12	-.21	-3.43**			
European	-.69	.18	-.22	-3.80**			
Step 3					.17	.14	.00
Discrimination	.01	.03	.02	0.31			
Step 4					.23	.18	.06*
Discrimination x < 6	.09	.08	.07	1.11			
Discrimination x > 6	.05	.08	.05	0.67			
Discrimination x Indian	-.22	.07	-.20	-3.08*			
Discrimination x Vietnamese	.27	.12	.15	2.26			
Discrimination x Filipino	-.11	.09	-.09	-.130			
Discrimination x European	-.13	.15	-.05	-0.85			

*Note.* Grade 8 reference group for grade; female reference group for sex; all my life reference group for time in Canada; Chinese reference group for ethnicity

\*  $p < .007$ ; \*\*  $p < .001$



**Figure 4.2 Interaction of perceived ethnic discrimination x ethnicity on public regard-smart**



#### **4.4.5 Public regard-successful like others: Grades 8-9 participants**

Question: Does discrimination explain public regard-successful above and beyond time in Canada and ethnicity?

Similar to the preceding analyses, a subset of the sample ( $n = 263$ ) was used in order to examine the effects of one's ethnic group on their reports of public regard-successful (see Table 4.15). Step 1, which included grade and sex as explanatory variables of public regard-successful, was not significant. Step 2 was significant, explaining 10% of the variance in public regard-successful,  $\Delta F(6, 252) = 4.73, p < .001$ . Specifically, youth of Indian and European origins reported lower levels of public regard-successful than youth of Chinese origins. The addition of perceived ethnic discrimination in Step 3 was significant,  $\Delta F(1, 251) = 27.29, p < .001$ , explaining an additional 8% of the variance in public regard-successful.

Given the significance of the model up to Step 3, the follow up research question was examined: Does the association between discrimination and public regard-successful vary as a function of time in Canada and ethnicity?

Step 4, which explored whether ethnic discrimination interacted with years lived in Canada and/or ethnicity, respectively, was conducted. Step 4 was not significant. However, the overall model was significant,  $F(15, 245) = 4.51, p < .001$ , and explained a total of 22% of the variance in public regard-successful (adjusted  $R^2 = 17\%$ ).

**Table 4.15 Grades 8-9 (n = 263) sample: Moderated multiple regression of years lived in Canada, ethnic group and discrimination on public regard-successful**

	B	SE	$\beta$	t	$R^2$	Adj $R^2$	$\Delta R^2$
Step 1					.01	.00	.01
Grade (Grade 9)	.06	.10	.04	0.62			
Sex (Male)	-.09	.10	-.06	-0.97			
Step 2					.11	.08	.10**
< 6 years	-.14	.15	-.06	-0.97			
> 6 years	-.10	.17	-.04	-1.13			
Indian	-.55	.14	-.25	-3.98**			
Vietnamese	-.20	.16	-.08	-1.30			
Filipino	-.28	.14	-.13	-2.04			
European	-.72	.21	-.22	-3.53**			
Step 3					.19	.17	.08**
Discrimination	-.15	.03	-.31	-5.22**			
Step 4					.22	.17	.02
Discrimination x < 6	-.02	.09	-.03	-0.17			
Discrimination x > 6	-.05	.09	.03	-0.51			
Discrimination x Indian	-.17	.08	-.14	-2.15			
Discrimination x Vietnamese	-.01	.13	-.00	-0.10			
Discrimination x Filipino	-.15	.09	-.12	-1.68			
Discrimination x European	-.05	.16	-.02	-0.30			

*Note.* Grade 8 reference group for grade; female reference group for sex; all my life reference group for time in Canada; Chinese reference group for ethnicity

\*  $p < .007$ ; \*\*  $p < .001$

## **4.5 Belonging to school and belonging to Canada**

The final and primary objective of the study was to examine the correlates of belonging to school and, importantly, belonging to Canada, which has not been examined as an outcome among early and middle adolescents.

### **4.5.1 Belonging to school: Grades 6-7 participants**

Question: How do youths' time in Canada, experiences with discrimination, perceptions of private regard predict their sense of belonging to school, after controlling for grade level and sex? (Using the Bonferroni correction, significance was adjusted to  $p < .008$  for sections 4.5.1 and 4.5.2).

Hierarchical regression was used to examine the factors that contributed to early adolescents' sense of school belonging. The first objective was to examine whether years lived in Canada contributed to youth sense of school belonging, after accounting for grade and sex. Results (Table 4.14) showed that years lived in Canada was not significantly linked to youth sense of school belonging. The third step examined whether experiences of ethnic discrimination uniquely contributed to lower levels of school belonging. Results indicated that the link between ethnic discrimination and school belonging was not significant.

The fourth step of the regression explored the unique contribution of private regard to school belonging. Findings indicated that higher levels of private regard were linked to higher levels of school belonging,  $\Delta F(1, 148) = 28.27, p < .001$ .

Given the significance of the model up to Step 4, the follow up question was asked: Does the time youth have lived in Canada moderate the link between private regard and belonging to school?

The fifth and last step of the regression indicated that the interaction terms between private regard and years lived in Canada was not significant,  $\Delta F(2, 146) = 3.12, p < .05$ . The overall model was significant,  $F(8, 146) = 5.58, p < .001$ , explaining 23% of the variance in early adolescents' sense of school belonging (adjusted  $R^2 = 19\%$ ).

**Table 4.16 Grades 6-7 (N = 158) sample: Moderated multiple regression of years lived in Canada, discrimination and ethnic regard on belonging to school**

	B	SE	$\beta$	t	$R^2$	Adj $R^2$	$\Delta R^2$
Step 1					.01	-.01	.01
Grade (Grade 7)	-.08	.07	-.08	-1.03			
Sex (Male)	.02	.07	.02	0.20			
Step 2					.05	.00	.02
< 6 years	-.13	.09	-.13	-1.49			
> 6 years	-.03	.09	-.03	-0.31			
Step 3					.05	.02	.03
Discrimination	-.08	.04	-.17	-2.03			
Step 4					.20	.17	.15**
Private Regard	.29	.06	.40	5.32**			
Step 5					.23	.19	.03
Private Regard x < 6 years	-.28	.12	-.26	-2.45			
Private Regard x > 6 years	-.02	.16	-.01	-0.13			

*Note.* Grade 6 reference group for grade; female reference group for sex; all my life reference group for time in Canada

\*\*  $p < .001$

#### 4.5.2 Belonging to Canada: Grades 6-7 participants

Question: How do youths' time in Canada, experiences with discrimination, perceptions of private regard predict their sense of belonging to Canada, after controlling for grade level and sex?

A five-step hierarchical regression was used to examine the factors that contributed to early adolescents' sense of belonging to Canada. The first objective of the regression was to examine whether years lived in Canada contributed to youth sense of school belonging accounting for grade and sex. Results (Table 4.17) showed that years lived in Canada was significantly linked to youth sense of belonging to Canada,  $\Delta F(2, 149) = 11.69, p < .001$  and contributed 13% to the variance in belonging to Canada. Specifically, youth who were born in Canada reported higher levels of belonging to Canada in comparison to both newcomer youth and youth have lived in Canada for over six years. The third step of hierarchical regression examined whether experiences of ethnic discrimination uniquely contributed to lower levels of belonging to Canada. Results indicated that the link between ethnic discrimination and belonging to Canada was not significant.

The fourth step of the regression explored the unique contribution of private regard to belonging to Canada. Findings indicated that higher levels of private regard were linked to higher levels of belonging to Canada,  $\Delta F(1, 147) = 15.94, p < .001$  and added 8% to the variance in belonging to Canada.

Given the significance of the model up to Step 4, the follow up question was asked: Does the time youth have lived in Canada moderate the link between private regard and belonging to Canada?

Finally, the last step of the regression examined whether private regard interacted with years lived in Canada. The fifth and last step of the regression indicated that the interaction terms between private regard and years lived in Canada was significant,  $\Delta F(2, 145) = 6.06, p < .008$ . The overall model was significant,  $F(8, 145) = 6.06, p < .001$ , explaining 29% of the variance in early adolescents' sense of belonging to Canada (adjusted  $R^2 = 26\%$ ). However,

none of the interaction terms emerged as significant. Therefore, secondary analyses with each interaction term entered in a separate model to examine whether one or both interaction terms were significant when examined separately. Results are presented in Appendix K.

**Table 4.17 Grades 6-7 (N = 158) samples: Moderated multiple regression of years lived in Canada, discrimination and regard on belonging to Canada**

	B	SE	$\beta$	t	R <sup>2</sup>	Adj R <sup>2</sup>	$\Delta R^2$
Step 1					.02	.00	.02
Grade (Grade 7)	-.11	.09	-.11	-1.31			
Sex (Male)	.08	.09	-.08	-0.92			
Step 2					.14	.13	.13**
< 6 years	-.47	.10	-.39	-4.74**			
> 6 years	-.26	.10	-.21	-2.59**			
Step 3					.15	.12	.00
Discrimination	.03	.04	.06	0.73			
Step 4					.23	.20	.08**
Private Regard	.25	.06	.29	3.99**			
Step 5					.29	.26	.06**
Private Regard x < 6 years	-.29	.14	-.23	-2.08			
Private Regard x > 6 years	.26	.18	.14	1.47			

*Note.* Grade 6 reference group for grade; female reference group for sex; all my life reference group for time in Canada

\*\*  $p < .001$

#### 4.5.3 Belonging to school: Grades 8-9 participants

Question: How do youths' time in Canada, experiences with discrimination, perceptions of private regard, public regard-respect, public regard-smart, and public regard-successful like others predict their sense of belonging to school, after controlling for grade level and sex?

A five-step hierarchical regression (see Table 4.18) was used to examine the factors that contribute to youth sense of belonging to school. The first step of the analyses included grade and sex in order to control for these two variables before proceeding with the rest of the analyses. Significance was adjusted from  $p < .05$  to  $p < .003$  using the Bonferroni correction.

Step 1 of the model indicated that grade and sex were not significantly linked to youth sense of belonging to school,  $\Delta F(2, 316) = 4.28, p = .01$ . The second step of the regression included the length of time youth have spent in Canada. Results showed that time in Canada was not linked to belonging to school. Step 3, which included the addition of ethnic discrimination to examine whether it uniquely contributed to youth sense of belonging to Canada, indicated that discrimination was associated with school belonging,  $\Delta F(1, 313) = 39.68, p < .003$ , contributing an additional 11% to the variance in school belonging. In fact, higher levels of ethnic discrimination were linked to lower levels of school belonging.

To examine the unique contribution of private regard and the three components of public regard to the variance in belonging to school, Step 4 of the regression included private regard, public regard-respect, public regard-smart, and public regard-successful (like other ethnic groups). Results showed that private regard, public regard-respect, and public regard-successful were uniquely and significantly linked to belonging to school. In fact, Step 4 explained an additional 22% of the variance in belonging to school,  $\Delta F(4, 309) = 26.16, p < .003$ .

Given the significance of the model up to Step 4, the follow up question was asked: Does the time youth have lived in Canada moderate the link between private regard and belonging to school and between each of the three aspects of public regard within the school context and belonging to school?

Results showed that time in Canada significantly moderated the link between ethnic regard and belonging to Canada,  $\Delta F(8, 301) = 3.71, p < .003$ , explaining an additional 6% of the variance in belonging to school. Specifically, as shown in Figure 4.3, for youth who have lived in Canada all their lives, higher levels of private regard were linked to higher levels of belonging to Canada. This relation was weaker for youth who have lived in Canadian for more than six years (but not all their lives). Also, as indicated in Figure 4.4, for youth who have lived in Canada for more than six years, perceiving that adults and students at their school view of their ethnic group as smart was linked to higher levels of belonging to school. This relation was stronger for youth who lived in Canada for more than six years than for youth who have lived in Canada all their lives. The overall model was significant,  $F(17, 301) = 12.47, p < .001$  and explained a total of 41% of the variance in belonging to school (adjusted  $R^2 = 38\%$ ).



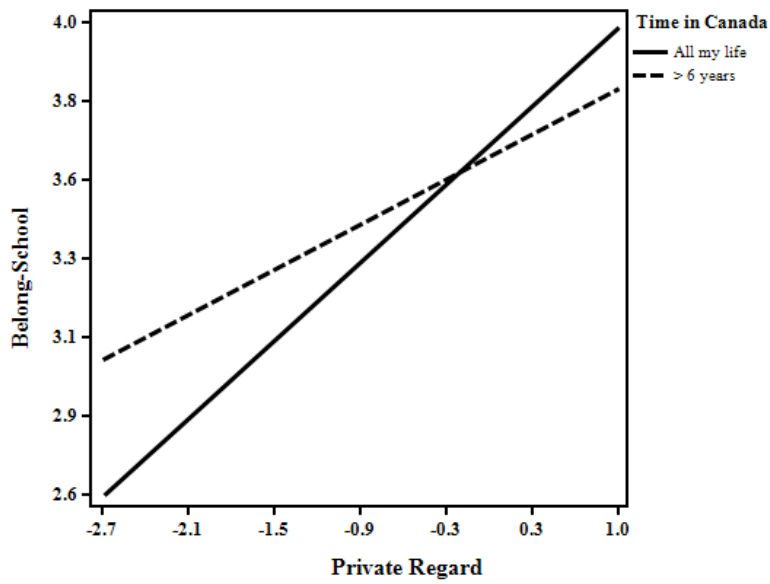
**Table 4.18 Grades 8-9 (N = 340) sample: Moderated multiple regression of years lived in Canada, discrimination and regard discrimination on belonging to school**

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>R</i> <sup>2</sup>	<i>Adj</i> <i>R</i> <sup>2</sup>	$\Delta R^2$
Step 1					.03	.02	.03
Grade (Grade 9)	-.18	.07	-.15	-2.66*			
Sex (Male)	.08	.07	.06	1.16			
Step 2					.03	.02	.00
< 6 years	.06	.10	.04	0.64			
> 6 years	.02	.11	.01	0.20			
Step 3					.14	.12	.11**
Discrimination	-.14	.02	-.34	-6.30**			
Step 4					.35	.33	.22**
Private Regard	.18	.05	.21	3.93**			
Public Regard-Respect	.29	.07	.27	4.24**			
Public Regard-Smart	.06	.05	.07	1.36			
Public Regard-Success	.11	.04	.13	2.48*			
Step 5					.41	.38	.06**
Private Regard x < 6 years	-.33	.12	-.16	-2.81			
Private Regard x > 6 years	-.46	.14	-.19	-3.19**			
Public Regard-Respect x < 6 years	.22	.20	.08	1.08			
Public Regard-Respect x > 6 years	.37	.22	.08	1.08			
Public Regard-Smart x < 6 years	-.02	.15	-.01	-0.10			
Public Regard-Smart x > 6 years	.42	.14	.15	3.00**			
Public Regard-Success x < 6 years	-.11	.13	-.05	-0.82			
Public Regard-Success x > 6 years	.11	.13	.05	0.87			

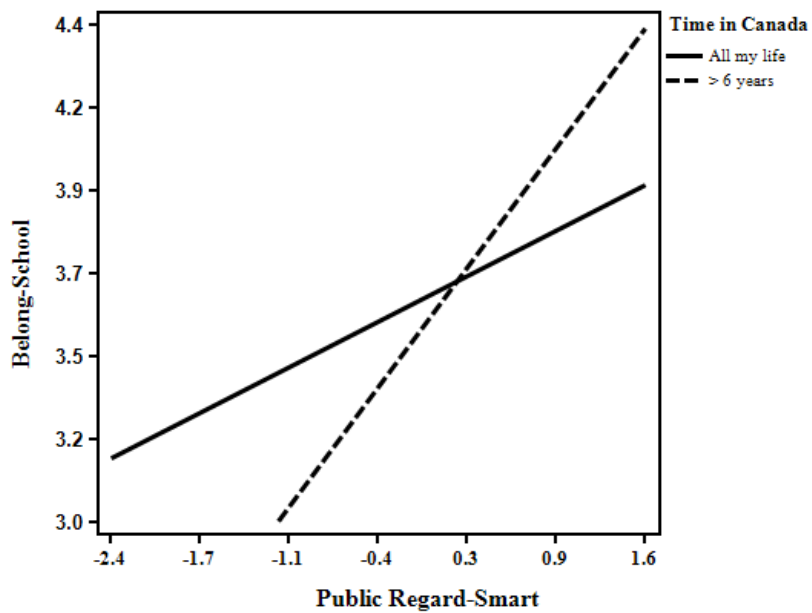
*Note.* Grade 8 reference group for grade; female reference group for sex; all my life reference group for time in Canada

\*  $p < .003$ ; \*\*  $p < .001$ reference

**Figure 4.3 Interaction of private regard x time in Canada on belonging to school**



**Figure 4.4 Interaction of public regard-smart x time in Canada on belonging to school**



#### **4.5.4 Belonging to Canada: Grades 8-9 participants**

Question: How do youths' time in Canada, experiences with discrimination, perceptions of private regard, public regard-respect, public regard-smart, and public regard-successful like others predict their sense of belonging to Canada, after controlling for grade level and sex?

A five-step hierarchical regression was used to examine the factors that contribute to youth sense of belonging to Canada. The first step of the analyses included grade and sex in order to control for these two variables before proceeding with the rest of the analyses. Results indicated that grade and sex were not linked to youth sense of belonging to Canada. The second step of the regression included the length of time youth have spent in Canada. Results showed that time in Canada was significantly associated with youth sense of belonging to Canada,  $\Delta F(2, 322) = 16.14, p < .001$ , explaining 9% of the variance in belonging to Canada. Step 3, which included the addition of ethnic discrimination to examine whether it uniquely contributed to youth sense of belonging to Canada, indicated that discrimination was not significantly linked to youth sense of belonging to Canada. Nonetheless, the association between discrimination and belonging to Canada approached significance,  $\Delta F(1, 321) = 5.33, p < .05$ .

To examine the unique contribution of private and public regard to the variance in belonging to Canada, Step 4 of the regression included private regard, public regard-respect, public regard-smart, and public regard-successful (like other ethnic groups). Findings showed that public regard-respect was uniquely and significantly linked to belonging to Canada. In fact, Step 4 explained an additional 7% of the variance in belonging to Canada,  $\Delta F(4, 317) = 7.16, p < .001$ .

Given the significance of the model up to Step 4, the follow up question was asked: Does the time youth have lived in Canada moderate the link between private regard and belonging to Canada and between each of the three aspects of public regard within the school context and belonging to Canada?

Finally, to examine whether time in Canada moderated the link between ethnic regard and belonging to Canada, Step 5 of the regression was conducted. Results showed that time in Canada was significant moderating the link between ethnic regard and belonging to Canada,  $\Delta F(8, 309) = 3.93, p < .001$ , explaining an additional 7% of the variance in belonging to Canada. Specifically, our results (see Figure 4.5) indicated that for youth who were newcomers to Canada, perceiving that adults and students at their school views of their ethnic group as not as smart were linked to higher levels of belonging to Canada. The overall model was significant,  $F(17, 309) = 6.06, p < .001$  and explained a total of 25% of the variance in belonging to Canada.

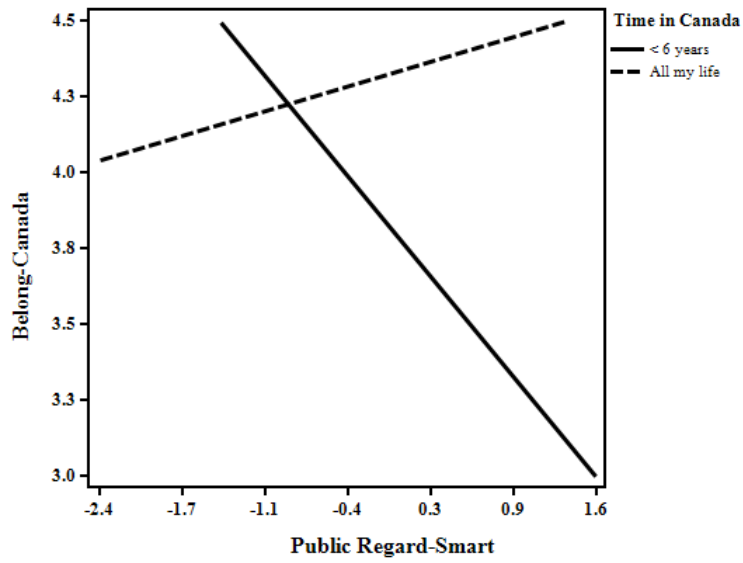
**Table 4.19 Grades 8-9 (N = 340) sample: Moderated multiple regression of years lived in Canada, discrimination and ethnic regard on belonging to Canada**

	<b>B</b>	<b>SE</b>	<b><math>\beta</math></b>	<b>t</b>	<b>R<sup>2</sup></b>	<b>Adj R<sup>2</sup></b>	<b><math>\Delta</math>R<sup>2</sup></b>
Step 1					.01	-.00	.01
Grade (Grade 9)	-.09	.08	-.07	-1.17			
Sex (Male)	.04	.08	.03	0.48			
Step 2					.10	.08	.09**
< 6 years	-.61	.11	-.30	-5.65**			
> 6 years	-.17	.12	-.08	-1.39			
Step 3					.11	.10	.02
Discrimination	-.06	.03	-.12	-2.31			
Step 4					.19	.16	.08**
Private Regard	.09	.06	.09	1.50			
Public Regard-Respect	.30	.09	.23	3.31**			
Public Regard-Smart	-.07	.06	-.07	-1.18			
Public Regard-Success	.07	.06	.07	1.23			
Step 5					.25	.21	.07**
Private Regard x < 6 years	-.22	.15	-.09	-1.46			
Private Regard x > 6 years	-.35	.19	-.13	-1.86			
Public Regard-Respect x < 6 years	.03	.25	.01	0.12			
Public Regard-Respect x > 6 years	.72	.28	.17	2.57			
Public Regard-Smart x < 6 years	-.62	.19	-.20	-3.23**			
Public Regard-Smart x > 6 years	.03	.18	.01	0.14			
Public Regard-Success x < 6 years	-.07	.12	-.03	0.41			
Public Regard-Success x > 6 years	-.05	.17	-.02	-0.30			

*Note.* Grade 8 reference group for grade; female reference group for sex; all my life reference group for time in Canada;

\*  $p < .003$ ; \*\*  $p < .001$ reference

**Figure 4.5 Interaction of public regard-smart x time in Canada on Belonging to Canada**



## **5 Discussion**

The present exploratory study had three main objectives:

- 1) To extend the current literature on ethnic regard, in particular public regard within the school context, by examining the measurement of the construct within the Canadian context,
- 2) To evaluate the association between ethnic regard and discrimination experiences with particular interest in assessing the extent to which ethnicity and time lived in Canada moderated the link between ethnic regard and discrimination, and
- 3) To gain an understanding of the link between ethnic regard and youth sense of belonging, specifically belonging to school and belonging to Canada.

In assessing these questions, the present study considered responses from two groups of adolescents: early adolescents in grades 6-7 and middle adolescents in grades 8-9. The literature on ethnic identity and particularly ethnic regard has hitherto prevalently focused on the experiences of middle adolescents and late adolescents (students in grades 9 and older because most studies have been conducted in the US where secondary school starts in grade 9). It is only recently that the study of ethnic regard among early adolescents has started to garner interest (e.g., Rivas-Drake et al., 2009). The results of principal component analysis are discussed first with a focus on the findings of the public regard items used with the participants in grades 8-9.

### **5.1 Examining the constructs within a Canadian context**

First, for the PCA performed on items tapping private regard, the same items were used with grades 6-7 and grades 8-9 participants. These items were adapted from

Luhtanen and Crocker (1992), Sellers et al., (1998), and Scottham et al. (1998). Although Hair et al. (2007) suggest including at least five items when using exploratory factor analysis, only four were selected. This was the largest number that we could include, while avoiding the overlap between items tapping private regard, centrality and ethnic belonging (see Ashmore et al., 2004). Thus, the items selected were those that have been consistently used in measuring only private regard. The “private regard” component produced for both groups of adolescents was consistent with private regard items used in previous studies (e.g., Scottham et al., 2008) and the inter-item reliabilities obtained were similar to those found in previous studies with early and middle adolescents (e.g., Rivas-Drake et al., 2009). For grades 6-7 and grades 8-9 students, only one item out of the four items did not load on the same component: “I feel that my ethnic group contributes less to society than other ethnic groups”. This was not surprising given that during the interviews with grades 6-7 students, some participants expressed that they did not understand the item and others stated that their ethnic group contributes less because they are fewer in numbers. Thus, this item was excluded from the private regard scale used in the present study.

The PCA of items tapping public regard within the school context reflected the challenges of measuring youths’ public regard (see Ho & Sidanius, 2010; Scottham et al., 2008; Sellers et al., 1997). For students in grades 6-7, the public regard of others at school was examined and, for students in grades 8-9, public regard at school was divided into public regard from adults at schools and public regard from other students. Seven items adapted from Luhtanen and Crocker (1992), Sellers et al. (1998), and Scottham et al. (2008) were included to measure public regard. The PCA of the items used to tap public regard among grades 6-7 students performed weakly, with very few inter-item



correlations exceeding .30 (none were close to .40). Thus, a public regard scale for grades 6-7 students was deemed inappropriate. This outcome was not surprising because the development of a public regard measure has been challenging. For example, in the early stages of developing the MIBI, Sellers et al. (1997) found that the factor analysis of the items they adapted from Luhtanen and Crocker's Public CSE (1992) to evaluate the public regard of African American late adolescents and young adults was weak and produced an  $\alpha = .20$ . Furthermore, while developing the MIBI-Teen, Scottham et al. (2008) found that youth focus groups consistently understood the items tapping private regard but had problems with public regard items.

On the other hand, the PCA of items tapping public regard among grade 8-9 students produced very interesting results. For instance, including items tapping public regard-adults at school and public regard-students in one PCA showed that the items did not load differently based on adult/student category. Rather, results of the PCA yielded three different component factors: respect, smart and successful.

The **Public Regard-Respect** component included eight items that measured the extent to which students believed that adults *and* students at school, respectively, a) respected their ethnic group, b) had a positive view of their ethnic group, c) thought that their ethnic group made important contributions, and c) considered their ethnic group "good". The **Public Regard-Smart** component included four items that tapped the extent to which youth believed that adults *and* students at school, respectively, a) thought that their ethnic group will do well in life and 2) considered their ethnic group "smart". Finally, the **Public Regard - Success** component included two items that measured the extent to which youth believed that adults *and* students at school, respectively, considered their ethnic group as successful as other ethnic groups. The last component was the only

one that explicitly prompted to students to compare their ethnic group to other ethnic groups. The inter-item reliability of each the three components in this breakdown was good (between 0.73 and 0.85).

This breakdown of distinct components of one's feelings of public regard has not been found in the very few recent studies examining public regard among early-mid adolescents of different ethnic backgrounds. One possible reason is that the majority of the existing studies with adolescents have used shortened versions of the MIBI, including only two to three items to measure public regard rather than Sellers et al.'s original six items. Also, different studies have used different items to tap public regard. For example, Chavous et al. (2003) used a shortened measure of the MIBI's Public Regard subscale with African American 12<sup>th</sup> grade students. This measure included only two items: "*In general, other groups view Blacks in a positive manner*" and "*Blacks are considered good by society*". In Sellers et al. (2006), the authors stated using MIBI-T, created by Scottham, Sellers, and Nguyen in 2005 that included a three-item public regard subscale with African American students in grades 7-10. Two of these items were: "*People of other races don't expect Blacks to accomplish much*" and "*A lot of people don't expect people to do well in life*". However, at least two of these items were different from the three public regard items that were ultimately published as part of the MIBI-T by Scottham, Sellers and Nguyen in 2008. The three items used to tap public regard were: "*Most people think that Blacks are as smart as people of other races*"; "*People think that Blacks are as good as people from other races.*"; and "*People from other races think that Blacks have made important contributions.*". Note that the internal consistency estimates for the public regard items in both Sellers et al. (2006) and Scottham et al. (2008) were adequate but not high, ranging from .66 to .73.

Most studies of younger adolescents of ethnic backgrounds other than African American emerged after the publication of MIBI-T by Scottham et al. (2008). So far, however, it is unclear whether studies with early adolescents have used the MIBI-T items published in Scottham et al. (2008). For example, Rivas-Drake, Hughes, and Way (2009) examined public regard among sixth graders using four items ( $\alpha = .77$ ) that were reportedly based on the original MIBI (Sellers et al., 1997)<sup>26</sup> and MIBI-T (Scottham et al., 2008). The authors provided one example of the public regard items used: “*In general, others respect my ethnic group.*”. This item was used in Sellers et al.’s Public Regard subscale of the MIBI published in 1998. In another study, Hughes, Way, and Rivas-Drake (2011) reported using three items to measure public regard, which were also based on the MIBI (Sellers et al., 1997) and Scottham et al. (2008). One example they provided was: “*A lot of people don’t expect my ethnic group to do well in life.*”  $\alpha = .77-.90$  (longitudinal study). This item was not found in Sellers et al. (1997; 1998) or in Scottham et al. (2008). In a recent article examining public regard and co-authored by Hughes and Way (McGill, Hughes, Alicea & Way, 2012), the authors noted that the public regard items they used were based on personal communication with R. M. Sellers in 2003 and are different from the items that were eventually published in Scottham et al. (2008). Thus, our results contribute to the study of public regard, which is in its early stages. The public regard components identified in the present sample of grades 8-9 students were similar to those reported in the literature. For example, the items that tapped public regard-respect in our study were similar to those reported in the literature

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<sup>26</sup> Sellers et al.’s original MIBI measure, published in 1997, did not include a public regard subscale due to the poor performance of its factor analysis. After further revisions, the MIBI by Sellers et al. (1998) included public regard items.

(e.g., Luhtanen & Crocker, 1992; Sellers et al., 1998). Importantly, however, our results suggest that there may be more than one facet to public regard.

Unlike public regard, the PCA results of belonging to Canada and discrimination for both grades 6-7 and 8-9 students produced results that were similar to those in the existing literature (see Phinney, 1992; Fisher et al., 2000).

Next, the present study's preliminary (grade and sex differences) and descriptive findings (correlation analyses and ethnic and time in Canada differences) for participants in grades 6-7 are jointly discussed with those for participants in grades 8-9. The findings on ethnic identity and belonging (the main objectives of the study), however, are examined separately for each group before comparing them.

## **5.2 Do ethnic regard, ethnic discrimination, and belonging vary as a function of grade and sex for early and middle adolescents?**

Results of the present study showed that, although discrimination and reported belonging to Canada were negatively correlated among students in grades 8-9 this relationship was not evident among students in grades 6-7. This difference could be attributed to the fact that, for younger students, the opinions of peers and thus the implications of discriminatory behavior's on one's identity may not be of as much significance as it is for older youth. Moreover, youth in grades 8-9 generally reported more incidences of discrimination than youth in grades 6-7. Participants in grades 6-7, on the other hand, reported a slightly higher private regard mean than students in grade 8-9. The greater incidence of discrimination may have more negative implications for one's view of their own ethnic group. It is also possible that students in grades 8-9 are simply more aware of the implications of discrimination.

Results also showed that the positive correlation observed between belonging to school and belonging to Canada was stronger for participants in grades 6-7 than for participants in grades 8-9. This finding could be linked to developmental or immigration status differences. For example, the social circles of grades 8-9 students may not be limited to their schools and may include other activities and groups outside school. Moreover, the majority of the students in grades 8-9 were born in Canada. In contrast, half of the grades 6-7 students were born outside Canada and over a quarter were newcomers (lived in Canada for less than 6 years). Thus, for students in grades 6-7, their schools may play a more central role in adapting to Canada and feeling connected to their new home.

The correlations observed in the present study were similar to those found in the existing literature. For example, like the grades 6-7 students in this study, grade 6 students in a recent study that included Chinese American youth (Rivas-Drake et al., 2008) reported no correlation between private regard and discrimination. However, in another study that included sixth grade students of African American, Puerto Rican, Dominican, Chinese, and European descent, Rivas-Drake et al. (2009) found that private regard and peer discrimination were negatively correlated, as reported by the grades 8-9 students in the present study. Furthermore, like previous studies that focused on private regard and public regard among African American youth in their late adolescent years (e.g., Chavous et al., 2003), the present study found that private regard (for both students in grades 6-7 and students in grades 8-9) and public regard (for students in grades 8-9), respectively, were positively correlated with one's sense of school belonging. In fact, all three components of public regard were positively correlated with school belonging. However, the correlation results between the three components of public regard and

belonging to Canada indicated that only public regard-respect and public regard-successful, respectively, were positively correlated with belonging to Canada. Public regard-smart was not correlated with belonging to Canada. Thus, stronger feelings of belonging to Canada were associated with beliefs that others considered their ethnic group to be respected and successful like other ethnic groups.

Preliminary analyses examining grade and sex differences in private regard, public regard, discrimination, belonging to school and belonging to Canada revealed a few differences between early adolescents in grades 6-7 and middle adolescents in grades 8-9. In fact, grade and sex differences were not detected among grades 6-7 students. In comparison, students in grade 8 reported higher levels of private regard and public regard-respect than their peers in grade 9. This difference has not been documented in previous studies because most cross sectional studies examining private and public regard during adolescence have focused on a single grade level (e.g., Rivas-Drake et al., 2008, 2009). Nonetheless, a longitudinal study conducted by French et al. (2006), examining the ethnic group esteem (private regard) of one group of early adolescents transitioning from fifth grade to sixth grade and another group of middle adolescents transitioning from eighth grade to ninth grade, showed that ethnic group esteem (private regard) increased over time among early adolescents *and* middle adolescents. Moreover, the first wave of data even showed that middle adolescents reported slightly higher levels of group esteem regard than early adolescents.

### **5.3 Do ethnic regard, discrimination, and belonging vary as a function of time lived in Canada for early and middle adolescents?**

The extent to which time in Canada contributed to differences in ethnic regard, discrimination, and belonging (to school and to Canada) was examined for both early and middle adolescents. The present findings showed that for both groups (grades 6-7 students and grades 8-9 students), youth who have lived in Canada for 6 years or less reported lower levels of belonging to Canada than youth who have lived in Canada all their life. Moreover, grades 8-9 students who have lived in Canada for six years or less have also reported higher levels of ethnic discrimination than their peers who have lived in Canada all their life. Similar findings have been found in the few studies that have examined the adjustment of newcomer youth in Canada (Li, 2009; Hébert & Lee, 2006). For example, in one qualitative study (Li, 2009), youth who were newcomers to Canada experienced exclusion from their Canadian-born peers who were of different as well as similar ethnic backgrounds. Moreover, Wu et al. (2011) who claimed that their study was the first to study belonging to Canada as an outcome found that participants who lived in Canada all their life reported higher levels of belonging to Canada than others who immigrated to Canada.

Additionally, the present study found that private regard varied as a function of the interaction between years lived in Canada and grade only for middle adolescents. Specifically, the findings indicated that within the group of youth who have lived in Canada for six years or less, youth in grade 9 reported lower levels of private regard than youth in grade 8. This result begs further investigation as the connection between years

lived in new country of resettlement and grade has not been investigated prior to the present study.

#### **5.4 What are the influences of ethnic group membership and discrimination on ethnic regard (private and public)?**

The purpose of this question was to extend the recent literature on the correlates of ethnic regard (e.g., Rivas-Drake et al., 2009). Rivas-Drake et al. (2009) have examined the effects of discrimination and parent socialization on private and public regard. However, very few studies have examined the role of other factors. The present study investigated not only the role of discrimination but also ethnic group membership and the extent to which one's ethnic group moderated the association between discrimination and regard. Given that the predictors (e.g., ethnic groups) and outcomes (public regard was not measured for grades 6-7 students) for grades 6-7 students differed from those of grades 8-9 students, the results of each group are discussed separately first<sup>27</sup>.

##### **5.4.1 Early adolescents' private regard**

The present findings showed that overall youth of Chinese backgrounds tended to report lower levels of private regard. However, among grades 6-7 participants only the difference between youth of Filipino origins and youth of Chinese origins was significant with youth of Chinese descent reporting lower levels of private regard. Similarly, in a previous study (Rivas-Drake et al., 2008), Chinese American youth in grade 6 reported lower levels of private regard than their African American youth. Likewise, Hughes et al. (2011) found that sixth grade Chinese American youth reported lower levels of private

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<sup>27</sup> Although time in Canada was included in the analyses, the results showed that it was not a significant variable in explaining ethnic regard for both groups of adolescents.



regard in comparison to their Dominican, Puerto Rican, and African American peers. The lower levels of private regard could be attributed to youth of Chinese origin generally having lower self-perceptions than their peers of other ethnic groups (Hughes et al., 2011). Moreover, some ethnic groups may provide more support and opportunities for ethnic pride than Chinese Canadian groups. For example, in one US study, youth of Dominican descent expressed pride in ethnic public events, such as The Dominican Pride Day. In the same study, youth of Chinese descent did not recall such public events (Way et al., 2008)

Unlike some previous studies with early adolescents (e.g., Rivas-Drake et al., 2009), the present study did not detect a significant link between discrimination and private regard. Ethnicity did not moderate the link between discrimination and private regard.

#### **5.4.2 Middle adolescents' private and public regard**

**Private regard.** A subset of the total sample was used to examine ethnic differences in ethnic regard. Like Chinese Canadians in grades 6-7, Chinese Canadians in grades 8-9 tended to report lower levels of private regard than their peers of Indian, Vietnamese, Filipino, and European descent. Although the results did not reach significance, the difference between youth of Filipino and youth of Chinese origins approached significance.

Unlike grades 6-7 students, higher levels of ethnic discrimination for grades 8-9 students were linked to lower levels of private regard. A few previous studies have found a negative link between private regard and discrimination. For example, Rivas-Drake et al. (2009) found that discrimination contributed to lower levels of private regard among

sixth graders of several ethnic backgrounds. However, a few previous studies with African American youth have shown no link between discrimination and private regard (Caldwell et al., 2004; Sellers et al., 2003, 2006). Thus, the history of one's ethnic group may have an impact on the link between discrimination and private regard.

**Public regard at school.** Findings on ethnic differences in public regard in the present study differed from findings in previous studies conducted in the United States. The extant studies that have examined ethnic differences in public regard have demonstrated that typically youth of Chinese origins reported lower levels of public regard than their peers of other ethnic groups (e.g., Hughes et al., 2011; Rivas-Drake et al., 2009) or did not differ from their peers (e.g., Rivas-Drake et al., 2008). For example, Rivas-Drake et al. (2009) found that sixth grade students of Chinese backgrounds reported lower levels of public regard in comparison to their peers of Dominican, Puerto Rican and European descent. The only group that reported significantly lower levels of public regard than them were African American youth.

In contrast, in the present study different ethnic differences in public regard (for grades 8-9 students) were detected across the three different public regard components. However, unlike the studies reported above, across all components youth of Chinese origins reported higher public regard than the groups to which they were compared. For example, youth of European origins reported significantly lower levels of public regard-respect than their peers of Chinese origins. Youth of Indian, Vietnamese, Filipino and European backgrounds, respectively, reported lower levels of public regard-smart in comparison to their peers of Chinese descent and youth of European and Indian backgrounds reported lower levels of public regard-successful in comparison to their peers of Chinese backgrounds. These results have several implications. For instance, the

differences in public regard between Chinese Canadian youth and Chinese American youth emphasize the importance of context. The present study was conducted in a school district where youth of Chinese descent, in general, are a plurality. In fact, immigrants of Chinese backgrounds make up the largest non-European ethnic group in Canada (<http://www.statcan.gc.ca/pub/89-621-x/89-621-x2006001-eng.htm>, 2007), with the majority living in Ontario (ON) and British Columbia (BC). The cited US studies (e.g., Rivas-Drake et al., 2009) were conducted in New York City where Asians, in general, are a minority. Thus, the experiences of Chinese American youth living in New York City cannot be generalized to those of their peers living here in BC. Moreover, youth of Asian backgrounds, generally, and of Chinese backgrounds, particularly, are usually perceived as high achievers. High achievement is of important value in society and is typically associated with the potential to do well in life. Thus, the lower levels of public regard of the other ethnic groups in comparison to Chinese Canadian youth could be a result of internalizing such societal messages. In fact, during our interviews with the grades 6-7 students, most students mentioned that Asians are respected because they do well at school and work hard.

Although the present “Canadian” findings differ from the findings reported in previous cross-sectional American studies, one longitudinal study conducted in the United States indicated that the public regard of youth of Chinese origins increased from sixth to eighth grade in comparison to their peers of African American, Puerto Rican, and Dominican backgrounds, whose public regard declined with time. Specifically, Hughes et al. (2011) found that, initially, in sixth grade youth of Chinese descent reported lower levels of public regard than their Dominican and Puerto Rican peers but were not different from their African American peers. However, with the passage of time the

public regard of youth of Chinese origins only started to increase while the reported public regard of the other three groups decreased. Hughes et al. attributed the rise in public regard among Chinese American youth to the model minority stereotype, which asserts that youth of Asian and Chinese origins are perceived as high achievers and more compliant to school rules than youth of other ethnic minorities.

Similar to previous studies, we found that higher levels of discrimination contributed to lower levels of public regard, specifically public regard-respect and public regard-success. The negative link between discrimination and public regard has been consistently reported in the literature (Caldwell et al., 2004; Rivas-Drake et al., 2008, 2009; Sellers et al., 2003; Sellers et al., 2006). Particularly, this link has been found between public regard items that typically measure the respect aspect of public regard. Although no study has particularly examined the successful like others items, it is possible that this item was linked to experiences of discrimination because it involved a comparison to other groups. In other words, the public regard-successful items are the only aspect of public regard that asked youth to compare their ethnic group's success to that of others. Perhaps, recognizing this difference between one's group and others is affected by discrimination experiences, which bring to the forefront issues of imbalances in power between groups. Discrimination, however, did not have a significant role in contributing to lower levels of public regard-smart. It is unclear why public regard-smart was not associated with discrimination. Given that the partitioning of public regard into three components has not been observed in the literature, replication is required.

Research to date has not examined the role of ethnicity, in moderating the link between discrimination and ethnic regard. For grades 8-9 students, ethnicity played a significant moderating role, modifying the association between discrimination and public

regard. Specifically, the results of the present study showed that the negative effects of discrimination on public regard-respect were worse for youth of Indian descent in comparison to their peers of Chinese descent. Thus, for youth of Indian descent but not youth of Chinese descent, more instances of discrimination were linked to lower levels of public regard-respect for their ethnic group at their school. Ethnicity also moderated the link between discrimination and public regard-smart. Specifically, for youth of Indian descent the negative effects of discrimination on public regard smart were worse. Thus, the more instances of discrimination experienced by youth of Indian descent, the lower their perceptions of public regard-smart, i.e., their belief that others perceive their ethnic group as being smart and having the potential to do well in life by adults and students at their school.

To our knowledge, this is the first study to examine the public regard of youth of Indian backgrounds. Therefore, future research is needed to corroborate this result. However, the public regard of youth of Indian descent maybe especially vulnerable to discrimination because of their numerical minority status in their schools. Moreover, a few studies have suggested the vulnerability of South Asians, including Indo-Canadians, to prejudice, especially after September 11, because of the “visible” difference in their appearance (darker skin color, appearance) and beliefs (e.g., Sikhs) (see Ghosh, 2013). Youth of Indian descent may be particularly aware (and sensitive to) of this difference and, thus, their public regard within the school context may be vulnerable to the effects of discrimination because it further confirms the messages that they may have internalized about wider society’s views of their ethnic group. The author believes that a closer examination of the general public regard and the within school public regard of youth of Indian descent (as well as other South Asian groups) and the role of school ethnic

composition as well as neighborhood ethnic composition could be an interesting topic for future research.

### **5.5 What are the influences of time in Canada and ethnic regard on youths' sense of belonging to school and belonging to Canada?**

Understanding the link between years lived in Canada, ethnic regard and belonging to school and belonging to Canada was the final and main objective of the present study. Contrary to expectations, results of the present study indicated that the main effect of years lived in Canada on school belonging was not significant for both early and middle adolescents. Thus this relation was not discussed. Findings on early adolescents' sense of belonging to school and to Canada are discussed first.

#### **5.5.1 Early adolescents' sense of belonging to school**

The findings of the present study revealed that time in Canada and discrimination were not linked to early adolescents' sense of school belonging. Only private regard was linked to school belonging for early adolescents. Specifically, the results indicated that for grades 6-7 students, higher levels of pride in their ethnic group were linked to more positive feelings towards their school. The absence of a link between discrimination and belonging to school is not surprising because during the interviews the author (and her assistants) noted that the students expressed that very little discrimination occurred in their schools (very low levels of victimization were also reported). Moreover, the positive link between private regard and belonging to school is consistent with the results of earlier studies that have studied this connection (e.g., Chavous et al., 2003).

### **5.5.3 Early adolescents' sense of belonging to Canada**

The present study found that for early adolescents youth who have lived in Canada all their life reported higher levels of belonging to Canada than their peers who immigrated to Canada (i.e., were newcomers to Canada as well as those who had lived in Canada for more than six years). It is worth noting that our results further support the findings of previous research. For example, Wu et al. (2011), who conducted the first study with of belonging to Canada as an outcome, found that participants (15 years of age and older) who lived in Canada all their life reported higher levels of belonging to Canada in comparison to others who have lived in Canada for between 11-20 years and those who have lived in Canada for over 20 years. Like our study, they also found no ethnic differences in belonging to Canada. In a Canadian qualitative study, Lee and Hébert (2006) found that 40% of non-immigrant youth and 15% of immigrant youth reported their enthusiasm about being Canadian, expressing their strong feelings towards the country. The authors, though, noted that non-immigrant youth were more enthusiastic and confident in expressing their Canadian identity than their immigrant peers, who provided more rational statements connected to Canada being peaceful and caring.

Experiences with discrimination were not linked to youths' sense of belonging to Canada. Higher levels of private regard, however, were linked to higher levels of belonging to Canada. Moreover, although time in Canada played a role in moderating the link between private regard and belonging to Canada, our initial model did not detect the nature of this interaction. Thus, two separate interactions were conducted with one model only including the interaction between newcomer youth and private regard and another

model only including the interaction between living in Canada for six or more years and public regard (see Appendix I).

### **5.5.2 Middle adolescents' sense of belonging to school**

Although time in Canada was not linked to middle adolescents' sense of belonging to school, discrimination was negatively linked to their sense of school belonging. Grades 8-9 students who reported higher levels of discrimination reported lower levels of school belonging. In addition to discrimination, private regard, public regard-respect, and public regard-successful were positively linked to school belonging. Public regard-smart was not linked to school belonging. Higher levels of private and public regard (respect and successful) were linked to more positive feelings towards school. As mentioned earlier, previous studies have found a similar positive link between ethnic regard and school (e.g., Chavous et al., 2003). In fact, research has consistently showed that a positive ethnic identity (different components of ethnic identity including private and public regard) was linked to several indices of well-being (e.g., Caldwell et al., 2004; Rivas-Drake et al., 2008, 2009; Sellers et al., 2003, 2006).

Although time in Canada was not a significant predictor of school belonging, it was a significant moderator of the link between ethnic regard and school belonging. In other words, the time youth have spent in Canada modified the association between private regard and school belonging as well as between public regard-smart and school belonging. Specifically, for youth who have lived in Canada all their life but not youth who have lived in Canada for six or more years, higher levels of ethnic pride were linked to higher levels of school belonging. This difference could be attributed to parent socialization. Most of the youth who lived in Canada all their life were born to parents



who immigrated to Canada. Given their minority status, the parents of these youth may have encouraged them to develop a sense of ethnic pride in their group, which in turn may become important for youth adjustment and well-being (e.g., school belonging). In contrast, for youth who were not born in Canada, there might have been less emphasis on parents fostering ethnic pride because they are familiar with their ethnic group (they were born in their parents' country of origin and exposed to the culture). Rather, the attention of these parents may be more directed on their children's adjustment in school and Canada.

In addition, the study found that for youth who have lived in Canada for six years or more but not for youth who have lived in Canada all their life feeling that others at school perceive their ethnic group as smart was linked to higher levels of school belonging. Like the earlier finding, this result suggests that different factors may be influencing the experiences of youth are Canadian-born in comparison to those who are foreign born. Specifically, for youth who were not born in Canada, parents may be more concerned about their children making it in school because immigration is a promise for a better future for their children. Thus, for these youth feeling that others at school perceive their ethnic group is smart is important to their school adjustment. However, it is unclear why the analyses failed to show a difference between youth who are Canadian-born and those are newcomers to Canada.

Given that, to date, no research study has examined the effects of time in country of resettlement on belonging to school and the link between ethnic regard and school belonging, more research is needed. However, this finding suggests that the nature of the relationship between time in Canada, ethnic regard, and belonging is complex. The

mechanisms that may affect the sense of belonging of minority youth who are Canadian-born may differ from those that affect youth who are born outside Canada.

#### **5.5.4 Middle adolescents' sense of belonging to Canada**

For grades 8-9 students, only newcomer youth reported lower levels of belonging to Canada than their peers who have lived in Canada all their life. The difference between grades 6-7 students and grades 8-9 students could be attributed to the increased importance of others outside the family during high school. In other words, grades 8-9 students who have lived in Canada for over six years may be spending more time with their peers and more influenced than youth in grades 6-7 whose parents may still be adjusting to living in Canada. Moreover, the present study's middle adolescent sample mostly consisted of youth who were born in Canada. In contrast, more than half the grades 6-7 sample consisted of youth who were born outside Canada. Therefore, the middle adolescent youth who have lived in Canada for more than six years may have more frequent interactions with Canadian-born peers (who are the majority in their school) and, consequently, a stronger feeling of connectedness to and possibly familiarity with Canadian society. To that end, studying the impact of the schools' composition of foreign-born youth on belonging to one's country of resettlement may be of benefit.

Like early adolescents, middle adolescents did not report a significant link between discrimination and belonging to Canada. Unlike early adolescents, however, middle adolescents did not report a significant positive link between private regard and belonging to Canada. Only public regard-respect emerged as a significant factor in explaining belonging to Canada. Specifically, the findings indicated that for middle adolescents feeling that their ethnic group was respected in their school was linked to

higher levels of belonging to Canada. None of the other aspects of public regard were significantly linked to belonging to Canada. The importance of feeling that one's ethnic group is respected for middle adolescents could stem from the overall increased importance of the opinions of others during this stage of development.

The last result of the study, which was somewhat surprising, examined whether time in Canada moderated the link between ethnic regard and belonging to Canada controlling for the effects of discrimination. Our results showed that years lived in Canada were significant for newcomer youths' perception of the link between public regard-smart and belonging to Canada. Particularly, we found that for newcomer youth, having low levels of public regard-smart was linked to a stronger sense of belonging to Canada in comparison to their peers who have lived in Canada all their life. In other words, for newcomer youth, believing that others at school did not perceive their ethnic group as smart or has the potential to do good in life was linked to them reporting higher levels of belonging to Canada.

Given that public regard within the school context has only been examined in one study and the measurement of public regard has been difficult, further research is necessary. This result calls for considering that public regard may involve different facets. Nonetheless, Tajfel's Social Identity Theory (1974) may offer an explanation to this result. According to SIT (Tajfel, 1974; Tajfel & Turner, 1979), individuals aim to either maintain or achieve a positive social identity, which is important to a positive self-concept. If the individual finds her/himself unsatisfied with their group membership, she/he may consider leaving her/his existing group and join a more distinct group that will support a positive social identity and a positive self-concept. Following the principles of SIT, in the current study's middle adolescent sample, youth who are

newcomers may express stronger sense of belonging to Canada as a viable option for achieving a more positive self-concept. Although belonging to Canada is not another group “per se”, it offers another opportunity for this group of youth to achieve a positive self-concept. A stronger identification with Canada may be the newcomers’ “way of coping” with the lower levels of public regard relevant to their group’s potential. Furthermore, parental messages about achieving a better future in Canada may be impacting newcomer youths’ perceptions of how others see their ethnic group and in turn contributing to their levels of belonging to Canada. These youth could be looking for another “more positive” identity or group membership, i.e., Canadian membership. In conclusion, this result is a reminder of how belonging is complicated by the “complex performances of identity” (Caxaj & Berman, 2010, p. 21).

### **5.5 Summary of research findings on ethnic regard and belonging for early and middle adolescents**

The present study’s findings contributed to our understanding of ethnic regard within a Canadian context and belonging. The examination of ethnic regard within grade 6-7 indicates that ethnicity and years lived in Canada did not contribute to youths’ ethnic pride. However, youth of Chinese descent tended to report lower ethnic pride than other groups. Moreover, the low loadings of the public regard items raises a question about the developmental readiness of this age group when it comes to considering the point of views of others. As expected, however, higher levels of discrimination were linked to lower levels of ethnic pride for grades 6-7 students.

In contrast, the findings on middle adolescents’ ethnic regard were more multifaceted. First, there were ethnic differences in ethnic regard. Specifically, like youth

of Chinese descent in grades 6-7, youth of Chinese descent in grades 8-9 tended to report lower levels of private regard (ethnic pride) than their peers. Interestingly, however, youth of Chinese descent reported the highest levels of public regard across all facets of public regard. For example, youth of Chinese descent reported significantly higher levels of public regard-smart than their peers of Indian, Vietnamese, Filipino, and European descent. This finding raises questions about the messages that youth are internalizing through socialization. The results also demonstrated that discrimination was negatively linked to public regard-respect and public regard successful. Most importantly, however, our results suggest that the public regard of youth of Indian backgrounds may be the most vulnerable to discrimination.

Finally, the results on the correlates of belonging to school and belonging to Canada also revealed some differences between early and middle adolescents. For grades 6-7 and grades 8-9 students time in Canada was not linked to school belonging. However, time in Canada was linked to belonging to Canada with Canadian born students exhibiting the strongest sense of belonging to Canada. Private regard was linked to grades 6-7 sense of school belonging to belonging to Canada. For grades 8-9, private regard was linked to belonging to school but not to belonging to Canada. For grades 8-9 students, it was respect from others at school (public regard-respect) that mattered to their sense of belonging to Canada. Most importantly, however, was that for newcomers in grades 8-9, feeling that one's ethnic group is not viewed as smart by others at schools was linked to a stronger sense of belonging to Canada. These results accompanied with the dearth of Canadian empirical research on youth ethnic identity and Canadian identity imply that we need to invest more of our efforts in studying this area of research during adolescence.

## 5.6 Limitations

We know very little about the ethnic identity and Canadian identity of youth living in Canada. The motivation for the present exploratory study stems from recognizing this gap in the literature. Undoubtedly, however, this study had its limitations. First, the participation rate in grades 8-9 was low. Unfortunately, such rates have been consistently observed in research with secondary school students. For example, Rivas-Drake (2011) reported that only 37% of high school students participated in the study that examined public regard within the school context. In fact, low participation rates when active consent is required have been a challenge for researchers working with high schools (e.g., Esbensen, Melde, Taylor, & Peterson, 2008; Wolfenden, Kypri, Freund, & Hodder, 2009).

Second, the study is correlational and does not imply causation. Further studies are necessary, especially longitudinal studies, to examine causal relationships among the variables that are theoretically believed to contribute to ethnic regard and belonging to school and to Canada, especially given that identity is dynamic and contextual. It would be worthwhile to track how ethnic identity, specifically private and public regard, and belonging to Canada change as newcomers spend more time in Canada. Moreover, it would be interesting to examine how these changes may differ across different ethnic groups.

Importantly, an examination of the items that have been used to tap public regard may be worthwhile, given that the measurement of public regard has not been consistent in the literature. Results of the present study raise important questions about the assessment of public regard, which is theoretically believed to be a primary component of ethnic identity (see Ashmore et al., 2004). Specifically, the findings of the present study

suggest that there might be different aspects of public regard. This has not been found in previous studies, which could be attributed to the fact that most studies have used a few items to tap public regard. For example, Chavous et al, (2003) have used a two-item index to tap public regard and Rivas-Drake (2011) used only three items to tap public regard from teachers at schools. In the present study, using seven items to tap public regard within the school context, three different components were produced: respect, smart, and successful like other. Their connection to discrimination, belonging to school, and belonging to Canada was not uniform. Moreover, the public regard items performed weakly with grades 6-7 students. Adolescents' difficulty in understanding public regard items has been documented previously (see Scottham et al., 2008). Thus, is it possible that early adolescents may not be developmentally ready to consider public regard questions? It may be harder for them to take other people's perceptions. Also, note that our sample of sixth and seventh graders were in schools that still had the homeroom system and students were with the same peers and teacher for most of the day. In the US, students in sixth grade move to middle schools where students have classes in different classrooms with changing peers and teachers throughout the day. Thus, for US students, the change from elementary to middle school could prompt ethnic exploration earlier as they are exposed to more students and teachers.

Society's public regard, in general, has been typically examined in previous studies. However, based on the recommendations of a few recent studies (e.g., Hughes et al., 2011; Rivas-Drake, 2011), the present study examined public regard specifically within the school context and did not include public regard in society. Would students' perception of public regard within the school context be different from their perceptions of public regard in society in general; under which circumstances would they be similar?

Future research would benefit from including both measurements of public regard to examine whether the more proximal public regard within the school context is unique from public regard of society in general.

Another limitation of the present study is that it was not possible to measure the actual ethnic composition of the schools included in the present study. Although the author requested such information, school representatives from all school districts have expressed that it was not available and the relatively low participation rate made it impossible to determine the composition of the entire school. Research in the US and the Netherlands, examining ethnic identity, demonstrates the important role of the school's ethnic composition as well as immigrant composition in studying ethnic identity and discrimination (e.g., Kinket & Verkuyten, 1997; Nishina et al., 2010; Umaña-Taylor, 2004). Making this information available to researchers may be of benefit to schools because it can provide a better understanding of ethnic identity as well as Canadian identity and, consequently, school adjustment.

Furthermore, examining the unique experiences of youth from other ethnic groups (e.g., African, West Asian) and youth of mixed backgrounds would be quite informative. Only youth from Chinese, Indian, Vietnamese, Filipino and European descent were included in the present study and the results suggest that their experiences can be quite different. Additionally, around 20% of the students in the study reported being of other or mixed backgrounds but when asked what they considered themselves in terms of ethnicity, they were prompted to only pick one ethnic background. Thus, their other ethnicity was overlooked. In the future, it would be of benefit to examine how being of mixed ethnic backgrounds may uniquely influence youths' experiences and what factors may influence a youth's decision to identify with one group more than the other. Youth



of mixed ethnic backgrounds are extremely understudied in the literature. Last, youth of Aboriginal backgrounds were not included given that this study focused on youth of immigrant backgrounds. However, it would be worthwhile to examine the ethnic identity and Canadian identity of Aboriginal youth in future studies.

### **5.7 Educational implications and future directions**

Although the present study was exploratory, it shed a light on an aspect of youths' school experiences that, despite its importance, is understudied. Notably, the present study suggests that the experiences of ethnic minorities in Canada and the time that youth have spent in Canada are important factors in identity and belonging. The implications of the present study's findings on ethnic identity are outlined first.

First, the experience of data collection among the students in grades 6-7 in the two schools suggest that researchers may need to reconsider how to involve youth who are refugees in research and recognize that their experiences may be different from their peers who are immigrants. Unlike youth who moved to Canada as refugees, youth who are immigrants moved with their families to Canada voluntarily. Many of the refugee students in one of the schools escaped war and other life threatening conditions. To include the voices of refugee youth, we need to start engaging their parents and understand the needs of these families. Researchers need to take the time to engage the parents in a conversation that includes the perspectives of the parents on research and what it means to them and explains the benefits of research. We cannot keep on overlooking the school experiences of refugee youth within Canadian contexts or assume that they are similar to those who immigrated to Canada voluntary.

Furthermore, the present study indicated that early and middle adolescents of Chinese descent may have a lower sense of the ethnic pride than their peers of other ethnic groups. At the same time, however, the present study's results indicate that youth of Chinese descent have the highest public regard in comparison to their peers of other ethnic groups. It would be of benefit to find out whether ethnic regard plays a role in youth friendships. Is it possible that youth of Chinese descent are more likely to seek friendships with other youth of Chinese descent not only because of (ethnic) homophily but also because of divides as a result of youth of other ethnic groups feeling that they are less respected than their Chinese Canadian peers? In particular, does the "model minority" stereotype of Chinese-Canadian youth have an effect on their relationships with youth from other ethnic groups?

Given that in the present study youth of Indian, Filipino, Vietnamese, and European descent (all groups compared to youth of Chinese descent) reported lower levels of public regard-smart than youth of Chinese descent, it may be beneficial for teachers to examine whether they value "smartness" (which could be associated with high achievement) in their classes over other qualities. Academic achievement is highly emphasized in secondary school and the messages (e.g., Asian students being the model minority) that students may be getting about the ability of their own ethnic group may discourage their academic motivation. Also, youth of Chinese descent who are not performing up to what is expected of their group may feel isolated.

The present study also indicated that youth of Indian backgrounds may be particularly vulnerable to discrimination. Specifically the present study showed that for youth of Indian descent, higher levels of discrimination are linked to lower levels of public regard- respect and public regard-smart. This finding suggests that some ethnic

groups could be more vulnerable than other ethnic groups. Teachers and schools need to tailor their efforts to the reality and needs of youth of specific groups. Ethnic minority youth who feel that their ethnic group is not respected and are also discriminated against may need extra attention and support. Moreover, studies have suggested (e.g., Ghosh, 2013) that youth of South Asian origins may be discriminated against because of their different appearance, such as their clothing and darker skin color. Based on the existing research and the present study's result, schools may need to reflect on how differences based on appearances (e.g., traditional clothing) are affecting the school experiences of ethnic minorities.

The present results showed that having a sense of ethnic pride is linked to a stronger sense of school belonging, suggesting the implementation of teaching and learning practices that foster youths' sense of pride of their heritage. In addition, feeling respected by others at school was linked to youth sense of belonging to Canada. Schools have a vital role as they reflect the values of their societies. Thus, it is important for students to feel that their ethnic group is respected *in school* in order to feel a sense of “at home” in Canada. As educators, we need to be mindful of how schooling is affecting youths' feelings about their ethnic group and their sense of belonging to Canada.

Finally, the final result of the present study indicted that for youth who have moved to Canada recently, feeling that their ethnic group is not viewed as smart was linked to a stronger sense of belonging to Canada. Knowing that students have a strong sense of belonging to Canada is good news! However, how are they developing this sense of belonging? If it is built on youth feeling that one's ethnic group is not viewed as “smart” or has the potential to do well in life, then what can schools do to support youth in building a sense of belonging to Canada that is based on positive public regard?

Providing a safe space to allow dialogue and discussion about ethnic identity and Canadian identity development within the school context may make schools a better place for all students. In fact, it may be worthwhile to start in teacher education programs to give future teachers the opportunity to grapple with these questions and their perceptions of their role as educators well before they are responsible for the education of children and youth.

In conclusion, the study of ethnicity, ethnic identity, specifically private regard and public regard, and belonging of youth in Canada is complex and offers no straightforward answers. However, despite the complexities, we cannot shy away. Embracing these complexities may be key to the success of multiculturalism in Canada.

## References

- Aboud, F. E., & Doyle, A. B. (1995). Does talk of race foster prejudice or tolerance in children? *Canadian Journal of Behavior Science*, 1996, 161-170. doi:[10.1037/0008-400X.28.3.161](https://doi.org/10.1037/0008-400X.28.3.161)
- Aguinis, L. S. & gottfredson, R. K. (2010). Best practice recommendations for estimating effects using moderated multiple regression. *Journal of Organizational Behavior*, 31, 776-786.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park: Sage.
- Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin*, 130, 80-114. doi:[10.1037/0033-2909.130.1.80](https://doi.org/10.1037/0033-2909.130.1.80)
- Anant. S. S. (1966). The need to belong. *Canada's Mental Health*, 14, 21-27.
- Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin*, 130, 80-114. doi:[10.1037/0033-2909.130.1.80](https://doi.org/10.1037/0033-2909.130.1.80)
- Battistich, V. & Hom, A. (1997) The relationship between students' sense of their school as a community and their involvement in problem behaviors, *American Journal of Public Health*, 87, 1997-2001.
- Baumeister, R. F. & Leary, M. R. (1995). The need to belong: Desire of interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.

- Booker, K. (2006). School belonging and the African-American Adolescent: What do we know and where should we go? *The High School Journal*, 89, 1-7.
- British Columbia Teacher Federation (2012). 2012 BC Education Facts. Retrieved October 15, 2013, from [http://www.bced.gov.bc.ca/reports/pdfs/student\\_stats/prov.pdf](http://www.bced.gov.bc.ca/reports/pdfs/student_stats/prov.pdf)
- Brown, C. S., Spatzier, A., & Tobin, M. (2010). Variability in the intergroup attitudes of White children: What we can learn from their ethnic identity labels. *Social Development*, 19, 758-778. doi:10.1111/j.1467-9507.2009.00571.x
- Caldwell, C. H., Kohn-Wood, L. P., Schmeelk-Cone, K. H., Chavous, T. M., & Zimmerman, M. A. (2004). Racial discrimination and racial identity as risk or protective factors for violent behaviors in African American adults. *American Journal of Community Psychology*, 33, 91-105.
- Caxaj, C. S. & Berman, H. (2010). Belonging among newcomer youths: Intersecting experiences of inclusion and exclusion. *Advances in Nursing Science*, 33, 17-30
- Chavous, T. M., Bernat, D. H., Schmeelk-Cone, K., Caldwell, C. H., Kohn-Wood, L., & Zimmerman, M. A. (2003). Racial identity and academic attainment among African American adolescents. *Child Development*, 74, 1076-1090. doi:10.1111/1467-8624.00593
- Costigan, C. L., Su, T. F., & Hua, J. M. (2009). Ethnic identity among Chinese Canadian youth: A review of the Canadian literature. *Canadian Psychology*, 50, 261-272. doi:10.1037/a0016880
- Crocker, J., Luhtanen, R., Blaine, B. & Broadnax, S. (1994). Collective self-esteem and psychological well-being among White, Black, and Asian college students. *Personality and Social Psychology Bulletin*, 20, 503-513. doi:10.1177/0146167294205007

- Erikson, E. (1968/1994). *Identity: Youth and Crisis*. NY: W. W. Norton & Company, Inc.
- Esbensen, F. A., Melde, C., Taylor, T. J., & Peterson, D. (2003). Active parental consent in school-based research: how much is enough and how do we get it? *Evaluation Review*, 32, 335-362. doi: 10.1177/0193841X08315175
- Faircloth, B. S. & Hamm J. V. (2005). Sense of belonging among high school students representing 4 ethnic groups. *Journal of Youth and Adolescence*, 34, 293-309.
- Fine, M. (1991). *Farming dropouts: Notes on the politics of an urban public high School*. NY: SUNY Press.
- Fisher, C. B., Wallace, S. A., & Fenton, R. E. (2000). Discrimination distress during adolescence. *Journal of Youth and Adolescence*, 29, 679–695.  
doi:10.1023/A:1026455906512
- Fordham, S. & Ogbu, J. U. (1986). Black students' success: Coping with the “burden” of “acting White”. *The Urban Review*, 18, 176-206.
- French, S. E., Seidman, E., Allen, & Aber, J. L., (2006). The development of ethnic identity during adolescence. *Developmental Psychology*, 42, 1-10. doi:10.1037/0012-1649.42.1.1
- Fuligni, A. J. (1997). The academic achievement of adolescents from immigrant families: The role of family background, attitudes, and behavior. *Child Development*, 68, 351-363. doi: 10.1111/j.1467-8624.1997.tb01944.x
- Fuligni, A. J., Kiang, L. Witkow, M. R., & Baldelomar, O. (2008). Stability and change in ethnic labeling among adolescents from Asian and Latin American immigrant families. *Child Development*, 79, 944-956. doi:10.1111/j.1467-8624.2008.01169.x

- Fuligni, A. J., Witkow, M., & Garcia, C. (2005). Ethnic identity and the academic adjustment of adolescents from Mexican, Chinese, and European backgrounds. *Developmental Psychology, 41*, 799-811. doi:10.1037/0012-1649.41.5.799
- Furrer, C. & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 95*, 148-162. doi: 10.1037/0022-0663.95.1.148
- Gagné, M. H. (2009). *The Impacts of Social Contexts in Schools: Adolescents Who Are New to Canada and their Sense of Belonging*. (Unpublished Master's Thesis). The University of British Columbia: Canada.
- Ghosh, S. (2013). 'Am I a South Asian, really?' Constructing 'South Asians' in Canada and being South Asian in Toronto. *South Asian Diaspora, 5*, 35-55.
- Goodenow, C. (1993). The psychological sense of membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*, 79-90.
- Hagborg, W. (1998) An investigation of a brief measure of school membership *Adolescence, 33*, 461- 468.
- Hagerty, B. M., Williams, R. A., Coyne, J. C., & Early, M. R. (1996). Sense of belonging and indicators of social and psychological functioning. *Archives of Psychiatric Nursing, 10*, 235-244.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis*. New Jersey: Pearson Prentice Hall
- Ho, A. K. & Sidanius, J. (2009). Preserving positive identities: Public and private regard for one's ingroup and susceptibility to stereotype threat. *Group Processes and Intergroup Relations, 13*, 55-67, doi: 10.1177/1368430209340910



- Hughes, D., Way, N., & Rivas-Drake, D. (2011). Stability and change in private and public regard among African American, Puerto Rican, Dominican, and Chinese American early adolescents. *Journal of Research on Adolescence*, 21, 861-870. doi: 10.1111/j.1532-7795.2011.00744.x
- Kao, G. & Thompson, J. S. (2003). Racial and ethnic stratification in educational achievement and attainment. *Annual Review of Sociology*, 29, 417-442.
- Kao, G. & Tienda, M. (1995). Optimism and achievement: The educational performance of immigrant youth. *Social Science Quarterly*, 76, 1-19.
- Kestenberg, M., & Kestenberg, J.S. (1988). The sense of belonging and altruism in children who survived the Holocaust. *Psychoanalytic Review*, 75, 533-560.
- Khanlou, N., Koh, J., & Mill, C. (2008). Cultural identity and experiences of prejudice and discrimination of Afghan and Iranian immigrant youth. *International Journal of Mental Health Addiction*, 6, 494-513. doi: 10.1007/s11469-008-9151-7
- Kia-Keating, M., & Ellis, B. H. (2007). Belonging and connection to school in resettlement: Young refugees, school belonging, and psychosocial adjustment. *Clinical Child Psychology and Psychiatry*, 12, 29-43.
- Kiang, L., & Fuligni, A. J. (2009a). Ethnic identity and family processes among adolescents from Latin American, Asian, and European backgrounds. *Journal of Youth and Adolescence*, 38, 228-241. doi:10.1007/s10964-008-9353-0
- Kiang, L., & Fuligni, A. J. (2009b). Ethnic identity in context: Variations in ethnic exploration and belonging within parent, same-ethnic peer, and different-ethnic peer relationships. *Journal of Youth and Adolescence*, 38, 732-743. doi:10.1007/s10964-008-9278-7

- Kinket, B. & Verkuyten, M. (1997). Levels of ethnic self-identification and social context. *Social Psychology Quarterly*, 60, 338-354.
- Kirova, A. (2001). Loneliness in immigrant children: Implications of classroom practice. *Childhood Education*, 77, 260-267. doi: [10.1080/00094056.2001.10521648](https://doi.org/10.1080/00094056.2001.10521648)
- Lee, J. W., & Hébert, Y. M. (2006). The meaning of being Canadian: A comparison between youth of immigrant and non-immigrant origins. *Canadian Journal of Education*, 29, 497-520
- Li, J. (2009). Forging the future between two different worlds: Recent Chinese immigrant adolescents tell their cross-cultural experiences. *Journal of Adolescent Research*, 24, 477-504. doi:10.1177/0743558409336750
- Liebkind, K. (2006). Ethnic identity and acculturation. In D. L. Sam & J. W. Berry (Eds.) *The Cambridge Handbook of Acculturation Psychology* (pp. 78-96). New York: Cambridge University Press
- Luhtanen, R. & Crocker, J. (1991). Self-esteem and intergroup comparisons: Toward a theory of collective self-esteem. In J. Suls & T. A. Wills (Eds.), *Social Comparison: cotemporary Theory and Research*. Hillside, NJ: Lawrence Erlbaum
- Luhtanen, R. & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18, 302-318. doi:10.1177/0146167292183006
- Ma, X. (2003). Sense of belonging to school: can schools make a difference? *The Journal of Educational Research*, 96, 340-349.
- McGill, D., Hughes, D., Way, N., & Way, N. (2012). Academic adjustment across middle school: The role of public regard and parenting. *Developmental Psychology*, 48, 1003-1018. doi: 10.1037/a0026006

- Newman, B. M., Newman, P. R., Griffen, S., O'Connor, K., & Spas, J. (2007). The relationship of social support to depressive symptoms during the transition to high school. *Adolescence*, 42, 441-459.
- Nishina, A., Bellmore, A., Witkow, M R., & Nlund-Gibson, K. (2010). Longitudinal consistency of adolescent ethnic identification across varying school ethnic contexts. *Developmental Psychology*, 46, 1389-1401. doi:[10.1037/a0020728](https://doi.org/10.1037/a0020728)
- Osterman, K. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70, 323-367.
- Pahl, K., & Way, N. (2006). Longitudinal trajectories of ethnic identity among urban Black and Latino adolescents. *Child Development*, 77, 1403-1415.  
doi:10.1111/j.1467-8624.2006.00943.x
- Pallant, J. (2007). SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS Windows (Version 15). New York: Open University Press.
- Phinney, J. S. (1989). Stages of ethnic identity development in minority group adolescents. *The Journal of Early Adolescence*, 9, 34-49.  
doi:10.1177/0272431689091004
- Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin*, 108, 499-514
- Phinney, J. S. (1992). The multiethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7, 156-176
- Phinney, J. S. (2003). Ethnic identity and acculturation. In K. M. Chun, P. B. Organista, G. Marin (Eds.). *Acculturation: Advances in theory, measurement, and applied research* (pp. 63-81). Washington, DC, US: American Psychological Association

- Phinney, J. S., Cantu, C. L., & Kurtz, C. A. (1997). Ethnic and American identity as predictors of self-esteem among African American, Latino, and White adolescents. *Journal of Youth and Adolescence*, 26, 165-185. doi:10.1023/A:1024500514834
- Phinney, J. S. & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology*, 54, 271-281. doi:[10.1037/0022-0167.54.3.271](https://doi.org/10.1037/0022-0167.54.3.271)
- Rivas-Drake, D. (2011). Public ethnic regard and academic adjustment among Latino adolescents. *Journal of Research on Adolescence*, 21, 537-544. doi: 10.1111/j.1532-7795.2010.00700.x
- Rivas-Drake, D., Hughes, D., & Way, N. (2008). A closer look at peer discrimination, ethnic identity, and psychological well-being among urban Chinese American sixth graders. *Journal of Youth and Adolescence*, 37, 12-21. doi: 10.1007/s10964-007-9227-x
- Rivas-Drake, D., Hughes, D., & Way, N. (2009). A preliminary analysis of associations among ethnic-racial socialization, ethnic discrimination, and ethnic identity among urban sixth graders. *Journal of Research on Adolescence*, 19, 554-584. doi:10.1111/j.1532-7795.2009.00607.x
- Roeser, R., Midgley, W., & Urdan, T. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: the mediating roles of goals and belonging. *Journal of Educational Psychology*, 88, 408-422.
- Scottham, K. M., Sellers, R. M., & Nguyễn, H. X. (2008). A measure of racial identity in African American adolescents: The development of the Multidimensional Inventory

- of Black Identity - Teen. *Cultural Diversity and Ethnic Minority Psychology*, 14, 297-306. doi: 10.1037/1099-9809.14.4.297
- Salehi, R. (2010). Intersection of health, immigration, and youth: A systematic literature review. *Journal of Immigrant Minority Health*, 12, 788-797. doi: 10.1007/s10903-009-9247-6
- Seaton, E. K. (2009). Perceived racial discrimination and racial identity profiles among African American adolescents. *Cultural Diversity and Ethnic Minority Psychology*, 15, 137-144. doi:10.1037/a0015506
- Sellers, R. M., Copeland-Linder, N., Martin, P. P. & Lewis, R. L. (2006). Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *Journal of Research on Adolescence*, 16, 187-216.
- Sellers, R. M., Rowley, S. A. J., Chavous, T. M., Shelton, J. N., & Smith, M. A., (1997). Multidimensional inventory of Black identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology*, 73, 805-815. doi: [10.1037/0022-3514.73.4.805](https://doi.org/10.1037/0022-3514.73.4.805)
- Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S. A. J., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review*, 2, 18-39. doi:10.1207/s15327957pspr0201\_2
- Spencer, M. B., & Markstrom-Adams, C. (1990). Identity processes and ethnic minority children in American. *Child Development*, 61, 290-310. doi:10.1111/j.1467-8624.1990.tb02780.x

- Statistics Canada (2007). The Chinese Community in Canada. Retrieved October 14, 2013 from <http://www.statcan.gc.ca/pub/89-621-x/89-621-x2006001-eng.htm>
- Suárez-Orozco, C., Gaytán, F. X., Bang, H. J., Pakes, J., O'Connor, E., & Rhodes, J. (2010). Academic trajectories of newcomer immigrant youth. *Developmental Psychology*, 46, 608-618. doi: 10.1037/a0018201.
- Suárez-Orozco, C., Pimentel, A., & Martin, M. (2009). The significance of relationships: Academic engagement and achievement among newcomer immigrant youth. *Teachers College Record*, 111, 712-749.
- Tabachnick, B. G. & Fidell, L. S. (2007). *Using Multivariate Statistics*. Boston: Allyn & Bacon.
- Tajfel, H. (1981). *Human Groups and Social Categories: Studies in Social Psychology*. Cambridge: England: Cambridge University Press
- Tajfel, H. (1974). Social identity and intergroup behavior. *Social Science Information*, 13, 65-93. doi:10.1177/053901847401300204
- Tajfel, H. & Turner, J. (1979). *An Integrative theory of intergroup conflict*. In. W. G. Austin & S. Worchel (Eds.) *The social psychology of group relations*. Monterey: Brooks/Cole Publishing Company.
- Tatum, B. D. (1997). *Why are all the Black Kids Sitting Together in the Cafeteria? And Other Conversations about Race*. NY: Basic Books.
- Umaña-Taylor, A. (2004). Ethnic identity and self-esteem: Examining the role of social context. *Journal of Adolescence*, 27, 139-146. [doi:10.1016/j.adolescence.2003.11.006](https://doi.org/10.1016/j.adolescence.2003.11.006)
- Verkuyten, M., & Kinket, B. (2000). Social distances in a multi ethnic society: The ethnic hierarchy among Dutch preadolescents. *School Psychology Quarterly* , 63, 75-85.

- Way, N., Santos, C. Niwa, E. Y., & Kim-Gerverey, C. (2008). To be or not to be: An exploration of ethnic identity development in context. In M. Azmitia, M. Syed, & K. Radmacher (Eds.), *The intersections of personal and social identities. New Directions for Child and Adolescent Development*, 120, 61–79.
- Wehlage, G. G. (1989). Engagement, not remediation or higher standards. In J. M. Lakebrink (Ed.), *Children at risk* (pp. 57-73). Springfield, IL: Charles C. Thomas.
- Wu, Z., Hou, F., & Schimmele, C. M. (2011). Racial diversity and sense of belonging in urban neighborhoods. *City and Community*, 10, 373-392. doi: 10.1111/j.1540-6040.2011.01374.x
- Yip, T. & Fuligni, A. J. (2002). Daily variation in ethnic identity, ethnic behaviors, and psychological well-being among American adolescents of Chinese descent. *Child Development*, 73, 1557-1572. doi:10.1111/1467-8624.00490
- Wolfenden, L., Kypri, K., Freund, M., & Hodder, R. (2009). Obtaining active parental consent for school-based research: A guide for researchers. *Australian and New Zealand Journal of Public Health*, 33, 270-275.
- Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.) (2004). *Building academic success on social and emotional learning: What does the research say*. NY: Teacher College Press.
- Zumbo, B. D., Gadermann, A.M., & Zeisser, C. (2007). Ordinal versions of coefficients alpha and theta for Likert rating scales. *Journal of Model Applied Statistical Methods*, 6, 21-29.

## Appendices

### Appendix A: Grades 6-7 parent consent form

#### THE UNIVERSITY OF BRITISH COLUMBIA



Department of Educational & Counseling Psychology & Special Education  
Faculty of Education  
2125 Main Mall  
Vancouver, B. C. Canada V6T 1Z4

**Dear Parent(s) or Guardian(s),**

We are writing to ask your permission for your daughter or son to take part in a research project at your child's school called "Growing Up in Canada: Youth Ethnic Identity and Canadian Identity". This project is part of the doctoral program of Lina Darwich in the Faculty of Education at the University of British Columbia, under the supervision of Dr. Shelley Hymel.

**Who Participates:** All students in grades 6 and 7 at your child's school are invited to take part in this project, but only if they obtain parent/guardian permission to do so. Student participation is voluntary and students can stop at any time if they wish. To help you decide whether your child can be part of this project, we provide a description of the project here.

**Project Description:** Canada is home to people from many different backgrounds but we know very little about what it is like for children to grow up in a multicultural Canada. Do they feel that they belong in Canada? Do students feel that their ethnic group is respected and valued in their school? Do students feel that they get along well with other students in school or do they experience discrimination and bullying? In this project, trained university researchers will talk with students in grades 6 to 7 about their feelings of connection to Canada and their own cultural backgrounds. Our aim is to better understand teens' sense of belonging to Canada, which is important to a promising future in Canada. The interviews will take no more than 40-50 minutes and will take place at the school, at a time arranged with the classroom teacher.

**Confidentiality:** All information given by students is considered confidential (private), and students who participate will only be identified by a coded number, not by name. Also, all reports of our findings will be about teens in general; individual student answers will not be shared.

**Consent:** Please complete the form on the next page indicating whether or not you give permission for your daughter/son to participate in this project. Your daughter/son must return the form to her/his teacher by Friday of this week. ***Please return the form even if you do not want your child to participate so that we know you received our request.*** You may keep this letter and one copy of the consent form for your records.

**Contact:** We would be very pleased if your daughter/son takes part in our project and we hope that you will give her/him permission to do so. If you have any questions about your child's treatment or rights as a research participant, please contact the Director of Research Services at the University of British Columbia. Thank you very much for your time and consideration of this request.

Sincerely,

Shelley Hymel  
UBC Professor

Lina Darwich  
Doctoral Candidate



**\*\*\* PLEASE KEEP THIS LETTER  
AND THIS COPY OF THE CONSENT FORM FOR YOUR RECORDS \*\*\***

**PARENT/GUARDIAN CONSENT FORM**

**Project Title:** Growing Up in Canada: Youth Ethnic Identity and Canadian Identity

**Principal Investigator:** Shelley Hymel, Professor, University of British Columbia (UBC)

**Co-Investigators:** Lina Darwich, Graduate Student, UBC

**Consent:** I have read and understood the information given about the project called “Growing Up in Canada: Youth Ethnic Identity and Canadian Identity”. I understand that my daughter/son’s participation in the project is voluntary and she/he may stop at any time without any penalty. I have a copy of this form for my records.

I give my permission for my son/daughter to participate in the confidential questionnaire.

*Please check one:*

☐ YES, I consent to my daughter/son’s participation in this project.

☐ NO, I do not consent to my daughter/son’s participation in this project.

---

Daughter/Son’s Name (please print)

---

Parent/Guardian Signature

---

Date

**\*\*\* PLEASE RETURN YOUR COMPLETED CONSENT  
FORM TO THE SCHOOL \*\*\***

**PARENT/GUARDIAN CONSENT FORM**

**Project Title:** Growing Up in Canada: Youth Ethnic Identity and Canadian Identity

**Principal Investigator:** Shelley Hymel, Professor, University of British Columbia (UBC)

**Co-Investigators:** Lina Darwich, Graduate Student, UBC

**Consent:** I have read and understood the information given about the project called “Growing Up in Canada: Youth Ethnic Identity and Canadian Identity”. I understand that my daughter/son’s participation in the project is voluntary and she/he may stop at any time without any penalty. I have a copy of this form for my records.

I give my permission for my son/daughter to participate in the confidential questionnaire.

*Please check one:*

☐ YES, I consent to my daughter/son’s participation in this project.

☐ NO, I do not consent to my daughter/son’s participation in this project.

---

Daughter/Son’s Name (please print)

---

Parent/Guardian Signature

---

Date

## Appendix B: Grades 6-7 student assent form

THE UNIVERSITY OF BRITISH COLUMBIA

### Department of Educational & Counseling Psychology & Special Education

Faculty of Education

2125 Main Mall

Vancouver, B. C. Canada V6T 1Z4



#### **Dear Student(s),**

We invite you to take part in a research project called “Growing Up in Canada: Youth Ethnic Identity and Canadian Identity” that will take place at your school in the coming weeks. This project is part of the doctoral program of Lina Darwich working with professor Shelley Hymel, and we would like to invite you to be consultants on the project.

**What’s it about?** Canada is home to people from many different backgrounds but we know very little about what it is like for students your age to grow up in Canada. How much do you feel that you belong in Canada? Do you feel that your ethnic group is respected in your school? Do you get along well with other students in school? Your feelings of belonging in Canada are important.

**Who takes part?** Only students who get parent/guardian permission and who agree to take part in the project. Participating in this project is totally up to you. It is not a test and you can stop at any time you wish.

**What do you have to do?** If you agree, you will take part in an interview at school (about 50 minutes) with one of the researchers during school hours.

**Confidentiality?** All your answers are confidential (private) and students’ names will not be written anywhere. The researchers will only look at the answers of all teens, in general, and not individual teens.

**Contact:** We would be very pleased if you take part in our project; your input can really help us to understand better the problems students face. If you have any questions about your rights as a research participant, you can contact the Director of Research Services at the University of British Columbia.

Thank you very much for your help with this project.

Sincerely,

Shelley Hymel  
UBC Professor

Lina Darwich  
Doctoral Candidate

Research Project: Growing Up in Canada: Youth Ethnic Identity and Canadian Identity  
Researchers: Lina Darwich and Shelley Hymel

Student Assent Form

I am willing to participate in this research project:

- ☐ YES, I consent to participate in this research.  
☐ NO, I do not consent to participate in this research.

PLEASE, PRINT YOUR NAME:

---

Signature:\_\_\_\_\_ Date:\_\_\_\_\_

THANK YOU

## Appendix C: Grades 8-9 parent consent form

### THE UNIVERSITY OF BRITISH COLUMBIA

#### Department of Educational & Counseling Psychology & Special Education

Faculty of Education

2125 Main Mall

Vancouver, B. C. Canada V6T 1Z4



#### Dear Parent(s) or Guardian(s),

We are writing to ask your permission for your daughter or son to take part in a research project at your child's school called "Growing Up in Canada: Youth Ethnic Identity and Canadian Identity". This project is part of the doctoral program of Lina Darwich in the Faculty of Education at the University of British Columbia, under the supervision of Dr. Shelley Hymel.

**Who Participates:** All students in grades 8 and 9 at your child's school are invited to take part in this project but only if they obtain parent/guardian permission to do so. Student participation is voluntary and students can stop at any time if they wish. To help you decide whether your child can be part of this project, we provide a description of the project here.

**Project Description:** Canada is home to people from many different backgrounds but we know very little about what it is like for children to grow up in a multicultural Canada. Do they feel that they belong in Canada? Do students feel that their ethnic group is respected and valued in their school? Do students feel that they get along well with other students in school or do they experience discrimination and bullying? Our aim is to better understand teens' sense of belonging to Canada, which is important to a promising future in Canada. In this project, students will be asked to take the survey (50 minutes) in class, at a time arranged with the classroom teacher.

**Confidentiality:** All information given by students is considered confidential (private), and students who participate will only be identified by a coded number, not by name. Also, all reports of our findings will be about teens in general; individual student answers will not be shared.

**Consent:** Please complete the form on the next page indicating whether or not you give permission for your daughter/son to participate in this project. Your daughter/son must return the form to her/his teacher by Friday of this week. ***Please return the form even if you do not want your child to participate so that we know you received our request.*** You may keep this letter and one copy of the consent form for your records.

**Contact:** We would be very pleased if your daughter/son takes part in our project and we hope that you will give her/him permission to do so. If you have any questions about your child's treatment or rights as a research participant, please contact the Director of Research Services at the University of British Columbia. Thank you very much for your time and consideration of this request.

Sincerely,

Shelley Hymel  
UBC Professor

Lina Darwich  
Doctoral Candidate

**\*\*\* PLEASE KEEP THIS LETTER  
AND THIS COPY OF THE CONSENT FORM FOR YOUR RECORDS \*\*\***

**PARENT/GUARDIAN CONSENT FORM**

**Project Title:** Growing Up in Canada: Youth Ethnic Identity and Canadian Identity

**Principal Investigator:** Shelley Hymel, Professor, University of British Columbia (UBC)

**Co-Investigators:** Lina Darwich, Graduate Student, UBC

**Consent:** I have read and understood the information given about the project called “Growing Up in Canada: Youth Ethnic Identity and Canadian Identity”. I understand that my daughter/son’s participation in the project is voluntary and she/he may stop at any time without any penalty. I have a copy of this form for my records.

I give my permission for my son/daughter to participate in the confidential questionnaire.

*Please check one:*

☐ YES, I consent to my daughter/son’s participation in this project.

☐ NO, I do not consent to my daughter/son’s participation in this project.

---

Daughter/Son’s Name (please print)

---

Parent/Guardian Signature

---

Date

**\*\*\* PLEASE RETURN YOUR COMPLETED CONSENT  
FORM TO THE SCHOOL \*\*\***

**PARENT/GUARDIAN CONSENT FORM**

**Project Title:** Growing Up in Canada: Youth Ethnic Identity and Canadian Identity

**Principal Investigator:** Shelley Hymel, Professor, University of British Columbia (UBC)

**Co-Investigators:** Lina Darwich, Graduate Student, UBC

**Consent:** I have read and understood the information given about the project called “Growing Up in Canada: Youth Ethnic Identity and Canadian Identity”. I understand that my daughter/son’s participation in the project is voluntary and she/he may stop at any time without any penalty. I have a copy of this form for my records.

I give my permission for my son/daughter to participate in the confidential questionnaire.

*Please check one:*

☐ YES, I consent to my daughter/son’s participation in this project.

☐ NO, I do not consent to my daughter/son’s participation in this project.

---

Daughter/Son’s Name (please print)

---

Parent/Guardian Signature

---

Date

## Appendix D: Grades 8-9 student assent form

THE UNIVERSITY OF BRITISH COLUMBIA

Department of Educational & Counseling Psychology & Special Education



Faculty of Education  
2125 Main Mall  
Vancouver, B. C. Canada V6T 1Z4

**Dear Student(s),**

We invite you to take part in a research project called “Growing Up in Canada: Youth Ethnic Identity and Canadian Identity” that will take place at your school in the coming weeks. This project is part of the doctoral program of Lina Darwich working with professor Shelley Hymel, and we would like to invite you to be consultants on the project.

**What’s it about?** Canada is home to people from many different backgrounds but we know very little about what it is like for students your age to grow up in Canada. How much do you feel that you belong in Canada? Do you feel that your ethnic group is respected in your school? Do you get along well with other students in school? Your feelings of belonging in Canada are important.

**Who takes part?** Only students who get parent/guardian permission and who agree to take part in the project. Participating in this project is totally up to you. It is not a test and you can stop at any time you wish.

**What do you have to do?** If you agree, you will be asked to complete a multiple-choice survey at school (about 50 minutes) with the researchers during school hours.

**Confidentiality?** All your answers are confidential (private) and students’ names will not be written anywhere. The researchers will only look at the answers of all teens, in general, and not individual teens.

**Contact:** We would be very pleased if you take part in our project; your input can really help us to understand better the problems students face. If you have any questions about your rights as a research participant, you can contact the Director of Research Services at the University of British Columbia.

Thank you very much for your help with this project.

Sincerely,

Shelley Hymel  
UBC Professor

Lina Darwich  
Doctoral Candidate



Research Project: Growing Up in Canada: Youth Ethnic Identity and Canadian Identity  
Researchers: Lina Darwich and Shelley Hymel

Student Assent Form

I am willing to participate in this research project:

- ☐ YES, I consent to participate in this project.  
☐ NO, I do not consent to participate in this project.

PLEASE, PRINT YOUR NAME:

\_\_\_\_\_

Signature:\_\_\_\_\_ Date:\_\_\_\_\_

THANK YOU

# Growing Up in Canada

## Instructions

All your answers on this survey are confidential (private) — DO NOT put your name on the survey.

Make sure to read every question.

This is not a test and there are no right or wrong answers, but it is important to answer honestly.

If you are not comfortable answering a question, you can leave it blank; if you don't know understand a question, you can ask for help.

Please do not look at other students' answers.

If there is anything you need help with or you have any questions, please raise your hand and we will come over to help you.

**It is important to colour the circles completely,**

**like this: ●**

**Please DO NOT use ✓, Please DO NOT use X.**

## About Me...

1. What is the name of your school? \_\_\_\_\_

2. How old are you? (In years) \_\_\_\_\_

3. What grade are you in? (Choose one)

☐ Grade 4   ☐ Grade 6   ☐ Grade 8   ☐ Grade 10   ☐ Grade 12

☐ Grade 5   ☐ Grade 7   ☐ Grade 9   ☐ Grade 11

4. Are a girl or a boy? (Choose one)

☐ Girl

☐ Boy

5. Were you born in Canada?

☐ Yes

If yes, where in Canada were you born?

\_\_\_\_\_

☐ No

If no, in which city and country were you born?

\_\_\_\_\_

6. How many years have you lived in Canada?

☐ Less than a year

☐ 1-2 years

☐ 2-4 years

☐ 4-6 years

☐ More than six years

☐ All my life

7. Canada is home to people from many different ethnic groups and backgrounds. Every person is born into one or more ethnic groups/backgrounds. What is your ethnic group? (Choose more than one if it is true for you).

☐ A. Aboriginal/Native People:

☐ 1. Chehalis Band

☐ 2. Sechelt Band

☐ 3. Musqueam

☐ 4. Other: \_\_\_\_\_

- ☐ B. Asian:
- |                                  |                                       |
|----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Chinese | <input type="radio"/> 3. Japanese     |
| <input type="radio"/> 2. Korean  | <input type="radio"/> 4. Other: _____ |
- ☐ C. South Asian:
- |                                    |                                       |
|------------------------------------|---------------------------------------|
| <input type="radio"/> 1. Indian    | <input type="radio"/> 3. Sri Lankan   |
| <input type="radio"/> 2. Pakistani | <input type="radio"/> 4. Other: _____ |
- ☐ D. South East Asian:
- |                                     |                                       |
|-------------------------------------|---------------------------------------|
| <input type="radio"/> 1. Thai       | <input type="radio"/> 3. Filipino     |
| <input type="radio"/> 2. Vietnamese | <input type="radio"/> 4. Other: _____ |
- ☐ E. West Asian:
- |                                  |                                       |
|----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Iranian | <input type="radio"/> 3. Turkish      |
| <input type="radio"/> 2. Afghani | <input type="radio"/> 4. Other: _____ |
- ☐ F. Caribbean:
- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Haitian  | <input type="radio"/> 3. Dominican    |
| <input type="radio"/> 2. Jamaican | <input type="radio"/> 4. Other: _____ |
- ☐ G. Black/African:
- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Kenyan   | <input type="radio"/> 3. Senegalese   |
| <input type="radio"/> 2. Nigerian | <input type="radio"/> 4. Other: _____ |
- ☐ H. White/Caucasian:
- |                                  |                                    |                                       |
|----------------------------------|------------------------------------|---------------------------------------|
| <input type="radio"/> 1. British | <input type="radio"/> 4. Italian   | <input type="radio"/> 7. Other: _____ |
| <input type="radio"/> 2. French  | <input type="radio"/> 5. Scottish  |                                       |
| <input type="radio"/> 3. Irish   | <input type="radio"/> 6. Ukrainian |                                       |
- ☐ I. Arab/Middle Eastern:
- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Egyptian | <input type="radio"/> 3. Lebanese     |
| <input type="radio"/> 2. Israeli  | <input type="radio"/> 4. Other: _____ |
- ☐ J. Latin American:
- |                                  |                                       |
|----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Mexican | <input type="radio"/> 3. Columbian    |
| <input type="radio"/> 2. Chilean | <input type="radio"/> 4. Other: _____ |
- ☐ K. Other: \_\_\_\_\_

8. Our families are different. Some live with one or two moms; others live with a mom and a dad. Some live with stepparents; others live with grandparents. **Who do you live with?** (Please, choose only one)

- ☐ Mom and Dad
- ☐ Mostly Mom
- ☐ Mostly Dad
- ☐ Mom and Mom

- ☐ Dad and Dad
- ☐ Mom and Stepmom/Stepdad
- ☐ Dad and Stepmom/Stepdad
- ☐ Other family members
- ☐ Others not from my family

9. Think of the parents/guardians you live with. Were both grownups born in Canada or in another country?

**(If you live with one parent, answer only for parent 1)**

A. Was **parent 1** born in Canada?

- ☐ Yes      ☐ No, **parent 1** was born in \_\_\_\_\_

B. Was **parent 2** born in Canada?

- ☐ Yes      ☐ No, **parent 2** was born in \_\_\_\_\_

10. Some kids your age have one or two parents who have to work in a different country, and don't live in Canada. Do one or two of your parents live and work in another country?

**(If you have one parent, answer only for parent 1)**

A. Does **parent 1** live and work in a country other than Canada?

- ☐ Yes      ☐ No

B. Does **parent 2** live and work in a country other than Canada?

- ☐ Yes      ☐ No

11. If your parents or guardians live and work in another country, how often do you talk to them (either on the phone, via text messaging, or via the Internet, e.g., Skype, Instant Messaging)?

**If both parents work in Canada please, check put a checkmark (☑) in this box**

☐

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Frequently
- ☐ Everyday

12. If your parents or guardians live and work in another country, how often do you visit them or they visit you?

**If both parents work in Canada please, check put a checkmark (☑) in this box**

☐

- ☐ Never
- ☐ Once every 2-3 years
- ☐ Once a year
- ☐ 2-3 times a year
- ☐ 4-6 times a year
- ☐ Every month or more

13. In your opinion, how many of the students **in your school** have the same ethnic background you have?

- |   |                  |
|---|------------------|
| <input type="radio"/> None              | (about 0%)       |
| <input type="radio"/> Hardly any        | (about 10%-20%)  |
| <input type="radio"/> Some              | (about 20%-40%)  |
| <input type="radio"/> Around half       | (about 40%-60%)  |
| <input type="radio"/> Most              | (about 60%-90%)  |
| <input type="radio"/> Almost all or all | (about 90%-100%) |

## My Feelings about My Ethnic Group

In Canada, people come from many countries and ethnic groups around the world and there are many different words to describe the backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups that people come from are: Filipino, Black, Chinese Canadian, Asian, Latin American, Indo Canadian, and South Asian, White. People differ in how they feel about their ethnic group. The questions in this section are about ***your*** ethnicity, or ethnic group, and how you feel and think about it.

14. Before you answer the questions below, please tell us:

In terms of ethnicity or ethnic group, who do you consider yourself to be?

\_\_\_\_\_

Think of your ethnic group when you answer the next questions.

Please choose the answer that is best for you. Remember your answers are confidential.

		Strongly Disagree	Disagree	Agree	Strongly Agree
15.	I feel good about people in my ethnic group.	①	②	③	④
16.	I would prefer to belong to a different ethnic group.	①	②	③	④
17.	I feel that my ethnic group contributes less to society than other ethnic groups.	①	②	③	④
18.	I feel close to people from my ethnic group.	①	②	③	④
19.	I have a strong sense of belonging to others in my ethnic group.	①	②	③	④
20.	If I were to describe myself to someone, one of the first things that I would say is that I am from my ethnic group.	①	②	③	④
21.	I feel proud to be from my ethnic group.	①	②	③	④

**Think of your school when you answer the next set of questions. Choose one answer that is best for you.**  
**Remember your answers are confidential.**

		<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
22.	In my school, others expect my ethnic group to do well in life.	①	②	③	④
23.	In my school, my ethnic group is considered less successful than other ethnic groups.	①	②	③	④
24.	In my school, others respect my ethnic group.	①	②	③	④
25.	In my school, others think that my ethnic group has made important contributions.	①	②	③	④
26.	In my school, others have a negative view of my ethnic group.	①	②	③	④
27.	In my school, others think that my ethnic group is smart.	①	②	③	④
28.	In my school, others think that my ethnic group is good.	①	②	③	④



# Growing Up in Canada

What is it like to be a student growing up in Canada? We know very little about how students your age feel about living in Canada. In this section, please help us understand your feelings about Canada.

Please choose the answer that is best for you.

		Strongly Disagree	Disagree	Agree	Strongly Agree
29.	I am happy that I live in Canada.	①	②	③	④
30.	I feel that I belong in Canada.	①	②	③	④
31.	I am proud to live in Canada.	①	②	③	④
32.	I have a lot of pride in the achievements of Canada.	①	②	③	④
33.	I feel strongly attached to Canada.	①	②	③	④
34.	I feel good about being in Canada.	①	②	③	④
35.	I consider myself Canadian.	①	②	③	④

# Me and My Schoolmates

At school, you spend a lot of time with other students. What do you think of your relationships and the time you spend with other students?

Think of the students in your school when answering these questions. Please choose the answer that is best for you.

		Never	Once or a few times	Several Times	Frequently	Always
36.	It's easy for me to make new friends.	①	②	③	④	⑤
37.	I have nobody to talk to.	①	②	③	④	⑤
38.	There's nobody I can go to when I need help.	①	②	③	④	⑤
39.	I have lots of friends.	①	②	③	④	⑤
40.	I feel alone.	①	②	③	④	⑤
41.	I can find a friend when I need one.	①	②	③	④	⑤
42.	It's hard to get others to like me.	①	②	③	④	⑤
43.	I don't have anyone to hang out with.	①	②	③	④	⑤
44.	I get along with other students.	①	②	③	④	⑤
45.	I feel left out of things.	①	②	③	④	⑤
46.	It's hard for me to make friends.	①	②	③	④	⑤
47.	I don't get along with others at school.	①	②	③	④	⑤
48.	I'm lonely.	①	②	③	④	⑤
49.	I'm well-liked by others in my classes.	①	②	③	④	⑤
50.	I don't have any friends.	①	②	③	④	⑤

## Experiences with Discrimination

The questions in this section ask about your experiences with students at school excluding you or being hurtful because of your ethnic background.

Think of the students in your school when answering these questions. Please choose the answer that is best for you.

How often have you had experiences with		Never	Once or a few times	Several Times	Frequently	Always
51.	other students calling you insulting names because of your ethnicity?	①	②	③	④	⑤
52.	other students excluding you from their games and activities because of your ethnicity?	①	②	③	④	⑤
53.	other students threatening you because of your ethnicity?	①	②	③	④	⑤
54.	other students discouraging you from joining a group because of your ethnicity?	①	②	③	④	⑤
55.	other students thinking you didn't know English very well because of your ethnicity?	①	②	③	④	⑤
56.	other students thinking you're the teacher's pet because of your ethnicity?	①	②	③	④	⑤
57.	other students saying you look/dress funny or weird because of your ethnicity?	①	②	③	④	⑤
58.	being upset/sad because other students have been hurtful and mean to you because of your ethnicity?	①	②	③	④	⑤
59.	being angry because other students have been hurtful and mean to you because of your ethnicity?	①	②	③	④	⑤

# Bullying at Your School

The next few questions ask about bullying at your school. There are lots of different ways to bully someone, but a bully wants to hurt the other person (it's not an accident), and does so repeatedly and unfairly (bullies have some advantage over the person they hurt). Sometimes a group of students will bully another student.

Think about this school year when you answer the following questions about bullying.

How often have you...		Never	Once or a Few Times	Every Month	Every Week	Several Times a Week
60.	been bullied?	①	②	③	④	⑤
61.	taken part in bullying others?	①	②	③	④	⑤
62.	seen other students being bullied?	①	②	③	④	⑤

How often have you been...		Never	Once or a Few Times	Every Month	Every Week	Several Times a Week
63.	<u>physically</u> bullied, when someone: <ul style="list-style-type: none"> <li>- hit, kicked, punched, pushed you</li> <li>- physically hurt you</li> <li>- damaged or stole your property</li> </ul>	①	②	③	④	⑤
64.	<u>verbally</u> bullied, when someone: <ul style="list-style-type: none"> <li>- said mean things to you</li> <li>- teased you or called you names</li> <li>- threatened you or tried to hurt your feelings</li> </ul>	①	②	③	④	⑤
65.	<u>socially</u> bullied, when someone: <ul style="list-style-type: none"> <li>- said bad things behind your back</li> <li>- gossiped or spread rumours about you</li> <li>- got other students not to like you</li> <li>- ignored you or refused to play with you</li> </ul>	①	②	③	④	⑤
66.	<u>cyber-bullied</u> , when someone: <ul style="list-style-type: none"> <li>- used the computer, websites, emails, text messages or pictures online to threaten you, hurt you, make you look bad, or spread rumours about you</li> </ul>	①	②	③	④	⑤

How often have you <i>seen</i> other students being...		Never	Once or a Few Times	Every Month	Every Week	Several Times a Week
67.	physically bullied?	①	②	③	④	⑤
68.	verbally bullied?	①	②	③	④	⑤
69.	socially bullied?	①	②	③	④	⑤
70.	cyber bullied?	①	②	③	④	⑤

How often have you <i>taken part in</i> ...		Never	Once or a Few Times	Every Month	Every Week	Several Times a Week
71.	physically bullying others?	①	②	③	④	⑤
72.	verbally bullying others?	①	②	③	④	⑤
73.	socially bullying others?	①	②	③	④	⑤
74.	cyber bullying others?	①	②	③	④	⑤

## Sense of Belonging to School

As a student, you spend a big part of your time at school. We want your help in understanding what it is like to be at school everyday. Please choose the answer that is true for you.

		Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
75.	I feel like a real part of this school.	①	②	③	④	⑤
76.	People here notice when I'm good at something.	①	②	③	④	⑤
77.	It is hard for people like me to be accepted here.	①	②	③	④	⑤
78.	Other students in this school take my opinions seriously.	①	②	③	④	⑤
79.	Most teachers at my school are interested in me.	①	②	③	④	⑤
80.	Sometimes I feel as if I don't belong here.	①	②	③	④	⑤
81.	There's at least one teacher or other adult in this school I can talk to if I have a problem.	①	②	③	④	⑤
82.	People at this school are friendly to me.	①	②	③	④	⑤
83.	Teachers here are not interested in people like me.	①	②	③	④	⑤
84.	I am included in lots of activities at my school.	①	②	③	④	⑤
85.	I am treated with as much respect as other students.	①	②	③	④	⑤
86.	I feel very different from most other students.	①	②	③	④	⑤
87.	I can really be myself at this school.	①	②	③	④	⑤
88.	The teachers here respect me.	①	②	③	④	⑤
89.	People here know I can do good work.	①	②	③	④	⑤
90.	I wish I were in a different school.	①	②	③	④	⑤
91.	I feel proud of belonging to this school.	①	②	③	④	⑤
92.	Other students here like the way I am.	①	②	③	④	⑤

If you are having problems with other students at school,  
please know that you do not have to face it alone; you can get help.

You can talk to your parents or others family members;  
they may have some ideas that you have not yet thought about.

You can talk to any adult that you trust at the school -  
a counsellor, a teacher or coach, a custodian, a youth worker, a bus driver,  
etc.

Do you want help with problems you are having with other  
students?

☐ NO, everything is ok

☐ YES, I would like help – Please print your name below

---

Print your name ONLY IF YOU PUT **YES** (first name, last name)

THANK YOU FOR COMPLETING THIS SURVEY!

# Growing Up in Canada

## Instructions

All your answers on this survey are confidential (private) — DO NOT put your name on the survey.

Make sure to read every question.

This is not a test and there are no right or wrong answers, but it is important to answer honestly.

If you are not comfortable answering a question, you can leave it blank; if you don't know understand a question, you can ask for help.

Please do not look at other students' answers.

If there is anything you need help with or you have any questions, please raise your hand and we will come over to help you.

**It is important to colour the circles completely,**

**like this: ●**

**Please DO NOT use ✓, Please DO NOT use X.**



## About Me...

1. What is the name of your school? \_\_\_\_\_

2. How old are you? (In years) \_\_\_\_\_

3. What grade are you in? (Choose one)

☐ Grade 4   ☐ Grade 6   ☐ Grade 8   ☐ Grade 10   ☐ Grade 12

☐ Grade 5   ☐ Grade 7   ☐ Grade 9   ☐ Grade 11

4. Are a girl or a boy? (Choose one)

☐ Girl

☐ Boy

5. Were you born in Canada?

☐ Yes

If yes, where in Canada were you born?

\_\_\_\_\_

☐ No

If no, in which city and country were you born?

\_\_\_\_\_

6. How many years have you lived in Canada?

☐ Less than a year

☐ 1-2 years

☐ 2-4 years

☐ 4-6 years

☐ More than six years

☐ All my life

7. Canada is home to people from many different ethnic groups and backgrounds. Every person is born into one or more ethnic groups/backgrounds. What is your ethnic group? (Choose more than one if it is true for you).

☐ A. Aboriginal/Native People:

- |  |                                       |
|--|---------------------------------------|
| <input type="radio"/> 1. Chehalis Band | <input type="radio"/> 3. Musqueam     |
| <input type="radio"/> 2. Sechelt Band  | <input type="radio"/> 4. Other: _____ |

☐ B. Asian:

- |                                  |                                       |
|----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Chinese | <input type="radio"/> 3. Japanese     |
| <input type="radio"/> 2. Korean  | <input type="radio"/> 4. Other: _____ |

☐ C. South Asian:

- |                                    |                                       |
|------------------------------------|---------------------------------------|
| <input type="radio"/> 1. Indian    | <input type="radio"/> 3. Sri Lankan   |
| <input type="radio"/> 2. Pakistani | <input type="radio"/> 4. Other: _____ |

☐ D. South East Asian:

- |                                     |                                       |
|-------------------------------------|---------------------------------------|
| <input type="radio"/> 1. Thai       | <input type="radio"/> 3. Filipino     |
| <input type="radio"/> 2. Vietnamese | <input type="radio"/> 4. Other: _____ |

☐ E. West Asian:

- |                                  |                                       |
|----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Iranian | <input type="radio"/> 3. Turkish      |
| <input type="radio"/> 2. Afghani | <input type="radio"/> 4. Other: _____ |

☐ F. Caribbean:

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Haitian  | <input type="radio"/> 3. Dominican    |
| <input type="radio"/> 2. Jamaican | <input type="radio"/> 4. Other: _____ |

☐ G. Black/African:

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Kenyan   | <input type="radio"/> 3. Senegalese   |
| <input type="radio"/> 2. Nigerian | <input type="radio"/> 4. Other: _____ |

☐ H. White/Caucasian:

- |                                  |                                    |                                       |
|----------------------------------|------------------------------------|---------------------------------------|
| <input type="radio"/> 1. British | <input type="radio"/> 4. Italian   | <input type="radio"/> 7. Other: _____ |
| <input type="radio"/> 2. French  | <input type="radio"/> 5. Scottish  |                                       |
| <input type="radio"/> 3. Irish   | <input type="radio"/> 6. Ukrainian |                                       |

☐ I. Arab/Middle Eastern:

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Egyptian | <input type="radio"/> 3. Lebanese     |
| <input type="radio"/> 2. Israeli  | <input type="radio"/> 4. Other: _____ |

☐ J. Latin American:

- |                                  |                                       |
|----------------------------------|---------------------------------------|
| <input type="radio"/> 1. Mexican | <input type="radio"/> 3. Colombian    |
| <input type="radio"/> 2. Chilean | <input type="radio"/> 4. Other: _____ |

☐ K. Other: \_\_\_\_\_

8. Our families are different. Some live with one or two moms; others live with a mom and a dad. Some live with stepparents; others live with grandparents. **Who do you live with?** (Please, choose only one)

- ☐ Mom and Dad
- ☐ Mostly Mom
- ☐ Mostly Dad
- ☐ Mom and Mom
- ☐ Dad and Dad
- ☐ Mom and Stepmom/Stepdad
- ☐ Dad and Stepmom/Stepdad
- ☐ Other family members
- ☐ Others not from my family

9. Think of the parents/guardians you live with. Were both grownups born in Canada or in another country?

**(If you live with one parent, answer only for parent 1)**

C. Was **parent 1** born in Canada?

- ☐ Yes      ☐ No, **parent 1** was born in \_\_\_\_\_

D. Was **parent 2** born in Canada?

- ☐ Yes      ☐ No, **parent 2** was born in \_\_\_\_\_

10. Some kids your age have one or two parents who have to work in a different country, and don't live in Canada. Do one or two of your parents live and work in another country?

**(If you have one parent, answer only for parent 1)**

C. Does **parent 1** live and work in a country other than Canada?

- ☐ Yes      ☐ No

D. Does **parent 2** live and work in a country other than Canada?

- ☐ Yes      ☐ No

11. If your parents or guardians live and work in another country, how often do you talk to them (either on the phone, via text messaging, or via the Internet, e.g., Skype, Instant Messaging)?

**If both parents work in Canada please, check put a checkmark (☑) in this box**

☐

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Frequently
- ☐ Everyday

12. If your parents or guardians live and work in another country, how often do you visit them or they visit you?

**If both parents work in Canada please, check put a checkmark (☑) in this box**

☐

- ☐ Never
- ☐ Once every 2-3 years
- ☐ Once a year
- ☐ 2-3 times a year
- ☐ 4-6 times a year
- ☐ Every month or more

13. In your opinion, how many of the students **in your school** have the same ethnic background you have?

- ☐ None (about 0%)
- ☐ Hardly any (about 10%-20%)
- ☐ Some (about 20%-40%)
- ☐ Around half (about 40%-60%)
- ☐ Most (about 60%-90%)
- ☐ Almost all or all (about 90%-100%)

## My Feelings about My Ethnic Group

In Canada, people come from many countries and ethnic groups around the world and there are many different words to describe the backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups that people come from are: Filipino, Black, Chinese Canadian, Asian, Latin American, Indo Canadian, and South Asian, White. People differ in how they feel about their ethnic group. The questions in this section are about ***your*** ethnicity, or ethnic group, and how you feel and think about it.

14. Before you answer the questions below, please tell us:

In terms of ethnicity or ethnic group, who do you consider yourself to be?

\_\_\_\_\_

Think of your ethnic group when you answer the next questions.

Please choose the answer that is best for you. Remember your answers are confidential.

		Strongly Disagree	Disagree	Agree	Strongly Agree
15.	I feel good about people in my ethnic group.	①	②	③	④
16.	I would prefer to belong to a different ethnic group.	①	②	③	④
17.	I feel that my ethnic group contributes less to society than other ethnic groups.	①	②	③	④
18.	I feel close to people from my ethnic group.	①	②	③	④
19.	I have a strong sense of belonging to others in my ethnic group.	①	②	③	④
20.	If I were to describe myself to someone, one of the first things that I would say is that I am from my ethnic group.	①	②	③	④
21.	I feel proud to be from my ethnic group.	①	②	③	④

**Think of the adults at your school (e.g., teachers, counselors, administrators, school staff) when you answer the next set of questions. Choose one answer that is best for you. Remember your answers are confidential.**

		<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
22.	Adults at my school expect my ethnic group to do well in life.	①	②	③	④
23.	Adults at my school consider my ethnic group to be less successful than other ethnic groups.	①	②	③	④
24.	Adults at my school respect my ethnic group.	①	②	③	④
25.	Adults at my school think that my ethnic group has made important contributions.	①	②	③	④
26.	Adults at my school have a positive view of my ethnic group.	①	②	③	④
27.	Adults at my school think that my ethnic group is smart.	①	②	③	④
28.	Adults at my school think that my ethnic group is good.	①	②	③	④

Think of *students* at your school when you answer the next set of questions. Choose one answer that is best for you. Remember your answers are confidential.

		Strongly Disagree	Disagree	Agree	Strongly Agree
29.	Students at my school expect my ethnic group to do well in life.	①	②	③	④
30.	Students at my school consider my ethnic group to be less successful than other ethnic groups.	①	②	③	④
31.	Students at my school respect my ethnic group.	①	②	③	④
32.	Students at my school think that my ethnic group has made important contributions.	①	②	③	④
33.	Students at my school have a positive view of my ethnic group.	①	②	③	④
34.	Students at my school think that my ethnic group is smart.	①	②	③	④
35.	Students at my school think that my ethnic group is good.	①	②	③	④

# Growing Up in Canada

What is it like to be a student growing up in Canada? We know very little about how students your age feel about living in Canada. In this section, please help us understand your feelings about Canada.

Please choose the answer that is best for you.

		Strongly Disagree	Disagree	Agree	Strongly Agree
36.	I am happy that I live in Canada.	①	②	③	④
37.	I feel that I belong in Canada.	①	②	③	④
38.	I am proud to live in Canada.	①	②	③	④
39.	I have a lot of pride in the achievements of Canada.	①	②	③	④
40.	I feel strongly attached to Canada.	①	②	③	④
41.	I feel good about being in Canada.	①	②	③	④
42.	I consider myself Canadian.	①	②	③	④



# My Schoolmates and Me

At school, you spend a lot of time with other students. What do you think of your relationships and the time you spend with other students?

Think of the students in your school when answering these questions. Please choose the answer that is best for you.

		Never	Once or a few times	Several Times	Frequently	Always
43.	It's easy for me to make new friends.	①	②	③	④	⑤
44.	I have nobody to talk to.	①	②	③	④	⑤
45.	There's nobody I can go to when I need help.	①	②	③	④	⑤
46.	I have lots of friends.	①	②	③	④	⑤
47.	I feel alone.	①	②	③	④	⑤
48.	I can find a friend when I need one.	①	②	③	④	⑤
49.	It's hard to get others to like me.	①	②	③	④	⑤
50.	I don't have anyone to hang out with.	①	②	③	④	⑤
51.	I get along with other students.	①	②	③	④	⑤
52.	I feel left out of things.	①	②	③	④	⑤
53.	It's hard for me to make friends.	①	②	③	④	⑤
54.	I don't get along with others at school.	①	②	③	④	⑤
55.	I'm lonely.	①	②	③	④	⑤
56.	I'm well-liked by others in my classes.	①	②	③	④	⑤
57.	I don't have any friends.	①	②	③	④	⑤

## Experiences with Discrimination

The questions in this section ask about your experiences with students at school excluding you or being hurtful because of your ethnic background.

Think of the students in your school when answering these questions. Please choose the answer that is best for you.

How often have you had experiences with		Never	Once or a few times	Several Times	Frequently	Always
58.	other students calling you insulting names because of your ethnicity?	①	②	③	④	⑤
59.	other students excluding you from their games and activities because of your ethnicity?	①	②	③	④	⑤
60.	other students threatening you because of your ethnicity?	①	②	③	④	⑤
61.	other students discouraging you from joining a group because of your ethnicity?	①	②	③	④	⑤
62.	other students thinking you didn't know English very well because of your ethnicity?	①	②	③	④	⑤
63.	other students thinking you're the teacher's pet because of your ethnicity?	①	②	③	④	⑤
64.	other students saying you look/dress funny or weird because of your ethnicity?	①	②	③	④	⑤
65.	being upset/sad because other students have been hurtful and mean to you because of your ethnicity?	①	②	③	④	⑤
66.	being angry because other students have been hurtful and mean to you because of your ethnicity?	①	②	③	④	⑤

# Bullying at Your School

The next few questions ask about bullying at your school. There are lots of different ways to bully someone, but a bully wants to hurt the other person (it's not an accident), and does so repeatedly and unfairly (bullies have some advantage over the person they hurt). Sometimes a group of students will bully another student.

Think about this school year when you answer the following questions about bullying.

How often have you...		Never	Once or a Few Times	Every Month	Every Week	Several Times a Week
67.	been bullied?	①	②	③	④	⑤
68.	taken part in bullying others?	①	②	③	④	⑤
69.	seen other students being bullied?	①	②	③	④	⑤

How often have you been...		Never	Once or a Few Times	Every Month	Every Week	Several Times a Week
70.	<u>physically</u> bullied, when someone: - hit, kicked, punched, pushed you - physically hurt you - damaged or stole your property	①	②	③	④	⑤
71.	<u>verbally</u> bullied, when someone: - said mean things to you - teased you or called you names - threatened you or tried to hurt your feelings	①	②	③	④	⑤
72.	<u>socially</u> bullied, when someone: - said bad things behind your back - gossiped or spread rumours about you - got other students not to like you - ignored you or refused to play with you	①	②	③	④	⑤
73.	<u>cyber-bullied</u> , when someone: - used the computer, websites, emails, text messages or pictures online to threaten you, hurt you, make you look bad, or spread rumours about you	①	②	③	④	⑤

How often have you <i>seen</i> other students being...		Never	Once or a Few Times	Every Month	Every Week	Several Times a Week
74.	physically bullied?	①	②	③	④	⑤
75.	verbally bullied?	①	②	③	④	⑤
76.	socially bullied?	①	②	③	④	⑤
77.	cyber bullied?	①	②	③	④	⑤

How often have you <i>taken part in</i> ...		Never	Once or a Few Times	Every Month	Every Week	Several Times a Week
78.	physically bullying others?	①	②	③	④	⑤
79.	verbally bullying others?	①	②	③	④	⑤
80.	socially bullying others?	①	②	③	④	⑤
81.	cyber bullying others?	①	②	③	④	⑤

## Sense of Belonging to School

As a student, you spend a big part of your day at school. We want your help in understanding what it is like to be at school everyday. Please choose the answer that is true for you.

		Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
82.	I feel like a real part of this school.	①	②	③	④	⑤
83.	People here notice when I'm good at something.	①	②	③	④	⑤
84.	It is hard for people like me to be accepted here.	①	②	③	④	⑤
85.	Other students in this school take my opinions seriously.	①	②	③	④	⑤
86.	Most teachers at my school are interested in me.	①	②	③	④	⑤
87.	Sometimes I feel as if I don't belong here.	①	②	③	④	⑤
88.	There's at least one teacher or other adult in this school I can talk to if I have a problem.	①	②	③	④	⑤
89.	People at this school are friendly to me.	①	②	③	④	⑤
90.	Teachers here are not interested in people like me.	①	②	③	④	⑤
91.	I am included in lots of activities at my school.	①	②	③	④	⑤
92.	I am treated with as much respect as other students.	①	②	③	④	⑤
93.	I feel very different from most other students.	①	②	③	④	⑤
94.	I can really be myself at this school.	①	②	③	④	⑤
95.	The teachers here respect me.	①	②	③	④	⑤
96.	People here know I can do good work.	①	②	③	④	⑤
97.	I wish I were in a different school.	①	②	③	④	⑤
98.	I feel proud of belonging to this school.	①	②	③	④	⑤
99.	Other students here like the way I am.	①	②	③	④	⑤

If you are having problems with other students at school,  
please know that you do not have to face it alone; you can get help.

You can talk to your parents or others family members;  
they may have some ideas that you have not yet thought about.

You can talk to any adult that you trust at the school -  
a counsellor, a teacher or coach, a custodian, a youth worker, a bus driver,  
etc.

Do you want help with problems you are having with other  
students?

☐ NO, everything is ok

☐ YES, I would like help – Please print your name below

Print your name ONLY IF YOU PUT **YES** (first name, last name)

THANK YOU FOR COMPLETING THIS SURVEY!

## Appendix G: Grades 6-7 public regard inter-items correlations

<b>Public Regard Inter-Item Correlation Matrix</b>							
	<b>22</b>	<b>23R</b>	<b>24</b>	<b>25</b>	<b>26R</b>	<b>27</b>	<b>28</b>
22) In my school, others expect my ethnic group to do well in life.	1.00	.18	.02	.19	.04	.30	.21
23R) In my school, my ethnic group is considered successful.	---	1.00	.10	.30	.23	.27	.14
24) In my school, others respect my ethnic group.	---	---	1.00	.14	.29	.08	.27
25) In my school, others think that my ethnic group has made important contributions.	---	---	---	1.00	.09	.32	.35
26R) In my school, others have a negative view of my ethnic group.	---	---	---	---	1.00	-.01	.25
27) In my school, others think that my ethnic group is smart.	---	---	---	---	---	1.00	.21
28) In my school, others think that my ethnic group is good.	---	---	---	---	---	---	1.00

## Appendix H: Grades 8-9 public regard inter-items correlations

**Public Regard Inter-Item Correlation Matrix**

	23R	24	25	26	27	28	29	30R	31	32	33	34	35
22) Adults at my school expect my ethnic group to do well in life.	-.094	.038	.213	.109	.413	.200	.347	-.059	.011	.072	.054	.187	.081
23R) Adults at my school consider my ethnic group successful.	1.00	.296	.196	.333	.167	.270	.209	.575	.237	.281	.282	.296	.298
24) Adults at my school respect my ethnic group.	---	1.00	.249	.492	.216	.427	.091	.188	.405	.267	.379	.152	.365
25) Adults at my school think that my ethnic group has made important contributions.	---	---	1.00	.484	.386	.351	.283	.180	.203	.509	.281	.268	.246
26) Adults at my school have a positive view of my ethnic group.	---	---	---	1.00	.410	.586	.274	.207	.422	.414	.535	.376	.509
27) Adults at my school think that my ethnic group is smart.	---	---	---	---	1.00	.499	.393	.205	.135	.259	.273	.576	.354
28) Adults at my school think that my ethnic group is good.	---	---	---	---	---	1.00	.218	.235	.322	.379	.448	.334	.588
29) Students at my school expect my ethnic group to do well in life.	---	---	---	---	---	---	1.00	.277	.186	.264	.260	.525	.267
30R) Students at my school consider my ethnic group successful.	---	---	---	---	---	---	---	1.00	.272	.307	.323	.339	.314
31) Students at my school respect my ethnic group.	---	---	---	---	---	---	---	---	1.00	.461	.619	.187	.481
32) Students at my school think that my ethnic group has made important contributions.	---	---	---	---	---	---	---	---	---	1.00	.504	.324	.419
33) Students at my school have a positive view of my ethnic group.	---	---	---	---	---	---	---	---	---	---	1.00	.375	.611
34) Students at my school think that my ethnic group is smart.	---	---	---	---	---	---	---	---	---	---	---	1.00	.440
35) Students at my school think that my ethnic group is good.	---	---	---	---	---	---	---	---	---	---	---	---	1.00



## **Appendix I: Separate moderated regression models of years lived in Canada, discrimination and regard on belonging to Canada for grades 6-7 (N = 158)**

The two models below examined the separate interaction terms for private x time in Canada for grades 6-7 students. More specifically, the interaction term for private regard x < 6 years was entered in one model and the interaction term for private regard x > 6 years was entered in another model to detect which of the two models was significant.

Table I.1 shows that the last step (private regard x < 6 years), Step 5 was significant,  $\Delta F(1, 142) = 9.88, p = .002$ , the model added 5% to the variance in belonging to Canada. The overall model explained 28% of the variance in belonging to Canada. Figure I.1 shows that for youth who have lived in Canada all their life higher levels of ethnic pride were linked to higher levels of belonging to Canada. For youth who were newcomers, however, higher levels of private regard were not linked to higher levels of belonging to Canada. Given that no previous study has examined the role of time in moderating the association between private regard and belonging to Canada, the interpretation of this result is difficult. However, it is possible that the ethnic pride for youth who have recently arrived to Canada is not an issue that they have explored yet given that they are still adjusting to a new home. For youth who have lived in Canada all their life, their parents may have spent a longer time on fostering a sense of pride given that they are not exposed to the culture of their parents' backgrounds. These findings suggest that the association between ethnic pride and belonging do vary as a function of time in Canada.

**Table I. 1 Grades 6-7 (N = 158) sample: Moderated multiple regression of less than six years lived in Canada, discrimination and regard on belonging to Canada**

	B	SE	$\beta$	t	R <sup>2</sup>	Adj R <sup>2</sup>	$\Delta R^2$
Step 1					.02	.00	.02
Grade (Grade 7)	-.11	.09	-.11	-1.31			
Sex (Male)	.08	.09	-.08	-0.92			
Step 2					.14	.13	.13**
< 6 years	-.47	.10	-.39	-4.74**			
> 6 years	-.26	.10	-.21	-2.59**			
Step 3					.15	.12	.00
Discrimination	.03	.04	.06	0.73			
Step 4					.24	.20	.08**
Private Regard	.25	.06	.29	3.99**			
Step 5					.28	.25	.05**
Private Regard x < 6 years	-.39	.12	-.31	-3.14*			

*Note.* Grade 6 reference group for grade; female reference group for sex; all my life reference group for time in Canada

\*  $p < .008$ ; \*\*  $p < .001$

The second model examined the interaction term between private regard x > 6 years for grades 6-7 students. Step was significant,  $\Delta F(1, 146) = 7.60, p = .007$ , and contributed an additional 4% to the variance in belonging to Canada (see Table I.2). The overall model explained 27% of the variance in belonging to Canada. Figure I.2 shows that for youth who have lived in Canada for more than six years in comparison to their youth who were born in Canada higher levels of private regard were linked to higher levels of belonging to Canada. This result was different from the result found among youth who have lived in Canada for less than six. Undoubtedly, the findings beg replication. However, they raise the question whether for youth who have lived in Canada for longer

than six years, ethnic pride becomes something they are more aware of and thus of increased relevance to their sense of belonging to Canada.

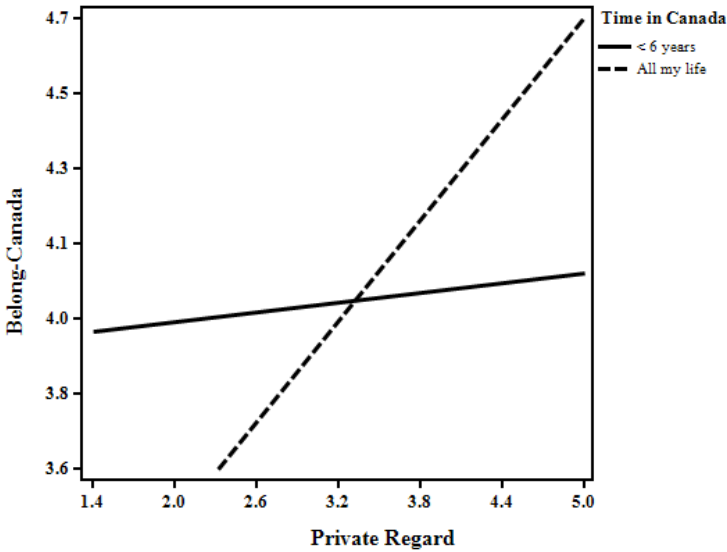
**Table I. 2 Grades 6-7 (N = 158) sample: Moderated multiple regression of more than six years lived in Canada, discrimination and regard on belonging to Canada**

	B	SE	$\beta$	t	R <sup>2</sup>	Adj R <sup>2</sup>	$\Delta R^2$
Step 1					.02	.00	.02
Grade (Grade 7)	-.11	.09	-.11	-1.31			
Sex (Male)	.08	.09	-.08	-0.92			
Step 2					.14	.13	.13**
< 6 years	-.47	.10	-.39	-4.74**			
> 6 years	-.26	.10	-.21	-2.59**			
Step 3					.15	.12	.00
Discrimination	.03	.04	.06	0.73			
Step 4					.24	.20	.08**
Private Regard	.25	.06	.29	3.99**			
Step 5					.28	.25	.05**
Private Regard x < 6 years	-.44	.16	.23	2.76*			

*Note.* Grade 6 reference group for grade; female reference group for sex; all my life reference group for time in Canada

\*  $p < .008$ ; \*\*  $p < .001$

**Figure I.1 Interaction of private regard x < 6 years time in Canada on belonging to Canada**



**Figure I.2 Interaction of private regard x > 6 years time in Canada on belonging to Canada**

