

**University of Alberta**

**An Exploratory Study of Ethnic Differences in Parent Cultural  
Socialization Practices and Children's Experiences of Peer Ethnic  
Victimization**

by

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## ABSTRACT

Research suggests that visible ethnic minority parents engage in cultural socialization practices and that visible ethnic minority children experience peer ethnic victimization more often than ethnic majority Caucasian children. Limited research has assessed ethnic differences in the construct validity and psychometric properties of measures assessing parent cultural socialization practices and peer ethnic victimization. This study examines ethnic differences in the construct validity and psychometric properties (reliabilities, mean levels) of these measures and in the associations between these constructs. Participants included 439 kindergarten to third-grade children and 275 of their parents from diverse ethnic groups. The constructs showed adequate construct validity across the overall visible ethnic minority and ethnic majority Caucasian groups. However, reliability was low at some waves for some ethnic groups. Relative to other ethnic groups, Southeast/East and West/South Asian parents engaged in more frequent cultural socialization practices and Black/African Canadian children experienced higher levels of peer ethnic victimization.

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## CHAPTER I

### **Introduction and Literature Review**

Research on parent cultural socialization practices among visible ethnic minority families has increased over the past decade (Hughes et al., 2006). Parent cultural socialization practices are the mechanisms by which parents implicitly or explicitly teach their children about their ethnic heritage, and promote values and positive attitudes about their culture or ethnic group (e.g., taking one's child to events or ceremonies about their ethnic group; Hughes et al., 2006). Culture represents socially transmitted practices, beliefs, and values held by a social group or society (Marsella & Yamada, 2000). Culture may be interconnected with ethnicity because people within the same ethnic group may often engage in similar cultural activities (Cashmore, 1984; Nikapota, 2009; Phinney, 1996; Quintanna et al., 2006). Ethnicity refers to a common background or heritage shared by a group of people (i.e., ethnic group) who may have the same country of origin, race, or culture, and who may sometimes share the same language (Karlsen, 2004; Yang, 2000). Ethnic groups can be broadly defined if at least one of the three main conditions (i.e., same country of origin, race, or culture) is met (Yang, 2000).

Research on children's experiences of peer ethnic victimization has also begun to increase (e.g., Larochette, Murphy, & Craig, 2010; McKenney, Pepler, Craig, & Connolly, 2006; Moran, Smith, Thompson, & Whitney, 1993; Verkuyten, 2002). Overall, peer victimization is defined by repeated, intentional, negative actions directed at a child by one or more socially or physically powerful



children (Olweus, 1995). Peer ethnic victimization specifically refers to acts of aggression that are focused on a child's ethnic characteristics or cultural practices (e.g., being made fun of because of one's skin color or because of the language one speaks; Larochette et al., 2010; McKenney et al., 2006).

Despite the growing research on parent cultural socialization practices and peer ethnic victimization, few studies have examined whether the available instruments demonstrate adequate factor structure and psychometric properties across diverse ethnic groups. Most studies have used measures to examine cultural socialization practices that were developed for specific ethnic groups, such as African American parents (Hughes & Chen, 1997) and Hispanic parents (Knight, Cota, & Bernal, 1993), and that are often reported on by adolescents. Studies of peer ethnic victimization have generally only included a single item measure (e.g., "how often have you been bullied because of your ethnicity?"; Larochette et al., 2010; McKenney et al., 2006). The factor structure and psychometric properties of single item measures cannot be assessed and thus limit understanding of whether the measure is equally valid across diverse ethnic groups. In addition, when ethnic differences are found it is unclear whether these are due to differences in the meaning of the item or experiences across separate ethnic groups.

The current study examines ethnic differences in the factor structure and psychometric properties of measures designed to assess parent cultural socialization practices and children's experiences of peer ethnic victimization. The sample included low-income children in grades kindergarten to three and

their parents from seven diverse ethnic groups (Canadian Caucasian, European Caucasian, Aboriginal, Black/African Canadian, Southeast/East Asian, West/South Asian, and Latin American) who were assessed three times over one school term (a 5 month period). In addition, ethnic differences in mean levels of parent cultural socialization practices and peer ethnic victimization and the associations between these constructs are assessed.

The following literature review first describes theoretical perspectives on parents as socialization agents and on problems in children's peer relationships. Second, the importance of assessing the factor structure and psychometric properties of these constructs across separate ethnic groups is discussed. Third, findings on ethnic differences in mean levels of parent cultural socialization practices and peer ethnic victimization and associations between these constructs are examined.

### **Theoretical Perspectives on Parent Cultural Socialization Practices**

Research on parent cultural socialization practices is based on socialization theory that indicates parents play an important role in supporting their children's social development (Grusec & Davidov, 2010; Miller & Goodnow, 1995). Socialization is the process by which children learn to develop and express behaviors appropriate for their culture or ethnic group. Socialization within cultures and ethnic groups involves learning throughout the life course and contributes to the development of children's social beliefs, behaviors, and actions. Research suggests that ethnic minority parents may place great importance on socializing children to their culture as a way to prepare children to thrive in social

settings with both the visible ethnic minority culture, as well as the ethnic majority culture (Caughy, Randolph, & O'Campo, 2002). As primary agents of their children's socialization, parents often engage in a variety of practices (e.g., cultural socialization) that contribute to their children's understanding of their culture or ethnic group, such as reading books with their child about people from their ethnic group (Hughes et al., 2006). Parent cultural socialization practices and activities take place in different settings, for example, within the home (e.g., having traditional items from a child's ethnic group within the home) or within the community (e.g., taking one's child to events about their ethnic group).

Although most research on parent cultural socialization practices has focused on older children and adolescents, Quintana (1998) suggests that by middle childhood children develop a literal understanding of characteristics related to culture and ethnicity, such as language, food, and activities. Based on this theory, it is expected that younger children are able to understand messages transmitted through parents' cultural socialization practices that focus on literal characteristics of ethnicity. Researchers suggest that cultural messages may be transmitted to children through implicit (e.g., cultural books or artwork displayed in the home) and explicit (e.g., talking to children about racial or ethnic differences) practices (Thornton, Chatters, Taylor, & Allen, 1990). However, few studies have been conducted on cultural socialization during middle childhood to determine how frequently parents of children from diverse ethnic groups, particularly Caucasian parents and parents of Western European descent, engage in these practices.

## **Theoretical Perspectives on Children's Experiences of Peer Ethnic**

### **Victimization**

Also less frequently studied during middle childhood are children's peer interactions that are specifically related to their ethnicity, like experiences of peer ethnic victimization. Peer relationships increase in significance during middle childhood as children begin to spend more time with their same-age peers (Hartup, 1984; Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006). At times, children's peer interactions during middle childhood are characterized by negative, derogatory exchanges targeted at a particular child, such as peer victimization (Kochenderfer-Ladd & Wardrop, 2001; Monks, Smith, & Swettenham, 2005). Generally, negative actions may be directed at a child by their peer for several reasons: to establish power, to damage the child's feelings, or to express dislike of a child's characteristics (Bosacki, Marini & Dane, 2006). Bosacki et al. (2006) report that 9% of a sample of 82 Canadian children aged 8 to 12 years old indicate that victims are picked on because of their ethnic characteristics. However, the reasons why children specifically experience peer ethnic victimization are less clear.

Children's peer interactions are influenced by a variety of factors, including their developmental stage. Two social-developmental theories lend understanding to why children may experience peer ethnic victimization during middle childhood: social cognitive theory and social identity theory. Social cognitive theory is based on the idea that children learn to understand their social environment by observing the behaviors and characteristics of other people

(Olson & Dweck, 2008). Social cognitive theory suggests that from early to middle childhood, children's understanding of ethnicity and their awareness of differences between and within ethnic groups increases as they become more attuned to literal characteristics of ethnicity, such as culture-specific clothing and skin color (Quintana, 1998). Research shows that young children's awareness of ethnic differences among their peers may sometimes lead to preferential treatment against particular children based on these differences (Barron, 2011; Clark & Clark, 1947). It is possible that children may even show preferential treatment against other children in their ethnic group based on slight differences in ethnic characteristics.

Social identity theory is closely linked to social cognitive theory. Social identity theory suggests that children develop a shared sense of belonging with other children based on similar characteristics (Tajfel, 1974). The group a child belongs to is referred to as their in-group and children outside the in-group are called the out-group. During middle childhood in-group attitudes are likely to become more ethnically biased as children's understanding of ethnic differences increases (Pfeifer et al., 2007). Children may be more likely to choose friends from the same ethnic group or who share similar ethnic characteristics as their own and exclude children who are ethnically different from themselves (Barron, 2011). Research during middle childhood shows that ethnic minority children display positive attitudes towards their ethnic in-group as well as ethnic majority out-groups, but do not necessarily show positive attitudes to other ethnic minority out-groups (Griffiths & Nesdale, 2006; Pfeifer et al., 2007). On the other hand,

ethnic majority children are more likely to show positive attitudes towards their ethnic in-group than ethnic out-groups. These findings imply that in ethnically diverse settings, peer ethnic victimization may occur as children begin to notice ethnic differences among themselves, such as the color of their skin or the clothes they wear, and aggress against other children based on these differences (Moran et al., 1993; Verkuyten, 2002).

### **Measuring Parent Cultural Socialization Practices and Peer Ethnic Victimization**

There are three main measurement concerns that have not been examined extensively in research on parent cultural socialization practices and peer ethnic victimization. First, it is not well established whether instruments hypothesized to measure parent cultural socialization practices are measuring a phenomenon unique from other similar supportive parenting practices, such as parent involvement and positive parenting. Parent involvement consists of active participation of parents in more general activities with their children (e.g., playing games with one's child; Hossain & Anziano, 2008). Positive parenting consists of support and encouragement given to children by parents (e.g., complimenting one's child when they do something well; Dumas, Lawford, Tieu, & Pratt, 2009). Although these constructs may be theoretically different, to classify parent cultural socialization as a unique construct it is necessary to establish that parents engage in cultural socialization practices as a phenomenon distinct from other similar parenting practices. By definition, parent cultural socialization is unique from parent involvement and positive parenting because it refers to practices that

specifically promote messages of ethnic heritage, cultural practices, and ethnic pride (Hughes et al., 2006). However, it is necessary to explore the factor structure of measures used to examine parent cultural socialization to establish that the construct is unique from similar parenting practices constructs and to determine the factor structure that best represents the data to use in subsequent analyses. The current study examines the factor structure of three conceptually distinct parenting practices constructs to test whether the measure assessing parent cultural socialization practices is empirically distinct from parent involvement and positive parenting constructs.

Similarly, it is also not known whether instruments used to measure peer ethnic victimization examine an aspect of peer victimization that is unique from similar constructs, such as relational and physical victimization. Relational victimization involves acts such as social exclusion and ostracizing whereas physical victimization involves overt acts of aggression against another child such as hitting, kicking, or punching (Crick & Grotpeter, 1996). Peer ethnic victimization is conceptually different from other forms of peer victimization (e.g., relational and physical victimization) in that the acts of aggression are focused on ethnic characteristics, such as skin color and language (Larochette et al., 2010). However, to classify peer ethnic victimization as a unique construct it is necessary to establish that children who report experiences of peer ethnic victimization actually report experiences that are unique from other forms of peer victimization, such as relational and physical victimization. The current study examines the factor structure of three conceptually distinct peer victimization

constructs to test whether the assessment of peer ethnic victimization is empirically distinct from assessments of peer relational and physical victimization.

Second, it is also important to determine that the factor structure of the parent cultural socialization and peer ethnic victimization constructs is valid and that the constructs can be used to measure the same phenomena across time and ethnic groups. Measurement constructs cannot be assumed to be culturally or ethnically equivalent (Pena, 2007). It is necessary to establish that the parent cultural socialization practices and peer ethnic victimization constructs each have the same meaning across ethnic groups to conduct meaningful comparisons across these groups. Many studies have used measures of parent cultural socialization practices that are specific to African American and Hispanic families so examinations of the consistency of these measures for use across diverse ethnic groups have been sparse (Hughes, 2003; Knight et al., 1993; Peters, 1985; White-Johnson, Ford, & Sellers, 2010). These studies have also not examined the consistency of these measures across time. Similarly, very few studies have examined the ability of measures of peer ethnic victimization to retain the same meaning across time and ethnic groups, generally because most studies have been cross-sectional or have used a single-item measure (Larochette et al., 2010; McKenney et al., 2006). The current study examines the measurement equivalence of these constructs across time and overall visible ethnic minority and ethnic majority Caucasian groups.

Third, previous reliability studies of measures of parent cultural



socialization practices have limitations. Very few studies have compared the consistency of responses to items hypothesized to measure cultural socialization practices across diverse ethnic groups (Hughes & Chen, 1997; Knight et al., 1993). In addition, the reproducibility of these measures has not been extensively tested as most of these studies have been cross-sectional and have not included repeated measurements. The few studies on peer ethnic victimization conducted in Canada have been based on single item measures so it has not been possible to assess the consistency of responses to multiple items measuring this construct (Larochette et al., 2010; McKenney et al., 2006). Additionally, these studies have typically not included repeated measurement designs so the consistency of responses to the same items on more than one occasion has not been tested. In order to establish that the parent cultural socialization and peer ethnic victimization constructs produce consistent responses, the reliability of these constructs is assessed across three waves of measurement each separated by approximately eight weeks in the current study.

### **Ethnic Differences in Parent Cultural Socialization Practices**

Although sparse, research examining the frequency of parent cultural socialization practices with young children suggests that many parents value educating their children on matters related to culture (Marshall, 1995). For example, results from cross-sectional research with African American mothers of children aged 3 to 4.5 years old found that 89% of mothers reported engaging in implicit cultural socialization practices in their home with their child, such as having household items that represent African culture in their home (Caughy,

O'Campo, Randolph, & Nickerson, 2002). Ethnic differences in parent cultural socialization practices have also been found. Research by Hughes (2003) with Puerto Rican, Dominican, and African American parents of children aged 6 to 17 years found that the frequency of cultural socialization practices was relatively high across all groups although a statistically significant higher percentage of African American parents reported engaging in explicit cultural socialization practices (e.g., promoting awareness of their history and culture) than Puerto Rican and Dominican parents. Significant differences were not found between Puerto Rican and Dominican parents, which may be due to their similar cultural experiences.

Though studies show that cultural socialization practices are a key aspect of child rearing among parents of African American, Southeast/East Asian, and Latin American youth (Caughy et al., 2002; Phinney & Chavira, 1995), less is known about how levels of parent cultural socialization practices compare across parents from other ethnic groups and for parents of younger children. It is unclear whether parents of Canadian Caucasian, European Caucasian, Aboriginal, and West/South Asian children also engage in cultural socialization practices with some frequency and if so, how their levels of engagement in these practices compare to other ethnic groups. Although not examined in previous studies, Hughes and Chen (1997) argued that parents of ethnic minority children may be more likely to engage in cultural socialization practices than parents of Caucasian children. It may be that mean levels of cultural socialization practices vary significantly between ethnic groups and are higher among parents of visible ethnic

minority children (such as Aboriginal, Black/African-Canadian, Southeast/East Asian, West/South Asian, and Latin American) than parents of ethnic majority Caucasian children (Canadian Caucasian and European Caucasian). The current study examines ethnic differences in mean levels of parent cultural socialization practices, assessed on three occasions across one school term in an ethnically diverse sample of children and their parents.

### **Ethnic Differences in Experiences of Peer Ethnic Victimization**

Peer ethnic victimization may be a reality for children from all ethnic groups in ethnically diverse settings. For instance, with a sample of Caucasian, African American, and Hispanic children in grades one, two, and four followed over two years, Hanish and Guerra (2000) found that Caucasian children experienced more episodes of peer victimization (assessed via peer nominations) than African American and Hispanic children, but only when Caucasian children were the numerical ethnic minority. This finding suggests that Caucasian children might also be at risk for peer ethnic victimization when they are in more ethnically diverse settings.

Most research on peer ethnic victimization has been conducted during late childhood and adolescence. For example, among Dutch and Turkish children aged 10 to 12 years, Turkish children reported higher mean levels of peer ethnic victimization than the ethnic majority Dutch children (Verkuyten, 2002). A smaller study examining 33 pairs of Asian and Caucasian youth aged 9 to 15 years found that Asian youth experienced significantly higher levels of peer ethnic victimization than Caucasian youth (Moran et al., 1993). In a study with a large

sample of ethnically diverse Canadian youth, Larochette et al. (2010) found that Black/African Canadian youth reported significantly higher levels of peer ethnic victimization than Caucasian, Aboriginal, and Asian youth even though they were the largest ethnic minority group. These findings suggest that in ethnically diverse settings all children may be at risk for experiencing peer ethnic victimization. However, little is known about how frequently these experiences occur during middle childhood and among typically neglected ethnic minority groups such as Aboriginal and West/South Asian children. The current study examines ethnic differences in children's experiences of peer ethnic victimization during middle childhood assessed on three occasions across one school term.

### **Associations between Parent Cultural Socialization Practices and Peer**

#### **Ethnic Victimization**

Ethnic differences may also be found in the association between parent cultural socialization practices and children's experiences of peer ethnic victimization. To date, there has been very little research conducted on associations between parent cultural socialization practices and peer ethnic victimization. As a result, the associations between parent cultural socialization practices and peer ethnic victimization are not well known among young children from diverse ethnic groups. Drawing from the literature on ethnic discrimination that has identified associations between parent cultural socialization practices and adolescents' experiences of ethnic discrimination (e.g., Stevenson, McNeil, Herrero-Taylor & Davis, 2002), it is hypothesized that parent cultural socialization practices may also be associated with children's experiences of peer

ethnic victimization. Hughes et al. (2001, 2006) suggest that adolescents' experiences of ethnic discrimination may prompt their parents to increase their engagement in cultural socialization practices, contributing to a positive relationship between these parenting practices and ethnic discrimination. For instance, African American adolescents aged 14.2 years on average who experienced ethnic discrimination also reported having parents who directed more messages related to cultural socialization toward them (Stevenson et al., 2002). Similarly, African American adolescents aged 15.9 years on average who experienced higher levels of ethnic discrimination than their peers also reported receiving higher levels of cultural socialization messages from parents (Miller & MacIntosh, 1999).

Based on these findings for ethnic discrimination, there may be a positive association between parent cultural socialization practices and peer ethnic victimization. Ethnic differences may also occur in the associations between cultural socialization practices and peer ethnic victimization if parents from some ethnic backgrounds are more likely to engage in cultural socialization practices to protect their children from experiences of peer ethnic victimization (Hughes, 2003). It may be that these associations differ among the separate ethnic minority and majority Caucasian groups or possibly only differ between the overall visible ethnic minority and ethnic majority Caucasian groups.

### **The Current Study**

In sum, the current study asks the following research questions: 1) Does the assessment of parent cultural socialization practices represent an empirical

dimension of parenting practice, distinct from assessments of parent involvement and positive parenting? Similarly, does the assessment of children's experiences of peer ethnic victimization represent an empirically distinct dimension of peer victimization relative to assessments of peer relational and physical victimization?

2) Do the assessments of parent cultural socialization practices and peer ethnic victimization demonstrate adequate factor structure and psychometric properties across occasions of measurement and across children and parents from diverse visible ethnic minority and ethnic majority Caucasian groups? 3) Do mean levels of parent cultural socialization practices and peer ethnic victimization and associations between these constructs across the waves of measurement differ across the diverse visible ethnic minority and ethnic majority Caucasian groups?

Drawing from the literature reviewed above, it is expected that: 1) The assessment of parent cultural socialization will represent an empirically distinct parenting practices dimension relative to parent involvement and positive parenting constructs. Similarly, it is expected that the peer ethnic victimization measure will represent an empirically distinct peer victimization dimension relative to peer relational and physical victimization. 2) The parent cultural socialization practices and peer ethnic victimization constructs will demonstrate adequate factor structure and psychometric properties across the three occasions of measurement and across parents and children from the visible ethnic minority (Aboriginal, Black/African Canadian, Southeast/East Asian, West/South Asian, and Latin American) and ethnic majority Caucasian (Canadian Caucasian and European Caucasian) groups, both within and across time. 3) Parents of visible

ethnic minority children will report higher mean levels of parent cultural socialization practices than parents of ethnic majority Caucasian children and, similarly, visible ethnic minority children will report higher mean levels of peer ethnic victimization than ethnic majority Caucasian children. 4) Parent cultural socialization practices will be positively associated with children's experiences of peer ethnic victimization and these associations will be stronger for visible ethnic minority children than for ethnic majority Caucasian children. Ethnic differences in mean levels of parent cultural socialization practices and peer ethnic victimization and differential associations between these constructs across the separate visible ethnic minority (e.g., between Aboriginal and West/South Asian children) and ethnic majority Caucasian (e.g., between Canadian Caucasian and European Caucasian children) groups are not hypothesized *a priori* given the limited extant research on differences among these groups.

## CHAPTER II

### Method

#### Participants

Participants included 461 children (mean age = 6.8 years,  $SD = 1.20$  years, 51% girls) and 296 of their parents (mean age = 39.9 years,  $SD = 6.5$  years, 89.3% mothers). Children were in kindergarten to grade three (27.3% kindergarten, 29.5% grade 1, 21.5% grade 2, and 21.7% grade 3). The children were recruited from 10 low-income, ethnically diverse elementary schools (6 from the Public School Board and 4 from the Catholic School Board) located in a large city in Western Canada. Based on school-level rankings from the Public and Catholic School Boards, all participating schools were classified in the top 25<sup>th</sup> quartile of high needs, ethnically diverse schools in their districts. On average, schools had 15.34% Aboriginal children ( $SD = 12.35$ , range = 2.9-40.7%), 14.38% English as a Second Language (ESL) children ( $SD = 13.93$ , range = 0.3-43.3%), 23.96% student mobility from the previous academic year ( $SD = 14.57$ , range = 7.4-50.0%), and 9.99% children designated as behavioral needs ( $SD = 5.03$ , range = 3.2-17.3%).

Although the parent-reported cultural socialization data for the current study were collected across one year for 296 children (~64% of the original sample of 461 children), parent-reported demographic information was collected over two years for 319 children (~70% of the original sample of 461 children). This information showed that children represented diverse ethnic groups: 42.6% ( $n = 136$ ) Canadian Caucasian, 8.2% ( $n = 26$ ) European Caucasian, 11.0% ( $n =$



35) Aboriginal, 10.3% ( $n = 33$ ) Black/African Canadian, 8.8% ( $n = 28$ ) Southeast/East Asian, 6.6% ( $n = 21$ ) West/South Asian, 5.6% ( $n = 18$ ) Latin American, and 6.9% ( $n = 22$ ) reported multiple ethnicities. Overall, the parent's ethnic background was similar to their children's ethnic background and also represented diverse ethnic groups. Since parent cultural socialization refers to parenting practices that teach children about their culture (Hughes et al., 2006), children's (and not parental) ethnicity is used to assess ethnic differences in the criterion constructs.

English was the primary language spoken in 46.2% of households; in 16.5% of households a language other than English was spoken all of the time (e.g., French, Spanish, or Aboriginal, Asian or African dialects). According to parent reports, 31% of children lived in a single-parent household, 21.5% of mothers and 25.4% of fathers did not graduate high school, and 40.2% of mothers and 14.4% of fathers were not employed.

### **Procedure**

Information packages regarding the purpose of the study and a parent consent form were sent home with all children in kindergarten to grade 3 in the participating schools. Parents were asked to return the consent form regardless of whether they granted consent. At each wave parent consent was sought for children new to the school and for children who had not previously returned their consent form. Overall, 60% of parent consent forms were returned and of these returned forms, the majority of parents granted consent to participate in all waves of this study (range = 77-80%). Of all eligible children, an average of 38% (range

= 36.7-39.2%) across schools had parental consent to participate. Child assent for the 461 children was obtained at each wave from each child who had parent consent to participate. Only one child refused to participate at wave 1 but all the children participated in the study at waves 2 and 3.

Data were collected on three occasions. Baseline data were collected in January 2010 (wave 1), and follow-up data were collected in March 2010 (wave 2) and June 2010 (wave 3). Each data collection period lasted approximately four to six weeks and each wave was separated by approximately eight weeks. Child-report data at each wave were collected through a 40-minute in-class survey that included assessments of children's experiences of peer victimization. A research assistant read all the questions aloud to the children and a second research assistant circulated to monitor children's placement of answers. Make-up surveys for children who were absent were conducted by a research assistant within two weeks. Parent-report data assessing their parenting behaviors and demographic characteristics were collected via hardcopy paper surveys or phone interviews. Parent surveys were sent home with the participating children and parents who did not return a survey within four weeks were contacted over the phone to complete a 20-minute phone survey. One parent survey per child could be completed by a parent (e.g., mother or father) or other legal guardian (e.g., grandparent, aunt, or uncle) of the child at each wave. In total, 95.2% - 98.9% of the parent surveys completed across the three waves of data collection were completed via hardcopy paper surveys. Overall, 296 parents (64.3% response rate) completed surveys at one or more data collection points; 50% ( $n = 189$ )

completed only 1 survey, 47.72% ( $n = 220$ ) completed 2 surveys, and 37.74% ( $n = 174$ ) completed all 3 surveys.

Twenty-two (6.9%) children from the multiple ethnicity group were excluded in the current analyses as this group represents children who come from multiple ethnic groups who may not share similar cultural experiences. Thus, the final sample for the current study included 439 children (mean age = 6.9 years,  $SD = 1.18$  years, 50.6 % girls) and 275 of their parents (mean age = 35.00 years,  $SD = 6.43$  years, 84.6% mothers). In addition, data on ethnicity were not available for 142 (30.8%) of the 439 children due to missing parent data. See Table 1 for a description of the child and parent ethnic group status (Canadian Caucasian, European Caucasian, Aboriginal, Black/African Canadian, Southeast/East Asian, West/South Asian, or Latin American) for 297 children (67.7%) from the final sample of 439 children. In addition to representing diverse ethnic backgrounds, 35.5% of children in the final sample were from immigrant families where at least the child or one parent (either the mother or father) had immigrated to Canada from another country. Most children from the Black/African Canadian, Southeast/East Asian, West/South Asian, or Latin American ethnic groups came from immigrant families (see Table 1). Some children in the final sample (23.2%) spoke a language other than English or in addition to English as a first language. As shown in Table 1, 50% or more of the children from the Black/African Canadian, Southeast/East Asian, West/South Asian, or Latin American groups spoke a language other than English or in addition to English as their first language.

Table 1

*Child and Parent Ethnicity, Immigrant Family Status, and Child First Language*

<b>Ethnic Group</b>	<b>Child Ethnicity</b>		<b>Parent Ethnicity<sup>1</sup></b>		<b>Immigrant Family<sup>2</sup></b>				<b>Child First Language<sup>3</sup></b>			
	<i>n</i>	(%)	<i>n</i>	(%)	<b>Immigrant</b>		<b>Not Immigrant</b>		<b>English</b>		<b>Not English</b>	
	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)
Canadian Caucasian <sup>4</sup>	136	45.8	136	46.9	12	8.9	123	91.1	129	94.9	7	5.1
European Caucasian	26	8.8	26	9.0	2	7.7	24	92.3	25	96.2	1	3.8
Aboriginal	35	11.8	32	11.1	3	8.6	32	91.4	33	94.3	2	5.7
Black/African Canadian	33	11.1	30	10.4	29	87.9	4	12.1	16	48.5	17	51.5
Southeast/ East Asian	28	9.5	26	9.0	24	85.7	4	14.3	10	35.7	18	64.3
West/South Asian	21	7.1	19	6.6	19	90.5	2	9.5	6	28.6	15	71.4
Latin American	18	6.1	17	5.9	16	88.9	2	11.1	9	50.0	9	50.0
Total <i>N</i>	297	100	285	100	105	35.5	191	64.5	228	76.8	69	23.2

*Note.* <sup>1</sup>Four (1.4%) parents reported ethnic heritage that was classified as Mixed Ethnicity. <sup>2</sup>Immigrant family status is based on how many children came from families in which a child, mother, or father has ever been a landed immigrant in Canada. <sup>3</sup>Child first language indicates whether children spoke English or a language other than English as their first language. <sup>4</sup>Immigrant family information was not available for one Canadian Caucasian child. Percentages for child and parent ethnicity indicate representation across ethnic groups. Percentages for immigrant family indicate percent within each ethnic group who were or were not immigrants.

Percentages for child first language indicate percent within each ethnic group who spoke English or a language other than English as their first language.

## Measures

**Parenting practices.** Parenting practices were assessed using parent reports of *parent cultural socialization practices* (items were adapted for the current study from the Racial Socialization Scale; Hughes & Chen, 1997; and the Teaching About Ethnic Pride Scale; Knight et al., 1993 by the researchers for the current study to be used across diverse ethnic groups), *parent involvement* (Parenting Relationship Questionnaire; Kamphaus & Reynolds, 2006), and *positive parenting* (Alabama Parenting Questionnaire; Shelton, Frick, & Wootton, 1996). See Appendix A for a complete list of the parenting practices items. At each wave parents were asked to indicate how often they engaged in these practices with their child in the past year. Parents answered each parenting item using a 4-point scale ranging from “0 = Never” to “3 = Always”.

The hypothesized parent cultural socialization practices construct included items assessing the mechanisms by which parents teach children values and attitudes about their ethnic group (9 items; e.g., “I cook or buy traditional food from our ethnic group,” “I teach my child to be proud of his/her ethnic group,” “I take my child to events/parties about our ethnic group”). The original parent cultural socialization practices measure showed high internal consistency ( $\alpha=.84$ ) in a study with parents of children aged 4 to 14 years old (Hughes & Chen, 1997). Since the validity of the hypothesized parent cultural socialization construct must first be examined in the current study, the internal consistencies and stability coefficients for this construct are examined in the following results section.

The parent involvement construct included items assessing parent

participation in general activities with their children (10 items; e.g., “I read to my child,” “I go on walks with my child,” “My child and I do arts and crafts together”). In an earlier study with parents of children aged 7.3 years on average, the parent involvement construct showed high internal consistency ( $\alpha = .86$ ; Lee, Anderson, Horowitz, & August, 2009). This construct showed high internal consistency at each wave for the overall sample in the current study (wave 1  $\alpha = .83$ , wave 2  $\alpha = .84$ , and wave 3  $\alpha = .85$ ). This construct also showed moderate stability across waves for the overall sample ( $r_s = .71 - .73, p \leq .01$ ).

The positive parenting practices construct includes items assessing parents’ support and encouragement toward their children (6 items; e.g., “I praise my child if he/she behaves well,” “I hug or kiss my child when he/she has done something well,” “I tell my child that I like it when he/she helps out around the house”). In previous studies with parents of children aged 6 to 13 years old, the positive parenting practices construct showed high internal consistency ( $\alpha_s = .80 - .89$ ; Frick, Christian, & Wootton, 1999; Shelton et al., 1996). This construct showed high internal consistency at each wave for the overall sample in the current study (wave 1  $\alpha = .80$ , wave 2  $\alpha = .83$ , and wave 3  $\alpha = .84$ ). This construct also showed moderate to high stability across waves for the overall sample in the current study ( $r_s = .65 - .79, p \leq .01$ ).

**Peer victimization.** Peer victimization was assessed from child self-reports on a measure of peer ethnic victimization developed for the current study based on Quintana’s (1998) model of the development of children’s understanding of ethnicity and on a measure of peer relational and physical victimization (i.e.,

the Social Experiences Questionnaire; Crick & Grotpeter, 1996). See Appendix B for a complete list of the peer victimization items. At each wave children indicated how often they experienced episodes of peer victimization over the last 4 weeks. Children responded to each peer victimization item using a 3-point scale ranging from “0 = Never” to “2 = All the Time.”

The hypothesized peer ethnic victimization subscale included items assessing children’s experiences of aggression that focused on their ethnic characteristics (5 items; all items started with the stem “how often do other kids make fun of you because of...” and were followed with “the color of your skin,” “the food you eat,” “the clothes you wear,” for example). Internal consistencies and stability coefficients for this construct are examined in the results section.

The relational victimization subscale included items assessing children’s experiences of social exclusion and friendship control (5 items; e.g., how often do other kids “say they won’t like you unless you do what they want you to do,” “tell lies about you to make other kids not like you anymore,” “get back at you by not letting you be in their group anymore”). The physical victimization subscale included items assessing children’s experiences and threats of harm (4 items; e.g., how often do other kids “push or shove you at school,” “say they will beat you up,” “hit you at school”). Earlier studies among children in grades 3 to 7 using these measures had high internal consistencies for both relational ( $\alpha=.80 - .86$ ) and physical ( $\alpha=.78 - .83$ ) victimization (Crick & Grotpeter, 1996; Hoglund & Leadbeater, 2007). The relational victimization construct showed moderate internal consistency at each wave for the overall sample in the current study



(wave 1  $\alpha = .69$ , wave 2  $\alpha = .72$ , and wave 3  $\alpha = .79$ ). This construct showed low to moderate stability across waves for the overall sample in the current study ( $r_s = .29 - .43, p \leq .01$ ). The physical victimization construct showed moderate internal consistency at each wave for the overall sample in the current study (wave 1  $\alpha = .71$ , wave 2  $\alpha = .70$ , and wave 3  $\alpha = .75$ ). The physical victimization construct showed low to moderate stability across waves for the overall sample in the current study ( $r_s = .23 - .47, p \leq .01$ ).

## CHAPTER III

### Results

#### **Data Analytical Strategy**

Findings are presented in five main sections. First, preliminary analyses are conducted to assess whether children who are missing parent-reported data differ from children who have parent-reported data on key demographic characteristics (e.g., child gender, age) and on child-reported peer ethnic victimization at each wave. Second, to examine whether parent cultural socialization is an empirically distinct parenting construct from the parent involvement and positive parenting constructs and to examine whether peer ethnic victimization is an empirically distinct form of peer victimization from relational and physical victimization, exploratory factor analysis (EFA) is used to examine the nature and number of parenting practices and peer victimization factors across the whole sample at baseline.

Third, confirmatory factor analysis (CFA) is used to assess the factor structure of the three parenting practices constructs and the three peer victimization constructs at waves 1 to 3 to determine the construct validity of these measures across the whole sample. These analyses are then followed up with CFAs using the parent cultural socialization practices indicators and peer ethnic victimization indicators only. Measurement invariance of the factor structure of both parent cultural socialization practices and peer ethnic victimization is assessed across occasions of measurement. Multiple-group models are used next to assess the measurement invariance of both the parent

cultural socialization practices and peer ethnic victimization constructs in the overall visible ethnic minority and ethnic majority Caucasian groups. Due to sample size limitations these analyses cannot be conducted with the separate ethnic groups.

Fourth, the reliabilities of the parent cultural socialization practices and peer ethnic victimization constructs, including internal consistencies and test-retest reliability, are assessed across each wave for the overall visible ethnic minority and ethnic majority Caucasian groups. These analyses are then followed up with each of the separate visible ethnic minority (Aboriginal, Black/African Canadian, Southeast/East Asian, South/West Asian, and Latin American) and ethnic majority Caucasian (Canadian Caucasian and European Caucasian) groups to examine consistencies and test-retest reliability across these ethnic groups.

Fifth, ethnic differences in mean levels of parent cultural socialization practices and peer ethnic victimization at each measurement wave and in the associations between these constructs across waves are assessed for the overall visible ethnic minority and ethnic majority Caucasian groups. Again, these analyses are followed up using each of the separate visible ethnic minority and ethnic majority Caucasian groups to assess consistencies across these ethnic groups. A  $p$  value of  $\leq .05$  is used to assess significance in all analyses. Additional follow up analyses are conducted to assess if ethnic differences are due in part to immigrant family status or child first language.

For the confirmatory factor analysis (CFA), ethnic group comparisons are based on the overall visible ethnic minority and ethnic majority Caucasian groups

because the sample sizes for most of the separate ethnic groups are too small to conduct these analyses. For the one-way analysis of variance (ANOVA) tests and bivariate correlations, these analyses are conducted with the dichotomous comparison between overall visible ethnic minority and ethnic majority Caucasian groups first and followed up using the seven separate ethnic groups to examine differences among these groups.

### **Preliminary Analyses**

First, to assess whether children who had data on ethnicity and parent cultural socialization practices ( $n = 275$ ) differed from children without these data ( $n = 164$ ) on child-reported peer ethnic victimization at each wave and on key demographic characteristics (gender, grade, and age), chi-square and t-tests were used to compare these groups of children. Group comparisons of peer ethnic victimization showed that children missing parent data experienced significantly higher levels of peer ethnic victimization at waves 1 and 2 than children who had parent data (see Table 2). Children missing parent data did not differ significantly from children who had parent data on gender, grade, age, or experiences of peer ethnic victimization at wave 3. These findings suggest that children missing data on parent-reported ethnicity and cultural socialization practices may be at somewhat higher risk for peer relationship problems and that their levels of parent cultural socialization practices may differ from children who have parent-reported data.

Table 2

*Demographic and Peer Ethnic Victimization Differences between Children with and without Parent-Reported Data*

	Parent Data				No Parent Data				$\chi^2$	<i>t</i>	<i>df</i>	<i>p</i>
	<i>n</i>	%	<i>Mean</i>	<i>SD</i>	<i>n</i>	%	<i>Mean</i>	<i>SD</i>				
Gender									0.15		1	.70
Boys	134	61.8			83	38.2						
Girls	141	63.5			81	36.5						
Grade									1.49		3	.69
Kindergarten	79	66.9			39	33.1						
Grade 1	82	61.7			51	38.3						
Grade 2	59	62.1			36	37.9						
Grade 3	55	59.1			38	40.9						
Age	275		6.81	1.17	164		6.96	1.21		1.31	437	.59
Ethnic Victimization												
Wave 1	242		0.35	0.46	138		0.43	0.52		1.65	378	.04
Wave 2	263		0.23	0.35	146		0.31	0.42		1.95	407	.00
Wave 3	261		0.25	0.42	153		0.24	0.38		-0.22	412	.38

*Note.* *N* = 439. Significant at the  $p \leq .05$  level.

## **Construct Validity: Exploratory Factor Analysis of Parenting Practices and Peer Victimization**

Exploratory factor analysis (EFA; Mplus 5.21, Muthén & Muthén, 1998-2009) was conducted on baseline (wave 1) data across the whole sample to examine the nature and number of factors that represent parenting practices and peer victimization. These analyses were first conducted with the three parenting practices constructs (parent cultural socialization, parent involvement, and positive parenting) and then with the three peer victimization constructs (ethnic, relational, and physical). All 25 items from the three parenting practices measures and all 14 items from the three peer victimization measures were rotated using maximum likelihood extraction (Fabrigar, Wegener, MacCallum, & Strahan, 1999). Geomin rotated loadings at or above .30 were considered good for the minimum loading of an item (Costello & Osborne, 2005; Tabachnick & Fidell, 2001).

**Parenting practices.** An EFA conducted with the 25 parenting practices indicators at wave 1 indicated that the best fitting model for parenting practices was a four-factor solution: two parent cultural socialization practices factors (home-based and community-based cultural socialization practices), one parent involvement factor, and one positive parenting practices factor ( $\chi^2[167] = 242.68$ ,  $p < .01$ ). See Table 3. This analysis indicated that 23 of the 25 indicators loaded moderately to high (range of loadings = .38-.90) on the parenting practices factors. One parent cultural socialization item loaded poorly on each of the parenting practices factors (loading range = -.01-.10). This item also loaded

Table 3

*Exploratory Factor Analysis of Parenting Practices and Peer Victimization Scales at Baseline*

Models	$\chi^2(df, N)$	Model Fit Indices			Model Comparisons $\chi^2\Delta(df_{diff}), p$
		CFI	RMSEA	SRMR	
<b>Parenting Practices</b>					
<i>Parenting Practices<sup>1</sup></i>					
1-Factor	917.17 (230, 172), $p = .00$	.552	.132	.122	
2-Factor	523.50 (208, 172), $p = .00$	.794	.094	.081	393.67 (22), $p = .00$
3-Factor	295.23 (187, 172), $p = .00$	.929	.058	.043	228.27 (21), $p = .00$
<b>4-Factor</b>	<b>242.68 (167, 172), <math>p = .00</math></b>	<b>.951</b>	<b>.051</b>	<b>.036</b>	<b>52.55 (20), <math>p = .00</math></b>
5-Factor	192.57 (148, 172), $p = .01$	.971	.042	.032	50.11 (19), $p = .00$
<b>Peer Victimization</b>					
<i>Peer Victimization<sup>2</sup></i>					
1-Factor	179.73 (65, 380), $p = .00$	.924	.068	.044	
<b>2-Factor</b>	<b>130.81 (53, 380), <math>p = .00</math></b>	<b>.949</b>	<b>.062</b>	<b>.035</b>	<b>48.92 (12), <math>p = .00</math></b>

*Note.* Best fitting model shown in boldface. <sup>1</sup>Parenting practices EFA includes indicators for parent cultural socialization, parent involvement, and positive parenting. <sup>2</sup>Peer victimization EFA includes indicators for ethnic, relational, and physical victimization. The three-factor solution would not converge.

poorly in the subsequent CFA and was removed from all analyses. In addition, one parent involvement item also loaded poorly on each of the parenting practices factors (loading range = -0.02-0.21) and was removed from all analyses. One parent involvement item loaded poorly on this factor (loading = .25). However, this item loaded well in the subsequent CFA (loading range = .61-.64) and was retained for all analyses. In addition, one positive parenting practices item loaded poorly on this factor (loading = .24). However, this item loaded moderately well in the subsequent CFA (loading range = .32-.50) and was retained for all analyses. See Appendix A for the parenting practices items that were retained and excluded from subsequent analyses for each of the parenting constructs. These EFAs are used as the basis for the confirmatory factor analysis conducted across time and across the overall visible ethnic minority and ethnic majority Caucasian groups.

**Peer victimization.** An EFA was also conducted with the 14 peer victimization indicators at wave 1. As shown in Table 3, a two-factor solution was the best fitting model for the peer victimization indicators ( $\chi^2[53] = 130.81, p < .01$ ): one peer ethnic victimization factor and one peer relational/physical victimization factor. The three-factor EFA would not converge. Thirteen items loaded on the two distinct factors moderately to high (range of loadings = .32-.74). While three peer ethnic victimization items showed low loadings on this factor (loading range = 0.15-.29) these items loaded well in the subsequent CFA (loading range = .54-.72) and were retained for all analyses. One relational victimization item had a low loading on the peer victimization factors (loading range = .14-.29). This item showed a low to moderate loading in the subsequent



CFA (.27-.48) and was removed from all analyses. See Appendix B for the peer victimization items that were retained and excluded from subsequent analyses for each of the peer victimization constructs.

### **Construct Validity: Confirmatory Factor Analysis of Parenting Practices and Peer Victimization**

Next, confirmatory factor analysis (CFA) was conducted to assess the measurement structure of the latent parenting practices constructs and latent peer victimization constructs at each wave for the whole sample. These analyses were based on the latent factors and their respective indicators identified from the EFAs at baseline. A combination of the  $\chi^2$  goodness of fit test, comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR) were used to evaluate model fit (Kline, 2011). Non-significant  $\chi^2$  goodness of fit tests ( $p > 0.05$ ) were considered good. CFI values were considered excellent if values were  $\geq 0.95$  and good if values fell between 0.90-0.95. RMSEA values  $\leq 0.05$  were considered good and values between 0.06-0.08 were considered adequate. SRMR values  $\leq 0.08$  were considered good (DeStefano & Hess, 2005; Kline, 2011).

#### **Parenting practices.**

*Overall parenting practices.* First, a CFA was conducted with the four latent parenting practices constructs (home-based and community-based cultural socialization, parent involvement, positive parenting) and their respective indicators at each wave across the whole sample. As shown in Table 4, the fit of these models was poor at each wave, possibly a function of sample size relative to

Table 4

*Confirmatory Factor Analysis of Parenting Practices and Peer Victimization  
Scales at Waves 1 to 3*

Models	$\chi^2(df, N)$	Model Fit Indices			
		CFI	RMSEA	SRMR	Standardized Loadings
<b>Parenting</b>					
<i>Parenting Practices<sup>1</sup></i>					
Wave 1	405.57 (224, 172), $p = .00$	.882	.069	.081	0.32-0.89
Wave 2	483.06 (224, 204), $p = .00$	.862	.075	.076	0.43-0.86
Wave 3	568.56 (224, 167), $p = .00$	.807	.096	.088	0.46-0.86
<i>Home-Based</i>					
Wave 1	18.01 (9, 171), $p = .04$	.975	.077	.034	0.58-0.84
Wave 2	33.62 (9, 203), $p = .00$	.934	.116	.044	0.54-0.73
Wave 3	28.27 (9, 164), $p = .00$	.950	.114	.040	0.56-0.88
<i>Community-Based<sup>2</sup></i>					
Wave 1	0.00 (0, 171), $p = .00$	1.00	0.00	0.00	0.66-0.75
Wave 2	0.00 (0, 203), $p = .00$	1.00	0.00	0.00	0.71-0.80
Wave 3	0.00 (0, 163), $p = .00$	1.00	0.00	0.00	0.72-0.77
<b>Peer Victimization</b>					
<i>Peer Victimization<sup>3</sup></i>					
Wave 1	152.51 (62, 380), $p = .00$	.940	.062	.040	0.48-0.72
Wave 2	177.30 (62, 410), $p = .00$	.922	.067	.044	0.53-0.69
Wave 3	190.90 (62, 414), $p = .00$	.935	.071	.044	0.62-0.76

(Table 4 con't on next page.)

Table 4 continued.

Models	$\chi^2(df, N)$	CFI	Model Fit Indices		
			Models	$\chi^2(df, N)$	CFI
<i>Ethnic</i>					
<i>Victimization</i>					
Wave 1	18.20 (5, 380), $p = .00$	.965	.083	.031	0.53-0.72
Wave 2	43.12 (5, 410), $p = .00$	.888	.136	.049	0.53-0.62
Wave 3	8.67 (5, 414), $p = .12$	.992	.042	.020	0.60-0.69

*Note.* <sup>1</sup>Parenting practices includes four latent factors: home-based cultural socialization, community-based cultural socialization, parent involvement, and positive parenting. <sup>2</sup>Community-based cultural socialization models were saturated as this construct only has two indicators. To define this model the variance of the latent construct was fixed to one and the indicator loadings were constrained to be equal. <sup>3</sup>Peer victimization includes three factors: ethnic, relational, and physical.

the number of parameters estimated: wave 1 ( $\chi^2[224] = 405.57, p < .01$ ), wave 2 ( $\chi^2[224] = 483.06, p < .01$ ), and wave 3 ( $\chi^2[224] = 568.56, p < .01$ ). The factor loadings were all significant ( $p < .01$ ). At each wave, home-based cultural socialization was significantly correlated with community-based cultural socialization ( $r_s = .78 - .85, p < .01$ ), parent involvement ( $r_s = .31 - .57, p < .01$ ), and positive parenting ( $r_s = .18 - .23, p < .01$ ). Community-based cultural socialization was significantly correlated with parent involvement at waves 1 to 3 ( $r_s = .36 - .53, p < .01$ ), and positive parenting at wave 1 only ( $r_s = .24, p < .01$ ). Parent involvement and positive parenting were also significantly correlated at waves 1 to 3 ( $r_s = .38 - .58, p < .01$ ). The strength of these associations suggest that home-based and community-based cultural socialization share 61%-72% of their variance but only share about 10%-32% of their variance with parent involvement and 3%-6% of their variance with positive parenting. These analyses suggest that while parent cultural socialization practices are related to parent involvement and positive parenting practices, the variance of these constructs are primarily independent of each other.

***Parent cultural socialization practices.*** Next, separate CFA models were tested for each of the two latent parent cultural socialization practices constructs at each wave. As shown in Table 4, the fit of the home-based cultural socialization models was adequate at wave 1 ( $\chi^2[9] = 18.01, p = .04$ ) but lower at wave 2 ( $\chi^2[9] = 33.62, p < .01$ ) and wave 3 ( $\chi^2[9] = 28.27, p < .01$ ). The factor loadings were all significant ( $p < .01$ ). For the community-based cultural socialization models the variance of the latent construct was constrained to one

and the indicators were set to be equal for model identification. However, model fit could not be assessed as these models were saturated with only two indicators (see Table 4). The factor loadings were all significant ( $p < .01$ ).

### **Peer victimization.**

**Overall peer victimization.** A CFA was conducted with the three latent peer victimization constructs (ethnic, relational, and physical victimization) and their respective indicators at each wave across the whole sample. These models were tested as three factors rather than the two suggested by the exploratory analysis presented above given substantial empirical evidence for the distinction between relational and physical victimization during early and middle childhood (Crick & Grotpeter, 1996; Cullerton-Sen & Crick, 2005; Dhimi, Hoglund, Leadbeater, & Boone, 2005). The fit of these models was good at each wave (see Table 4): wave 1 ( $\chi^2[62] = 152.51, p < .01$ ), wave 2 ( $\chi^2[62] = 177.30, p < .01$ ), and wave 3 ( $\chi^2[62] = 190.90, p < .01$ ). The factor loadings were all significant ( $p < .01$ ). Ethnic victimization was correlated significantly with relational victimization ( $r_s = .86 - .91, p < .01$ ) and physical victimization ( $r_s = .75 - .85, p < .01$ ) at waves 1 to 3. Relational and physical victimization were also significantly correlated at waves 1 to 3 ( $r_s = .85 - .93, p < .01$ ). The strength of these associations suggest that peer ethnic victimization shares about 74%-83% of its variance with relational victimization and about 56%-72% of its variance with physical victimization. These analyses suggest some degree of overlap between peer ethnic victimization and the other subtypes of peer victimization, particularly relational victimization.

***Peer ethnic victimization.*** Last, a CFA with the five peer ethnic victimization indicators was conducted at each wave. As displayed in Table 4, the fit of the peer ethnic victimization models were good at wave1 ( $\chi^2[5] = 18.20, p < .01$ ) and wave 3 ( $\chi^2[5] = 8.67, p = .10$ ), but marginal at wave 2 ( $\chi^2[5] = 43.12, p < .01$ ). The factor loadings were all significant ( $p < .01$ ).

### **Construct Validity: Measurement Invariance across Time and Overall**

#### **Visible Ethnic Minority and Ethnic Majority Caucasian Groups**

The invariance of the measurement structure of the two latent parent cultural socialization constructs and the latent peer ethnic victimization construct was examined across time (waves 1, 2, and 3) and across the overall visible ethnic minority and ethnic majority Caucasian groups. These analyses could not be conducted with the separate visible ethnic minority and ethnic majority Caucasian groups due to sample size limitations.

A four-step process was used to examine measurement invariance across time and ethnic groups (Wu, Li, & Zumbo, 2007). First, configural invariance was tested by allowing the factor loadings, intercepts and error variances of the indicators to vary across time or ethnic group. Second, the configural model was compared to a weak (metric) invariance model that constrained the factor loadings to be equal over time or ethnic group but left the intercepts and error variances of the indicators free to vary over time or ethnic group. Third, the weak model was compared to a strong (scalar) invariance model that constrained the loadings and intercepts of the indicators to be equal over time or ethnic group but left the error variances of the indicators free to vary. Fourth, the strong model was compared to

the strict invariance (residual) model that constrained the loadings, intercepts and error variances of the indicators to be equal over time or ethnic group. A chi-square difference test ( $\chi^2\Delta$ ) was used to compare nested models with increasing constraints (i.e., configural vs. weak, weak vs. strong, strong vs. strict). If a model did not hold at the weak invariance model, partial weak invariance was explored by allowing the factor loadings of each item to vary over time or ethnic group separately (Milfont & Fischer, 2010; Vandenberg & Lance, 2000).

**Parent home-based cultural socialization practices.** Comparison of the four models assessing measurement invariance across waves 1 to 3 indicated that the strict invariance model fit the data adequately and was the best fitting model for home-based cultural socialization practices ( $\chi^2[154] = 311.17, p < .01$ ; see Table 5). This indicated that the factor loadings, intercepts and residual variances of the indicators were consistent across waves 1 to 3 and that this measure represented the same construct across time for the whole sample. The strict time invariance model was used as the basis to assess measurement invariance between the overall visible ethnic minority and ethnic majority Caucasian parents. Holding the factor loadings, intercepts and variances of the indicators consistent across time, the home-based cultural socialization construct demonstrated configural invariance across the two overall ethnic groups ( $\chi^2[310] = 550.09, p < .01$ ). This indicates that the meaning of the home-based latent construct differed between visible ethnic minority parents and ethnic majority Caucasian parents. Partial invariance of the home-based cultural socialization construct was examined next

Table 5

*Measurement Invariance of Parent Cultural Socialization Practices and Peer Ethnic Victimization Scales across Time and across Overall Visible Ethnic Minority and Ethnic Majority Caucasian Groups*

Models	$\chi^2(df, N)$	Model Fit Indices				Model Comparisons $\chi^2\Delta(df_{diff}), p$
		CFI	RMSEA	SRMR	Standardized Loadings	
<b>Parent Cultural Socialization</b>						
<i>Invariance Across Time</i>						
<i>Home-Based</i>						
Configural	280.00 (120, 273), $p = .00$	.904	.070	.071	0.56-0.87	
Weak	290.07 (130, 273), $p = .00$	.904	.071	.067	0.58-0.86	10.07 (10), $p = 0.43$
Strong	296.75 (142, 273), $p = .00$	.907	.072	.063	0.57-0.86	6.68 (12), $p = 0.88$
<b>Strict</b>	<b>311.17 (154, 273), <math>p = .00</math></b>	<b>.906</b>	<b>.061</b>	<b>.073</b>	<b>0.58-0.82</b>	<b>14.42 (12), <math>p = 0.27</math></b>
<i>Community-Based</i>						
Configural	2.08 (2, 273), $p = .35$	1.00	.012	.016	0.65-0.87	
Weak	5.93 (6, 273), $p = .43$	1.00	.000	.037	0.70-0.77	3.85 (4), $p = 0.43$
Strong	11.81 (10, 273), $p = .30$	.995	.026	.047	0.70-0.77	5.88 (4), $p = 0.21$
<b>Strict</b>	<b>16.20 (14, 273), <math>p = .30</math></b>	<b>.994</b>	<b>.024</b>	<b>.044</b>	<b>0.73-0.73</b>	<b>4.39 (4), <math>p = 0.36</math></b>

(Table 5 cont'd on next page.)



Table 5 continued.

Models	$\chi^2(df, N)$	Model Fit Indices				Model Comparisons $\chi^2\Delta(df_{diff}), p$
		CFI	RMSEA	SRMR	Standardized Loadings	
<i>Invariance Across Ethnic Groups</i>						
<i>Home-Based</i>						
<b>Configural</b>	<b>550.09 (310), <math>p = .00</math></b>	<b>.859</b>	<b>.076</b>	<b>.106</b>	<b>0.52-0.86</b>	
Weak	574.15 (315), $p = .00$	.848	.079	.118	0.50-0.85	24.06 (5), $p = 0.00$
Strong	632.28 (321), $p = .00$	.817	.085	.147	0.53-0.87	58.13 (6), $p = 0.00$
Strict	662.52 (327), $p = .00$	.803	.088	.154	0.57-0.83	30.24 (6), $p = 0.00$
<i>Community-Based</i>						
<b>Configural</b>	<b>61.23 (30), <math>p = .00</math></b>	<b>.905</b>	<b>.088</b>	<b>.162</b>	<b>0.57-0.86</b>	
Weak	70.41 (32), $p = .00$	.884	.095	.178	0.61-0.83	9.18 (2), $p = 0.00$
Strong	98.37 (34), $p = .00$	.805	.119	.181	0.58-0.82	27.96 (2), $p = 0.00$
Strict	109.32 (36), $p = .00$	.778	.124	.189	0.62-0.82	10.95 (2), $p = 0.00$
<b>Ethnic Victimization</b>						
<i>Invariance Across Time</i>						
Configural	175.89 (77, 436), $p = .00$	.932	.054	.040	0.54-0.71	

(Table 5 cont'd on next page.)

Table 5 continued.

Models	$\chi^2(df, N)$	Model Fit Indices				Standardized Loadings	Model Comparisons $\chi^2\Delta(df_{diff}), p$
		CFI	RMSEA	SRMR			
<b>Weak</b>	<b>188.61 (85, 436), <math>p = .00</math></b>	<b>.928</b>	<b>.053</b>	<b>.043</b>	<b>0.54-0.66</b>	<b>12.72 (8), <math>p = 0.12</math></b>	
Strong	219.99 (95, 436), $p = .00$	.914	.055	.055	0.54-0.66	31.38 (10), $p = 0.00$	
Strict	324.86 (105, 436), $p = .00$	.848	.069	.070	0.52-0.73	104.87 (10), $p = 0.00$	
<i>Invariance Across Ethnic Groups</i>							
Configural	345.72 (170), $p = .00$	.835	.083	.077	0.50-0.74		
Weak	347.06 (174), $p = .00$	.837	.082	.077	0.55-0.72	1.34 (4), $p = 0.85$	
<b>Strong</b>	<b>367.47 (189), <math>p = .00</math></b>	<b>.832</b>	<b>.080</b>	<b>.085</b>	<b>0.53-0.73</b>	<b>20.41 (15), <math>p = 0.16</math></b>	
Strict	433.33 (204), $p = .00$	.784	.087	.098	0.50-0.77	65.86 (15), $p = 0.00$	

*Note.* Parent Cultural Socialization:  $N = 142$  for ethnic majority Caucasian,  $N = 125$  for visible ethnic minority. Peer Ethnic Victimization:  $N = 161$  for ethnic majority Caucasian,  $N = 136$  for visible ethnic minority. Weak = Metric. Strong = Scalar. Strict = Residual. Best fitting models are shown in boldface.

by allowing the factor loadings of the items to vary separately across visible ethnic minority and ethnic majority Caucasian parents (see Table 6). The home-based cultural socialization construct demonstrated partial weak invariance ( $\chi^2[314] = 557.77, p < .01$ ) when item four (“I take my child to see artwork [e.g., pictures, crafts] about our ethnic group”; See Appendix A) was free to vary across the two groups. Overall, five of the six home-based cultural socialization indicators had the same meaning across the visible ethnic minority and ethnic majority Caucasian parents. Although the meaning of one indicator (item 4) varied across the overall visible ethnic minority and ethnic majority Caucasian groups, this indicator was retained because it did not affect the main ethnic group differences for the home-based cultural socialization construct found in subsequent analyses (i.e., one-way analysis of variance [ANOVA] tests and bivariate correlations).

**Parent community-based cultural socialization practices.** Similar to home-based cultural socialization, the model for community-based cultural socialization practices fit the data well and showed strict invariance across time ( $\chi^2[14] = 16.20, p = .30$ ; see Table 5), indicating that the factor loadings, intercepts and the variances of the indicators were consistent across the three waves of data. This strict time model was also used as the basis to assess measurement invariance across the visible ethnic minority and ethnic majority Caucasian parents. Holding the factor loadings, intercepts and variances of the indicators consistent across time, the community-based cultural socialization practices model showed configural invariance across ethnic groups ( $\chi^2[30] =$

Table 6

*Partial Measurement Invariance of Parent Cultural Socialization Practices Scales across Time and across Overall Visible Ethnic Minority and Ethnic Majority Caucasian Groups*

Models	$\chi^2(df)$	Model Fit Indices			Standardized Loadings	Model Comparisons $\chi^2\Delta(df_{diff}), p$
		CFI	RMSEA	SRMR		
<b>Parent Cultural Socialization</b>						
<i>Partial Invariance across Ethnic Groups<sup>1</sup></i>						
<i>Home-Based</i>						
Configural	550.09 (310), $p = .00$	.859	.076	.106	0.52-0.86	
Weak – Item 2 Free to Vary	574.03 (314), $p = .00$	.847	.079	.119	0.50-0.85	23.94 (4), $p = 0.00$
Weak – Item 3 Free to Vary	572.80 (314), $p = .00$	.848	.079	.118	0.50-0.85	22.71 (4), $p = 0.00$
<b>Weak – Item 4 Free to Vary</b>	<b>557.77 (314), <math>p = .00</math></b>	<b>.857</b>	<b>.076</b>	<b>.108</b>	<b>0.51-0.86</b>	<b>7.68 (4), <math>p = 0.10</math></b>
Weak – Item 5 Free to Vary	571.29 (314), $p = .00$	.849	.078	.117	0.48-0.84	21.20 (4), $p = 0.00$
Weak – Item 6 Free to Vary	575.58(314), $p = .00$	.846	.079	.119	0.49-0.84	25.49 (4), $p = 0.00$
Weak – Item 7 Free to Vary	571.91 (314), $p = .00$	.849	.078	.117	0.54-0.85	21.82 (4), $p = 0.00$

(Table 6 cont'd on next page.)

Table 6 continued.

Models	$\chi^2(df)$	Model Fit Indices				Model Comparisons	
		CFI	RMSEA	SRMR	Standardized Loadings	$\chi^2\Delta(df_{diff}), p$	
<i>Community-Based</i>							
Configural	61.23 (30), $p = .00$	.905	.088	.162	0.57-0.86		
<b>Weak – Item 8 Free to Vary</b>	<b>62.35 (31), <math>p = .00</math></b>	<b>.905</b>	<b>.087</b>	<b>.164</b>	<b>0.51-0.86</b>	<b>1.12 (1), <math>p = 0.29</math></b>	
Weak – Item 9 Free to Vary <sup>2</sup>	N/A	N/A	N/A	N/A	N/A	N/A	

*Note.* Parent Cultural Socialization:  $N = 142$  for ethnic majority Caucasian,  $N = 125$  for visible ethnic minority. <sup>1</sup>Partial invariance across ethnic groups was explored by allowing the factor loadings of each item to vary across the overall visible ethnic minority and ethnic majority Caucasian groups separately. <sup>2</sup>The community-based cultural socialization partial weak invariance model had problems in convergence when item nine was left free to vary. See Appendix A for a complete listing of the home-based and community-based cultural socialization items. Weak = Metric. Best fitting models are shown in boldface.

61.23,  $p < .01$ ). This indicates that the meaning of the latent construct measured differed across visible ethnic minority and ethnic majority Caucasian parents. As shown in Table 6, partial weak invariance for the factor loadings was found ( $\chi^2[31] = 62.35, p < .01$ ) when one community-based cultural socialization indicator (item eight; “I take my child to events about our ethnic group [e.g., festivals, heritage days]”; see Appendix A) was free to vary across the visible ethnic minority and ethnic majority Caucasian parents. The model had problems in convergence when item nine was left free to vary. Partial weak invariance for this construct suggests that one of the two community-based cultural socialization indicators (item 9; “My child and I celebrate holidays or go to parties about our ethnic group”; see Appendix A) may have retained the same meaning across the overall visible ethnic minority and ethnic majority Caucasian parents. Although item eight differed in meaning across visible ethnic minority parents and ethnic majority Caucasian parents, this item was retained because it did not affect the main ethnic group differences found for the community-based cultural socialization construct in the subsequent analyses (i.e., ANOVA tests or bivariate correlations).

**Peer ethnic victimization.** Comparison of the four models assessing measurement invariance across waves 1 to 3 indicated that the weak invariance model fit the data well and was the best fitting model for peer ethnic victimization ( $\chi^2[85] = 188.61, p < .01$ ; see Table 5). This signifies that the same latent construct was being measured across time but that the mean structure and residual variances of the latent indicators varied over time (i.e., children varied over time

in their mean level of their endorsement of the peer victimization indicators and in how much they varied from the average level of endorsement). This weak time invariance model was used as the basis to examine measurement invariance across the overall visible ethnic minority and ethnic majority Caucasian groups. Holding the factor loadings to be consistent across time, the latent peer ethnic victimization construct demonstrated strong invariance across the two ethnic groups ( $\chi^2[189] = 367.47, p < .01$ ). This indicated that the factor structure of the peer ethnic victimization construct was consistent across visible ethnic minority and ethnic majority Caucasian children but that these children differed in the amount of variability around the indicators.

### **Reliabilities of Parent Cultural Socialization Practices and Peer Ethnic Victimization**

Fourth, the internal consistencies (Cronbach's alphas,  $\alpha$ s) of the indicators for the two parent cultural socialization practices constructs and for the peer ethnic victimization construct were assessed at each wave. Internal consistencies were used to determine how well the items representing each construct measure the same concept. Cronbach's alpha values between .60 - .69 were considered adequate, values between .70 - .79 were considered moderate, and values  $\geq .80$  were considered high (Nunnally, 1967). Test-retest reliability or stability (Pearson correlation coefficients,  $r$ s) of the composite parent cultural socialization and peer ethnic victimization constructs were also assessed across waves. Pearson correlation coefficients were used to measure the stability of the constructs over time. Correlation coefficients  $\geq .75$  were considered to demonstrate high stability,

coefficients between .50 – .74 were considered moderate, coefficients between .25 – .49 were considered low, and coefficients  $< 0.24$  were considered unstable (Rothon et al., 2011). Fisher's  $z$ -tests were used to compare ethnic differences in the strength of the correlations. These sets of analyses were conducted for the overall visible ethnic minority and ethnic majority Caucasian groups first and then follow-up analyses with the separate visible ethnic minority and ethnic majority Caucasian groups were conducted.

**Parent home-based cultural socialization practices.** As shown in Table 7, the home-based cultural socialization practices construct demonstrated high internal consistencies ( $\alpha = .82 - .87$ ) at each wave for the overall samples of visible ethnic minority and ethnic majority Caucasian parents. Further examinations across the separate visible ethnic minority and ethnic majority Caucasian groups demonstrated that the internal consistencies of the home-based cultural socialization construct were also adequate to high ( $\alpha = .60 - .93$ ) for each ethnic group at each wave (see Table 8).

As shown in Table 9, the home-based cultural socialization practices construct demonstrated moderate to high test-retest reliabilities across waves among the overall samples of visible ethnic minority ( $r_s = .76 - .85, p \leq .01$ ) and ethnic majority Caucasian ( $r_s = .57 - .84, p \leq .01$ ) parents. According to Fisher's  $z$ -test comparisons, the stability coefficient between waves 1 and 3 was significantly stronger for visible ethnic minority parents than for ethnic majority parents ( $z = -2.60, p < .01$ ).

Across the separate visible ethnic minority and ethnic majority Caucasian



Table 7

*Psychometric Statistics for Parent Cultural Socialization Practices and Peer Ethnic Victimization across Overall Visible Ethnic Minority and Ethnic Majority Caucasian Groups*

Constructs	Overall					Ethnic Majority Caucasian <sup>1</sup>					Visible Ethnic Minority <sup>2</sup>				
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Range</i>	<i>α</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>Range</i>	<i>α</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>Range</i>	<i>α</i>
<i>Home-Based</i>															
Wave 1	162	1.43	.76	0.00-3.00	.86	94	1.20 <sup>a</sup>	.70	0.00-3.00	.83	67	1.74 <sup>a</sup>	.73	0.33-3.00	.84
Wave 2	197	1.41	.75	0.00-3.00	.83	107	1.25 <sup>a</sup>	.74	0.00-2.67	.82	88	1.60 <sup>a</sup>	.72	0.17-3.00	.82
Wave 3	159	1.45	.77	0.00-3.00	.86	89	1.29 <sup>a</sup>	.79	0.00-3.00	.87	67	1.70 <sup>a</sup>	.70	0.00-3.00	.83
<i>Community-Based</i>															
Wave 1	167	1.60	.82	0.00-3.00	.66	96	1.43 <sup>a</sup>	.72	0.00-3.00	.45	70	1.75 <sup>a</sup>	.93	0.00-3.00	.83
Wave 2	201	1.60	.85	0.00-3.00	.72	108	1.47 <sup>a</sup>	.81	0.00-3.00	.67	91	1.75 <sup>a</sup>	.87	0.00-3.00	.77
Wave 3	162	1.52	.80	0.00-3.00	.71	90	1.37 <sup>a</sup>	.74	0.00-3.00	.66	69	1.75 <sup>a</sup>	.84	0.00-3.00	.75
<i>Ethnic Victimization</i>															
Wave 1	380	0.38	.48	0.00-2.00	.75	149	0.28 <sup>a</sup>	.40	0.00-1.80	.69	117	.44 <sup>a</sup>	.51	0.00-2.00	.75
Wave 2	409	0.26	.38	0.00-2.00	.70	154	0.21	.35	0.00-1.80	.72	129	.28	.37	0.00-1.60	.66
Wave 3	414	0.25	.41	0.00-2.00	.78	153	0.20 <sup>a</sup>	.35	0.00-1.60	.75	130	.31 <sup>a</sup>	.48	0.00-2.00	.81

*Note.* Mean levels in the same row with the same superscripts differ significantly ( $p \leq .05$ ). <sup>1</sup>Ethnic majority Caucasian includes the

separate Canadian Caucasian and European Caucasian groups. <sup>2</sup>Visible ethnic minority includes the Aboriginal, Black/African Canadian, Southeast/East Asian, West/South Asian, and Latin American groups.

Table 8

*Psychometric Statistics of Parent Cultural Socialization Practices and Peer Ethnic Victimization across Separate Visible Ethnic Minority and Ethnic Majority Caucasian Groups*

<b>Constructs</b>	<b>Canadian Caucasian</b>				<b>European Caucasian</b>				<b>Aboriginal</b>				<b>Black/African Canadian</b>			
	<i>n</i>	<i>Mean</i>	<i>SD</i>	$\alpha$	<i>n</i>	<i>Mean</i>	<i>SD</i>	$\alpha$	<i>n</i>	<i>Mean</i>	<i>SD</i>	$\alpha$	<i>n</i>	<i>Mean</i>	<i>SD</i>	$\alpha$
<i>Home-Based</i>																
Wave 1	80	1.20 <sup>ab</sup>	.74	.85	15	1.21 <sup>cd</sup>	.41	.60	17	1.54 <sup>e</sup>	.58	.75	10	1.44	.88	.89
Wave 2	88	1.21 <sup>a</sup>	.76	.83	19	1.45 <sup>b</sup>	.63	.76	26	1.26 <sup>c</sup>	.58	.73	20	1.57 <sup>d</sup>	.72	.82
Wave 3	68	1.28 <sup>ab</sup>	.83	.88	21	1.33 <sup>c</sup>	.69	.83	17	1.38 <sup>d</sup>	.70	.85	11	1.47	.62	.77
<i>Community-Based</i>																
Wave 1	83	1.45 <sup>a</sup>	.73	.42	14	1.39 <sup>b</sup>	.74	.67	18	1.61	.87	.80	11	1.68	.87	.80
Wave 2	89	1.43 <sup>a</sup>	.81	.66	19	1.66	.78	.70	26	1.42 <sup>b</sup>	.77	.59	21	1.76	.97	.74
Wave 3	69	1.38 <sup>a</sup>	.77	.68	21	1.33 <sup>b</sup>	.62	.58	17	1.59	.87	.67	11	1.45	.82	.82
<i>Ethnic Victimization</i>																
Wave 1	126	0.28 <sup>a</sup>	.41	.70	24	0.31	.39	.68	27	0.39	.43	.59	28	0.64 <sup>ab</sup>	.62	.83
Wave 2	130	0.21 <sup>a</sup>	.35	.71	25	0.27	.40	.75	31	0.22	.33	.59	31	0.46 <sup>a</sup>	.42	.63
Wave 3	129	0.20	.35	.76	25	0.24	.36	.71	31	0.35	.55	.86	32	0.42	.45	.66

(Table 8 con't. on next page.)

Table 8 continued.

<b>Constructs</b>	<b>Southeast/East Asian</b>				<b>West/South Asian</b>				<b>Latin American</b>			
	<i>n</i>	<i>Mean</i>	<i>SD</i>	$\alpha$	<i>n</i>	<i>Mean</i>	<i>SD</i>	$\alpha$	<i>n</i>	<i>Mean</i>	<i>SD</i>	$\alpha$
<i>Home-Based</i>												
Wave 1	17	1.98 <sup>ac</sup>	.65	.82	13	2.32 <sup>bdef</sup>	.65	.88	9	1.23 <sup>f</sup>	.49	.68
Wave 2	18	1.66	.61	.72	13	2.40 <sup>abcde</sup>	.57	.82	11	1.45 <sup>e</sup>	.76	.84
Wave 3	17	1.88 <sup>a</sup>	.56	.69	12	2.31 <sup>bcd</sup>	.71	.93	10	1.47	.51	.68
<i>Community-Based</i>												
Wave 1	18	1.83	.97	.80	13	2.35 <sup>abc</sup>	.85	.86	9	.94 <sup>c</sup>	.58	.74
Wave 2	18	1.64	.66	.78	14	2.32 <sup>ab</sup>	.72	.69	12	1.96	1.03	.95
Wave 3	17	1.59	.59	.64	14	2.36 <sup>ab</sup>	.74	.76	10	1.75	1.01	.92
<i>Ethnic Victimization</i>												
Wave 1	26	0.32	.32	.33	20	0.21 <sup>b</sup>	.28	.54	15	0.63	.70	.86
Wave 2	28	0.28	.34	.67	21	0.16	.24	.48	17	0.18	.40	.78
Wave 3	28	0.21	.34	.70	20	0.39	.64	.93	18	0.10	.29	.72

*Note.* <sup>a-f</sup>Mean levels in the same row with the same superscripts differ significantly from each other ( $p \leq .05$ ).

Table 9

*Bivariate Correlations among Parent Cultural Socialization and Peer Ethnic Victimization across Overall Visible Ethnic Minority<sup>1</sup> (above the diagonal) and Ethnic Majority Caucasian<sup>2</sup> (below the diagonal) Groups*

Variables	1	2	3	4	5	6	7	8	9
<i>Home-Based</i>									
1. Wave 1		<b>.76**</b>	<b>.85***<sup>a</sup></b>	.63**	.46**	.70**	-.05	.05	.14
2. Wave 2	<b>.72**</b>		<b>.79**</b>	.43**	.63**	.57**	-.14	-.16	.05
3. Wave 3	<b>.57***<sup>a</sup></b>	<b>.84**</b>		.58**	.72**	.66**	-.19	-.01	.10
<i>Community-Based</i>									
4. Wave 1	.53**	.51**	.54**		<b>.52**</b>	<b>.68**</b>	.05	.00	.19
5. Wave 2	.46**	.63**	.57**	<b>.58**</b>		<b>.72**</b>	-.13	-.08	.19
6. Wave 3	.65**	.62**	.65**	<b>.63**</b>	<b>.59**</b>		-.08	.03	.17
<i>Ethnic Victimization</i>									
7. Wave 1	-.04	-.01	.08	.01	-.03	.03		<b>.60***<sup>a</sup></b>	<b>.41***<sup>a</sup></b>
8. Wave 2	.02	.01	.00	.04	.00	.08	<b>.18*<sup>a</sup></b>		<b>.43**</b>
9. Wave 3	.14	-.04	-.04	.21*	-.01	.05	<b>.14<sup>a</sup></b>	<b>.51**</b>	

*Note.* <sup>a</sup>Correlations between same constructs differ significantly ( $p \leq .05$ ) between ethnic majority Caucasian and visible ethnic minority children.  $N_s = 56-153$  for Caucasian and  $36-130$  for visible ethnic minority. Stability correlations are shown in boldface. \* $p \leq .05$ , \*\* $p \leq .01$ . <sup>1</sup>Visible ethnic minority includes the Aboriginal, Black/African Canadian, Southeast/East Asian, West/South Asian,

and Latin American groups. <sup>2</sup>Caucasian includes the separate Canadian Caucasian and European Caucasian groups.

groups this construct showed statistically significant test-retest reliability that was moderate to high across waves ( $r_s = .62 - .97, p_s \leq .05-.01$ ) for some but not all ethnic groups (see Table 10). Some of these non-significant stability coefficients were likely a reflection of the small sample sizes for these separate ethnic groups that had scores on the measure at both time points. These correlation coefficients were significant across waves for most ethnic groups, with the exception of non-significant correlations for European Caucasian and West/South Asian parents between waves 1 and 2; European Caucasian, Southeast/East Asian and Latin American parents between waves 1 and 3; and for Aboriginal, West/South Asian and Latin American parents between waves 2 and 3. Overall, these test-retest reliability coefficients were most consistent for Canadian Caucasian and Black/African Canadian parents and least consistent for European Caucasian, West/South Asian and Latin American parents. These correlations also showed some consistency over time for Aboriginal and Southeast/East Asian parents. In addition, test-retest stability coefficients were significantly stronger for Black/African Canadian parents relative to European Caucasian parents between waves 1 and 2 and waves 1 and 3 ( $z = -2.11, p < .05$  and  $z = -2.19, p < .05$  respectively) and Aboriginal parents between waves 2 and 3 ( $z = -2.15, p < .05$ ); for Aboriginal parents relative to European Caucasian parents between waves 1 and 3 ( $z = -1.99, p < .05$ ); for West/South Asian parents relative to Canadian Caucasian, European Caucasian, and Southeast/East Asian parents between waves 1 and 3 ( $z = -2.22, p < .05$ ;  $z = -2.77, p < .01$ , and  $z = -.2.07, p < .05$  respectively); and for Canadian Caucasian parents relative to Aboriginal parents between waves

Table 10

*Bivariate Correlations among Parent Cultural Socialization and Peer Ethnic Victimization across Separate Visible Ethnic Minority and Ethnic Majority Caucasian Groups*

Variables	1	2	3	4	5	6	7	8	9
<b>Canadian Caucasian</b>									
<i>Home-Based</i>									
1. Wave 1									
2. Wave 2	<b>.75**</b>								
3. Wave 3	<b>.62***<sup>a</sup></b>	<b>.85***<sup>a</sup></b>							
<i>Community-Based</i>									
4. Wave 1	.57**	.50**	.52*** <sup>a</sup>						
5. Wave 2	.48**	.60**	.56*** <sup>a</sup>	<b>.54***<sup>ab</sup></b>					
6. Wave 3	.72**	.70*** <sup>a</sup>	.71**	<b>.62**</b>	<b>.60***<sup>ab</sup></b>				
<i>Ethnic Victimization</i>									
7. Wave 1	-.01	.03	.13 <sup>a</sup>	.09	-.02	-.04 <sup>a</sup>			
8. Wave 2	.04	-.03 <sup>a</sup>	-.07	.05	-.04 <sup>a</sup>	.00	<b>.18***<sup>abcd</sup></b>		
9. Wave 3	.17	-.05	-.06	.16	-.01 <sup>a</sup>	.04	<b>.16<sup>a</sup></b>	<b>.57**</b>	

(Table 10 con't. on next page.)



Table 10 continued.

Variables	1	2	3	4	5	6	7	8	9
<b>European Caucasian</b>									
<i>Home-Based</i>									
1. Wave 1									
2. Wave 2	<b>.43<sup>a</sup></b>								
3. Wave 3	<b>.25<sup>bcd</sup></b>	<b>.76<sup>**</sup></b>							
<i>Community-Based</i>									
4. Wave 1	.21	.62	.64*						
5. Wave 2	.35	.74 <sup>**</sup>	.60 <sup>**</sup>	<b>.81<sup>**cd</sup></b>					
6. Wave 3	.29 <sup>a</sup>	.25 <sup>a</sup>	.39 <sup>a</sup>	<b>.69<sup>**</sup></b>	<b>.57<sup>**cd</sup></b>				
<i>Ethnic Victimization</i>									
7. Wave 1	-.29 <sup>a</sup>	-.33 <sup>a</sup>	-.20	-.24	-.13	.42			
8. Wave 2	-.04	.12 <sup>b</sup>	.23 <sup>a</sup>	.22	.14 <sup>b</sup>	.36	<b>.36</b>		
9. Wave 3	-.22	-.01	.04	.61 <sup>*a</sup>	-.06	.12	<b>.11<sup>b</sup></b>	<b>.20</b>	

(Table 10 con't. on next page.)

Table 10 continued.

Variables	1	2	3	4	5	6	7	8	9
<b>Aboriginal</b>									
<i>Home-Based</i>									
1. Wave 1									
2. Wave 2	<b>.87**</b>								
3. Wave 3	<b>.84**<sup>b</sup></b>	<b>.51<sup>ab</sup></b>							
<i>Community-Based</i>									
4. Wave 1	.68**	.36	.40						
5. Wave 2	.57	.69**	.39 <sup>b</sup>	<b>.88**<sup>aef</sup></b>					
6. Wave 3	.73*	.44	.75**	<b>.75*</b>	<b>.50<sup>ef</sup></b>				
<i>Ethnic Victimization</i>									
7. Wave 1	.49* <sup>a</sup>	.43 <sup>ab</sup>	.47 <sup>b</sup>	.43	.31 <sup>a</sup>	.72** <sup>abc</sup>			
8. Wave 2	.08	.20 <sup>c</sup>	.43 <sup>b</sup>	.03	.22 <sup>c</sup>	.47	<b>.59**<sup>a</sup></b>		
9. Wave 3	.40	.28	.37 <sup>a</sup>	.45	.38 <sup>b</sup>	.40	<b>.74**<sup>ab</sup></b>	<b>.61**</b>	

(Table 10 con't. on next page.)

Table 10 continued.

Variables	1	2	3	4	5	6	7	8	9
<b>Black/African Canadian</b>									
<i>Home-Based</i>									
1. Wave 1									
2. Wave 2	<b>.94***<sup>a</sup></b>								
3. Wave 3	<b>.93***<sup>c</sup></b>	<b>.93***<sup>b</sup></b>							
<i>Community-Based</i>									
4. Wave 1	.35	.71	.89*						
5. Wave 2	.47	.57**	.90*** <sup>ab</sup>	<b>.85*<sup>g</sup></b>					
6. Wave 3	.70	.79*	.86*** <sup>a</sup>	<b>.88*<sup>a</sup></b>	<b>.96***<sup>acegh</sup></b>				
<i>Ethnic Victimization</i>									
7. Wave 1	.19	-.16	.12	.42	.03	.01			
8. Wave 2	.63	-.25	-.02	.41	.05 <sup>d</sup>	.10	<b>.57***<sup>b</sup></b>		
9. Wave 3	.10	-.14	.29	.11	.50* <sup>acd</sup>	.34	<b>.34</b>	<b>.48**</b>	

(Table 10 con't. on next page.)

Table 10 continued.

Variables	1	2	3	4	5	6	7	8	9
<b>Southeast/East Asian</b>									
<i>Home-Based</i>									
1. Wave 1									
2. Wave 2	<b>.63*</b>								
3. Wave 3	<b>.53<sup>e</sup></b>	<b>.81**</b>							
<i>Community-Based</i>									
4. Wave 1	.60**	.30 <sup>a</sup>	.17 <sup>b</sup>						
5. Wave 2	.35	.31 <sup>a</sup>	.68*	<b>.13<sup>ce</sup></b>					
6. Wave 3	.86*** <sup>a</sup>	.42	.64**	<b>.52</b>	<b>.56<sup>gi</sup></b>				
<i>Ethnic Victimization</i>									
7. Wave 1	.15	.17	-.03	.10	-.22	-.15 <sup>b</sup>			
8. Wave 2	.24	-.05	-.08	.01	.14 <sup>e</sup>	-.14	<b>.60***<sup>c</sup></b>		
9. Wave 3	.14	-.05	.15	.08	.19	.02	<b>.53**</b>	<b>.55**</b>	

(Table 10 con't on next page.)

Table 10 continued.

Variables	1	2	3	4	5	6	7	8	9
<b>West/South Asian</b>									
<i>Home-Based</i>									
1. Wave 1									
2. Wave 2	<b>.55</b>								
3. Wave 3	<b>.97**ade</b>	<b>.57</b>							
<i>Community-Based</i>									
4. Wave 1	.70**	.91*ab	.94**abc						
5. Wave 2	.36	.86**a	.67*	<b>.83**h</b>					
6. Wave 3	.60	.43	.42	<b>.94**b</b>	<b>.30<sup>hj</sup></b>				
<i>Ethnic Victimization</i>									
7. Wave 1	.40	-.12	.03	.20	-.05	-.25 <sup>c</sup>			
8. Wave 2	.20	-.62*abc	-.13	-.06	-.78**abcde	.08	<b>.63**d</b>		
9. Wave 3	-.16	-.16	-.23	-.20 <sup>a</sup>	-.21 <sup>c</sup>	-.33	<b>.46*</b>	<b>.24</b>	

(Table 10 con't on next page.)

Table 10 continued.

Variables	1	2	3	4	5	6	7	8	9
<b>Latin American</b>									
<i>Home-Based</i>									
1. Wave 1									
2. Wave 2	<b>.79*</b>								
3. Wave 3	<b>.31</b>	<b>.82</b>							
<i>Community-Based</i>									
4. Wave 1	.33	-.28 <sup>b</sup>	-.17 <sup>c</sup>						
5. Wave 2	.46	.54	.87	<b>-.53<sup>bd fgh</sup></b>					
6. Wave 3	-.02	.57	.52	<b>-.46<sup>ab</sup></b>	<b>.99**<sup>bd f ij</sup></b>				
<i>Ethnic Victimization</i>									
7. Wave 1	-.35	-.53 <sup>b</sup>	-.71 <sup>*ab</sup>	-.15	-.60 <sup>a</sup>	-.18			
8. Wave 2	-.32	-.35	-.66 <sup>*ab</sup>	-.56	-.44	-.24	<b>.62*</b>		
9. Wave 3	-.37	-.31	-.55 <sup>a</sup>	-.25	-.41 <sup>bd</sup>	.26	<b>.51</b>	<b>.24</b>	

Note. <sup>a-j</sup>Correlations between the same constructs with the same superscripts differ significantly between ethnic groups ( $p \leq .05$ ).  $N$ s = 42-129 for Canadian Caucasian, 10-25 for European Caucasian, 10-31 for Aboriginal, 6-32 for Black/African Canadian, 9-28 for Southeast/East Asian, 6-20 for West/South Asian, and 4-18 for Latin American children. Stability correlations are shown in boldface.

\* $p \leq .05$ , \*\* $p \leq .01$ .

2 and 3 ( $z = 2.11, p < .05$ ).

**Parent community-based cultural socialization practices.** The community-based cultural socialization practices construct also showed adequate to high internal consistencies for the overall sample of visible ethnic minority and ethnic majority Caucasian parents at each wave ( $\alpha = .66 - .83$ ), with the exception of a low internal consistency ( $\alpha = .45$ ) at wave 1 for ethnic majority Caucasian parents (see Table 7). As shown in Table 8, the internal consistencies for the community-based cultural socialization construct were adequate to high ( $\alpha = .64 - .95$ ) for each of the separate ethnic groups at each wave, with the exception of low reliability values for Canadian Caucasian parents at wave 1 ( $\alpha = .42$ ), European Caucasian parents at wave 3 ( $\alpha = .58$ ), and Aboriginal parents at wave 2 ( $\alpha = .59$ ).

As shown in Table 9, the community-based cultural socialization practices construct demonstrated moderate test-retest reliability across waves for the overall samples of visible ethnic minority ( $r_s = .52 - .72, p \leq .01$ ) and ethnic majority Caucasian ( $r_s = .58 - .63, p \leq .01$ ) parents, with no differences in the strength of these associations between the overall visible ethnic minority and ethnic majority Caucasian groups.

As with the home-based cultural socialization practices measure, the community-based cultural socialization practices construct showed statistically significant test-retest reliability that was moderate to high across waves for most but not all of the separate ethnic minority and majority Caucasian groups ( $r_s = .54 - .99, p \leq .05-.01$ ; see Table 10). None of these correlation coefficients were

significant for Southeast/East Asian parents and the correlations were not significant for Latin American parents between waves 1 to 2 and 3 and for Aboriginal or West/South Asian parents between waves 2 and 3. Similar to findings for home-based cultural socialization practices, test-retest reliabilities were most consistent for both groups of Caucasian parents and Black/African Canadian parents and least consistent for Southeast/East Asian parents. Aboriginal and West/South Asian parents also showed some consistency in these correlations over time. In addition, test-retest stability coefficients were significantly stronger for all parents (except for Southeast/East Asian parents) relative to Latin American parents between waves 1 and 2 ( $z_s = 2.32 - 3.25, p < .01-.05$ ); for Aboriginal parents relative to Canadian Caucasian parents and Southeast/East Asian parents between waves 1 and 2 ( $z = -2.11, p < .05$  and  $z = 2.61, p < .01$  respectively); for European Caucasian parents relative to Southeast/East Asian parents between waves 1 and 2 ( $z = 1.99, p < .05$ ); for Black/African Canadian and West/South Asian parents relative to Latin American parents between waves 1 and 3 ( $z = 2.05, p < .05$  and  $z = 2.57, p \leq .01$  respectively); and for Black/African Canadian and Latin American parents relative to all other parents between waves 2 and 3 ( $z_s = -2.33 - 3.07, p < .01-.05$ ).

**Peer ethnic victimization.** As displayed in Table 7, internal consistencies for the peer ethnic victimization construct for the overall sample of visible ethnic minority and ethnic majority Caucasian children were moderate to high ( $\alpha_s = .66 - .81$ ) at each wave. The peer ethnic victimization construct demonstrated moderate to high internal consistencies ( $\alpha_s = .62 - .93$ ) across waves for some but not all of



the separate visible ethnic minority and ethnic majority Caucasian groups (see Table 8). Low internal consistencies were found for Aboriginal children at waves 1 and 2 ( $\alpha = .59$ ), Southeast/East Asian children at wave 1 ( $\alpha = .33$ ), and West/South Asian children at waves 1 and 2 ( $\alpha s = .48$  and  $.54$ ).

As shown in Table 9, the peer ethnic victimization construct demonstrated statistically significant test-retest reliability that was low to moderate for the overall sample of visible ethnic minority children across waves ( $r_s = .41 - .60, p \leq .01$ ). Test-retest reliability was unstable but statistically significant for the overall sample of ethnic majority Caucasian children between waves 1 and 2 ( $r = .18, p \leq .05$ ) and was moderate between waves 2 and 3 ( $r = .51, p \leq .01$ ). In addition, the test-retest coefficients were significantly stronger for visible ethnic minority than for ethnic majority Caucasian children between waves 1 and 2 ( $z = -3.90, p < .01$ ) and between waves 1 and 3 ( $z = -2.18, p < .05$ ).

Across the separate visible ethnic minority and ethnic majority Caucasian groups, the peer ethnic victimization construct showed moderate test-retest reliability between waves 1 and 2 for most children ( $r_s = .57 - .63, p_s \leq .05-.01$ ), with the exception of the Canadian Caucasian ( $r = .18, p < .05$ ) and European Caucasian ( $r = .36, ns$ ) children (see Table 10). Correlations between waves 1 and 3 were low to moderate for Aboriginal, Southeast/East Asian, and West/South Asian children ( $r_s = .46 - .74, p_s \leq .05-.01$ ) but were not significant for Latin American parents ( $r = .51, ns$ ). The correlations between waves 1 and 3 were unstable and non-significant for the other ethnic groups. The test-retest correlations between waves 2 and 3 were low to moderate for most children ( $r_s =$

.48 - .61,  $p_s \leq .05-.01$ ), with the exception of European Caucasian, West/South Asian, and Latin American children. Overall, this construct showed the most consistent test-retest reliability for Aboriginal and Southeast/East Asian children and poor test-retest reliability for European Caucasian children. In addition, the test-retest stability coefficients were significantly stronger for all parents (except for European Caucasian and Latin American parents) relative to Canadian Caucasian parents between waves 1 and 2 ( $z_s = -2.02- -2.24$ ,  $p < .05$ ); and for Aboriginal parents relative to Canadian Caucasian and European Caucasian parents between waves 1 and 3 ( $z_s = -3.25$  and  $-2.65$ ,  $p < .01$ , respectively). No significant ethnic differences were found in the test-retest stability coefficients between waves 2 and 3.

### **Ethnic Differences in Mean Levels of Parent Cultural Socialization Practices and Peer Ethnic Victimization**

Fifth, ethnic differences in mean levels of home-based and community-based cultural socialization practices and peer ethnic victimization were examined at each wave. First, differences between the overall visible ethnic minority and ethnic majority Caucasian groups are tested. These analyses are then followed up with comparisons across the separate visible ethnic minority and ethnic majority Caucasian groups. One-way analysis of variance (ANOVA) tests were used to examine ethnic differences in these constructs at each wave. Post-hoc Tukey tests were used to assess all possible 2-way comparisons between the separate ethnic groups.

**Parent home-based cultural socialization practices.** Overall, both

visible ethnic minority and ethnic majority Caucasian parents reported engaging in moderate levels of home-based cultural socialization practices at waves 1 to 3, on average ( $M_s = 1.20 - 1.70$ ,  $SD_s = .70 - .79$ ; see Table 7). As expected, one-way ANOVA tests showed that visible ethnic minority parents reported engaging in significantly higher average levels of home-based cultural socialization practices than Caucasian parents at waves 1 ( $F[1, 159] = 22.73$ ,  $p < .01$ ), 2 ( $F[1, 193] = 10.99$ ,  $p < .01$ ), and 3 ( $F[1, 154] = 11.27$ ,  $p < .01$ ).

Further examinations across the separate groups of visible ethnic minority and ethnic majority Caucasian parents demonstrated that while most parents engaged in moderate levels of home-based cultural socialization practices at each wave ( $M_s = 1.20 - 1.98$ ,  $SD_s = .41 - .88$ ), West/South Asian parents engaged in high average levels of these practices at each wave ( $M_s = 2.31 - 2.40$ ,  $SD_s = .57 - .71$ ; see Table 8). One-way ANOVA tests indicated that there were significant differences in home-based cultural socialization practices among the separate groups of visible ethnic minority and ethnic majority Caucasian parents at waves 1 ( $F[6, 154] = 7.51$ ,  $p < .01$ ), 2 ( $F[6, 188] = 6.30$ ,  $p < .01$ ), and 3 ( $F[6, 149] = 4.43$ ,  $p < .01$ ). Post-hoc comparisons indicated that West/South Asian parents reported significantly ( $p < .01-.05$ ) higher average levels of home-based cultural socialization practices than parents from the other ethnic groups across waves, except for Black/African Canadian parents at waves 1 and 3 and Southeast/East Asian parents at each wave (see Table 8). Southeast/East Asian parents reported significantly ( $p < .01-.05$ ) higher average levels of home-based cultural socialization practices than Canadian Caucasian parents at waves 1 and 3 and

European Caucasian parents at wave 1. No other significant ethnic differences were found in how frequently parents practiced home-based cultural socialization practices.

Follow-up analyses were conducted to test whether the ethnic difference findings for home-based cultural socialization practices were due in part to immigrant family status or child first language. As shown in Table 11, parents from immigrant and non-immigrant families reported engaging in moderate levels of home-based cultural socialization practices at waves 1 to 3, on average ( $M_s = 1.26 - 1.79$ ,  $SD_s = .64 - .79$ ). One-way ANOVA tests showed that parents from immigrant families reported engaging in significantly higher average levels of home-based cultural socialization practices than parents from non-immigrant families at waves 1 ( $F[1, 176] = 16.29, p < .01$ ), 2 ( $F[1, 209] = 19.59, p < .01$ ), and 3 ( $F[1, 162] = 14.29, p < .01$ ). As displayed in Table 12, parents of children who spoke English as a first language and parents of children who spoke a language other than English as a first language both reported engaging in moderate levels of home-based cultural socialization practices at waves 1 to 3, on average ( $M_s = 1.28 - 1.93$ ,  $SD_s = .64 - .77$ ). Similar to the immigrant family status differences, one-way ANOVA tests showed that parents of children who spoke a first language other than English reported engaging in significantly higher average levels of home-based cultural socialization practices than parents of children whose first language was English at waves 1 ( $F[1, 177] = 6.48, p < .05$ ), 2 ( $F[1, 208] = 16.71, p < .01$ ), and 3 ( $F[1, 162] = 13.28, p < .01$ ).

**Parent community-based cultural socialization practices.** As displayed

Table 11  
*Psychometric Statistics for Parent Cultural Socialization Practices and Peer  
 Ethnic Victimization by Immigrant Family Status<sup>1</sup>*

<b>Constructs</b>	<b>Immigrant</b>				<b>Not Immigrant</b>			
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>Range</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>Range</i>
<i>Home-Based</i>								
Wave 1	36	1.79 <sup>a</sup>	.74	0.50-3.00	116	1.29 <sup>a</sup>	.72	0.00-3.00
Wave 2	54	1.76 <sup>a</sup>	.71	0.50-3.00	134	1.26 <sup>a</sup>	.72	0.00-3.00
Wave 3	43	1.73 <sup>a</sup>	.64	0.50-2.83	105	1.36 <sup>a</sup>	.79	0.00-3.00
<i>Community-Based</i>								
Wave 1	38	1.76 <sup>a</sup>	.94	0.00-3.00	119	1.48 <sup>a</sup>	.79	0.00-3.00
Wave 2	55	1.87 <sup>a</sup>	.89	0.00-3.00	137	1.51 <sup>a</sup>	.82	0.00-3.00
Wave 3	44	1.69 <sup>a</sup>	.79	0.00-3.00	107	1.49 <sup>a</sup>	.82	0.00-3.00
<i>Ethnic Victimization</i>								
Wave 1	74	0.42 <sup>a</sup>	.52	0.00-2.00	177	0.30 <sup>a</sup>	.42	0.00-2.00
Wave 2	83	0.29 <sup>a</sup>	.42	0.00-1.80	187	0.21 <sup>a</sup>	.33	0.00-1.40
Wave 3	85	0.33	.49	0.00-2.00	184	0.21	.37	0.00-2.00

*Note.* Mean levels in the same row with the same superscripts differ significantly ( $p \leq .05$ ). <sup>1</sup>Immigrant family status is based on how many children came from families in which a child, mother, or father has ever been a landed immigrant in Canada.

Table 12  
*Psychometric Statistics for Parent Cultural Socialization Practices and Peer  
 Ethnic Victimization by Child First Language<sup>1</sup>*

<b>Constructs</b>	<b>English</b>				<b>Not English</b>			
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<b>Range</b>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<b>Range</b>
<i>Home-Based</i>								
Wave 1	132	1.33 <sup>a</sup>	.73	0.00-3.00	30	1.85 <sup>a</sup>	.74	0.67-3.00
Wave 2	157	1.28 <sup>a</sup>	.71	0.00-3.00	39	1.92 <sup>a</sup>	.71	0.50-3.00
Wave 3	121	1.33 <sup>a</sup>	.77	0.00-3.00	35	1.93 <sup>a</sup>	.64	0.83-3.00
<i>Community-Based</i>								
Wave 1	135	1.53	.77	0.00-3.00	32	1.67	1.02	0.00-3.00
Wave 2	158	1.48 <sup>a</sup>	.82	0.00-3.00	42	2.02 <sup>a</sup>	.81	0.00-3.00
Wave 3	122	1.46 <sup>a</sup>	.78	0.00-3.00	37	1.78 <sup>a</sup>	.82	0.00-3.00
<i>Ethnic Victimization</i>								
Wave 1	208	0.33 <sup>a</sup>	.45	0.00-2.00	60	0.43 <sup>a</sup>	.46	0.00-2.00
Wave 2	222	0.23	.36	0.00-1.80	65	0.28	.37	0.00-1.40
Wave 3	220	0.23	.41	0.00-2.00	67	0.32	.43	0.00-1.60

*Note.* Mean levels in the same row with the same superscripts differ significantly ( $p \leq .05$ ). <sup>3</sup>Child first language indicates whether children spoke English or a language other than English as their first language.

in Table 7, visible ethnic minority and ethnic majority Caucasian parents also reported engaging in moderate levels of community-based cultural socialization practices at waves 1 to 3, on average ( $M_s = 1.37 - 1.75$ ,  $SD_s = .72 - .93$ ). As expected, one-way ANOVA tests indicated that visible ethnic minority parents reported engaging in significantly higher mean levels of community-based cultural socialization practices than ethnic majority Caucasian parents at waves 1 ( $F[1, 164] = 6.08$ ,  $p < .05$ ), 2 ( $F[1, 197] = 5.58$ ,  $p < .05$ ), and 3 ( $F[1, 157] = 8.93$ ,  $p < .01$ ).

As shown in Table 8, examinations across the separate groups of visible ethnic minority and ethnic majority Caucasian parents demonstrated that while parents generally engaged in moderate levels of community-based cultural socialization practices at waves 1 to 3 ( $M_s = 1.33 - 1.96$ ,  $SD_s = .59 - 1.03$ ), West/South Asian parents engaged in high levels of these practices at waves 1 to 3 ( $M_s = 2.32 - 2.36$ ,  $SD_s = .72 - .85$ ) whereas Latin American parents engaged in low levels of these practices at wave 1 ( $M = .94$ ,  $SD = .58$ ). Consistent with findings for home-based cultural socialization, one-way ANOVA tests indicated that there were significant differences in community-based cultural socialization practices among the separate groups of visible ethnic minority and ethnic majority parents at waves 1 ( $F[6, 159] = 3.90$ ,  $p < .01$ ), 2 ( $F[6, 192] = 3.19$ ,  $p < .01$ ), and 3 ( $F[6, 152] = 3.56$ ,  $p < .01$ ). Examinations across the separate groups of visible ethnic minority and ethnic majority parents revealed that West/South Asian parents engaged in significantly ( $p < .01-.05$ ) higher average levels of community-based cultural socialization practices than Canadian Caucasian parents at each

wave, European Caucasian parents at waves 1 and 3, Aboriginal parents at wave 2, and Latin American parents at wave 1 (see Table 8). No other significant ethnic differences were found in how frequently parents engaged in community-based cultural socialization practices.

Follow-up analyses indicated that parents from immigrant and non-immigrant families reported engaging in moderate levels of community-based cultural socialization practices at waves 1 to 3, on average ( $M_s = 1.48 - 1.87$ ,  $SD_s = .79 - .94$ ; see Table 11). Similar to findings for home-based cultural socialization, one-way ANOVA tests showed that parents from immigrant families reported engaging in significantly higher average levels of community-based cultural socialization practices than parents from non-immigrant families at waves 1 ( $F[1, 181] = 4.06, p < .05$ ), 2 ( $F[1, 213] = 7.58, p < .01$ ), and 3 ( $F[1, 165] = 5.10, p < .01$ ). Parents of children who spoke English as a first language and parents of children who spoke a language other than English as a first language also reported engaging in moderate levels of home-based cultural socialization practices at waves 1 to 3, on average ( $M_s = 1.46 - 2.02$ ,  $SD_s = .77 - 1.02$ ; see Table 12). One-way ANOVA tests showed that parents of children who spoke a first language other than English reported engaging in significantly higher average levels of community-based cultural socialization practices than parents of children whose first language was English at waves 2 ( $F[1, 212] = 8.87, p < .01$ ), and 3 ( $F[1, 165] = 9.78, p < .01$ ), but not at wave 1 ( $F[1, 182] = .00, p = .95$ ).

**Peer ethnic victimization.** Overall, visible ethnic minority and ethnic majority Caucasian children reported experiencing low levels of peer ethnic



victimization at waves 1 to 3, on average ( $M_s = 0.20 - 0.44$ ,  $SD_s = .35 - .51$ ; Table 7). As expected, one-way ANOVA tests demonstrated that visible ethnic minority children reported experiencing significantly higher average levels of peer ethnic victimization at wave 1 ( $F[1, 264] = 8.10$ ,  $p < .01$ ) and 3 ( $F[1, 281] = 4.59$ ,  $p < .05$ ), but not at wave 2 ( $F[1, 281] = 2.67$ ,  $p = .10$ ) relative to ethnic majority Caucasian children.

As displayed in Table 8, further examinations across the separate groups of visible ethnic minority and ethnic majority Caucasian children demonstrated that all the children experienced low average levels of peer ethnic victimization at waves 1 to 3 ( $M_s = 0.10 - 0.64$ ,  $SD_s = .24 - .70$ ). One-way ANOVA tests indicated that there were significant differences in experiences of peer ethnic victimization among the separate groups of visible ethnic minority and ethnic majority children at waves 1 ( $F[6, 259] = 3.96$ ,  $p < .01$ ), 2 ( $F[6, 276] = 2.39$ ,  $p < .05$ ) and 3 ( $F[6, 276] = 2.35$ ,  $p < .05$ ). Post-hoc comparisons indicated that Black/African Canadian children reported significantly ( $p < .01 - .05$ ) higher average levels of peer ethnic victimization than Canadian Caucasian children at waves 1 and 2 and West/South Asian children at wave 1 (see Table 8). No other significant ethnic differences were found in how frequently children experienced peer ethnic victimization at waves 1 and 2. Although the one-way ANOVA test indicated that there were significant ethnic differences in average levels of peer ethnic victimization at wave 3, the post-hoc comparisons were all non-significant at wave 3, possibly due to the unbalanced sample sizes across the ethnic groups.

As shown in Table 11, follow-up analyses indicated that children from

immigrant and non-immigrant families reported experiencing low levels of peer ethnic victimization at waves 1 to 3, on average ( $M_s = 0.21 - 0.42$ ,  $SD_s = .33 - .52$ ). One-way ANOVA tests demonstrated that children from immigrant families reported experiencing significantly higher average levels of peer ethnic victimization experiences than children from non-immigrant families at waves 1 ( $F[1, 286] = 8.62$ ,  $p < .01$ ) and 2 ( $F[1, 304] = 4.97$ ,  $p < .05$ ), but not at wave 3 ( $F[1, 307] = 3.82$ ,  $p = .05$ ). As displayed in Table 12, children who spoke English as a first language and children who spoke a language other than English as a first language reported experiencing low levels of peer ethnic victimization at waves 1 to 3, on average ( $M_s = 0.23 - 0.43$ ,  $SD_s = .36 - .46$ ). One-way ANOVA tests indicated that children who spoke a first language other than English reported experiencing significantly higher average levels of peer ethnic victimization than children whose first language was English at wave 1 ( $F[1, 286] = 10.10$ ,  $p < .01$ ) but not at waves 2 ( $F[1, 304] = 2.17$ ,  $p = .14$ ) or 3 ( $F[1, 307] = .94$ ,  $p = .33$ ).

### **Ethnic Differences in the Associations among Parent Cultural Socialization Practices and Peer Ethnic Victimization**

Last, ethnic differences in the bivariate correlations among home-based and community-based cultural socialization practices and peer ethnic victimization within and across waves were examined (see Tables 9 and 10). Overall, the bivariate correlations showed that home-based cultural socialization practices were positively and significantly associated with community-based cultural socialization practices, both within and across time for visible ethnic minority ( $r_s = .43 - .72$ ,  $p \leq .01$ ) and ethnic majority Caucasian ( $r_s = .46 - .65$ ,  $p \leq .01$ ).

.01) parents, with no ethnic differences in the strength of these associations (see Table 9).

Follow-up of these correlations among the separate groups of visible ethnic minority and ethnic majority Caucasian parents indicated that the within and across time correlations between home-based and community-based cultural socialization practices were all in the expected directions (with the exception of three negative correlations for Latin American parents), but not all correlations were significant (see Table 10). These within and across time correlations were most consistent (and all were significant) for Canadian Caucasian parents, which is likely due to the larger sample size for this group. The pattern of within time correlations was generally significant for all groups with the exception of one non-significant correlation for Black/African Canadian parents and both groups of Asian parents and two non-significant correlations for European Caucasian parents. All correlations were non-significant for Latin American parents. In addition, the correlation between home-based and community-based cultural socialization was significantly stronger for West/South Asian parents relative to Southeast/East Asian parents at wave 2 ( $z = -2.05, p < .05$ ) and for Black/African Canadian parents relative to European Caucasian parents at wave 3 ( $z = -2.10, p < .05$ ).

Across the overall and separate visible ethnic minority and ethnic majority Caucasian groups very few of the correlations between the parent cultural socialization practices constructs and peer ethnic victimization were significant and the few significant correlations were inconsistent in direction (see Tables 9

and 10). These findings suggest that parent cultural socialization practices and children's experiences of peer ethnic victimization during middle childhood are unrelated among this sample.

## CHAPTER IV

### Discussion

The current study examined the factor structure and psychometric properties of measures assessing parent cultural socialization practices (home-based and community-based) and peer ethnic victimization among parents and children representing diverse ethnic groups in Canada (Canadian Caucasian, European Caucasian, Aboriginal, Black/African Canadian, Southeast/East Asian, West/South Asian, and Latin American). In addition, ethnic differences in mean levels of parent cultural socialization practices and peer ethnic victimization and in the associations among these constructs were also examined. The discussion below addresses each of these research foci in turn.

#### **Parent Cultural Socialization Practices**

**Can parent cultural socialization practices be measured adequately across ethnic groups?** The current study first assessed the factor structure of the parent cultural socialization practices measure that was developed for the current study based on two widely used measures (Hughes & Chen, 1997; Knight et al., 1993). Parent cultural socialization practices represent implicit (e.g., cultural books or artwork displayed in the home) and explicit (e.g., talking to children about racial or ethnic differences) cultural messages that contribute to children's understanding of their cultural or ethnic group. Few studies have established whether parent cultural socialization practices represent a unique parenting construct that is empirically distinct from other similar supportive parenting practices (e.g., parent involvement and positive parenting practices). Consistent

with expectations, we found support that parent cultural socialization practices were correlated with ( $r$ s ranged from .18 to .57,  $p < .01$ ) but empirically distinct from the two other assessments of parenting practices, specifically general parent involvement (e.g., playing games with one's child) and positive parenting practices (e.g., complimenting one's child when he or she does something well). These findings urge future studies to address both the theoretical and empirical distinctions between parent cultural socialization practices and other parenting practices.

Interestingly, two separate parent cultural socialization constructs were found in the current study: home-based and community-based. The home-based cultural socialization practices construct was based on implicit or explicit parental practices that take place within the context of the home and that contribute to children's understanding of their ethnic group, such as reading books with one's child about people from their ethnic group. The community-based cultural socialization practices construct represented implicit or explicit practices parents engage in within the community with their child that contribute to their child's understanding of their ethnic group, such as taking one's child to events or ceremonies about their ethnic group. Although both forms of parent cultural socialization practices were highly correlated ( $r$ s = .78 - .85,  $p < .01$ ), the current findings suggest that it may be necessary to measure these constructs as two related but distinct factors to adequately capture the ways that parents implicitly and explicitly teach their children about their culture within and outside of the home environment. Hughes et al., (2006) suggest that parent cultural socialization

practices may take place in a variety of different settings and activities. However, previous studies have not established home-based and community-based cultural socialization as separate forms of parent cultural socialization practices which may be because analyses of this nature have not been conducted.

As expected, the home-based cultural socialization construct demonstrated good construct validity across the three occasions of measurement, assessed over a 5-month period (see Table 5). The adequacy of the community-based cultural socialization construct could not be assessed via traditional model fit indices as this measure has only two items and the model was saturated. In general, the home-based cultural socialization construct showed partial measurement invariance across the overall samples of visible ethnic minority and ethnic majority Caucasian parents. One of the six home-based cultural socialization items (item four; “I take my child to see artwork [e.g., pictures, crafts] about our ethnic group.”; See Appendix A) differed in meaning between visible ethnic minority parents and ethnic majority Caucasian parents. The community-based cultural socialization construct showed partial measurement invariance across ethnic groups as well, with one of the two items differing in meaning between the two overall ethnic groups (item eight; “I take my child to events about our ethnic group [e.g., festivals, heritage days]”; see Appendix A). However, with only two items these analyses do not provide conclusive evidence of the equivalency of this measure across visible ethnic minority and ethnic majority Caucasian parents. Both the home-based and community-based cultural socialization items were retained in subsequent analyses as they did not affect the overall ethnic group

differences found in the one-way ANOVA tests or bivariate correlations. It is possible that these items also differ across the separate visible ethnic minority and ethnic majority Caucasian parents. Nonetheless, our samples of the separate visible ethnic minority parents and ethnic majority Caucasian parents were too small to test the measurement structure of these constructs across the separate ethnic groups.

Hughes et al. (2006) highlight the need for comparative studies of parent cultural socialization practices across diverse ethnic groups to test whether specific parent cultural socialization practices hold different meanings for different ethnic groups. As the current findings suggest, some parent cultural socialization practices items may differ between overall visible ethnic minority and ethnic majority Caucasian parents. It may be that the two cultural socialization items differed between the overall visible ethnic minority and ethnic majority Caucasian parents because these items referred to parents taking their child to see artwork or events about their ethnic group and one group of parents may not have perceived there to be any artwork or events in their community that celebrated or showcased their culture. Ethnic majority Caucasian parents may be less likely to focus on ethnic group membership because they do not perceive mainstream community events (e.g., art shows at an art gallery) as representing a cultural activity specific to their ethnic heritage (McWhorter, 2005). Based on this, some ethnic majority Caucasian parents may have underrepresented their engagement in these two cultural socialization practices items because they do not recognize their involvement in these activities as unique to their child's ethnic



group and may instead attribute their involvement in these activities as mainstream. Overall, these findings suggest that the home-based and community-based constructs assessed here may be better assessments of parents' engagement in these cultural socialization parenting practices for visible ethnic minority parents than for ethnic majority Caucasian parents. Further research with larger samples of the separate visible ethnic minority and ethnic majority Caucasian groups examined here will help to establish the construct validity of the home-based and community-based cultural socialization constructs across these diverse ethnic groups.

**Can parent cultural socialization practices be measured reliably across ethnic groups?** The internal consistencies (Cronbach's alphas,  $\alpha$ s) of the home-based cultural socialization practices construct demonstrated adequate reliability for the overall and separate samples of visible ethnic minority and ethnic majority Caucasian parents at each wave. The home-based cultural socialization construct also demonstrated adequate test-retest reliability across waves for the overall sample of visible ethnic minority and ethnic majority Caucasian parents. However, this construct was less stable across time for European Caucasian, West/South Asian, and Latin American parents. It may be that the home-based cultural socialization practices measure demonstrated less stability because these parents are less consistent in their use of these practices across time. In addition, this measure may have been a less stable assessment over time because few parents from these ethnic groups completed the surveys at all data collection points. Overall, the home-based cultural socialization construct

was most stable across time for Canadian Caucasian, Aboriginal, Black/African Canadian, and Southeast/East Asian parents. This measure may need to be reassessed with European Caucasian, West/South Asian, and Latin American parents, primarily when considering longitudinal analyses.

The internal consistencies of the community-based cultural socialization practices construct indicated that the two constituent items were reliable indicators for the overall and separate samples of visible ethnic minority parents and ethnic majority Caucasian parents at each wave, with a low consistency value at one time point for Canadian Caucasian, European Caucasian, and Aboriginal parents. These low reliability values may be due to Canadian Caucasian, European Caucasian, and Aboriginal parents inconsistently engaging in the practices described by these two items (see Appendix A) or because psychometric properties of two-item constructs are generally less reliable than multi-item constructs. Black/African Canadian, Southeast/East Asian, West/South Asian, and Latin American parents may have been more consistent in their endorsement of these items because most of these parents came from immigrant families (where at least the participating child or one parent in the family immigrated to Canada from another country). Hughes et al. (2006) and Inman, Howard, Beaumont, and Walker (2007) suggest that immigration status may influence parent cultural socialization practices. Consequentially, parents from immigrant families (i.e., the Black/African Canadian, Southeast/East Asian, West/South Asian, and Latin American parents) may be more likely to consistently participate in both community events (e.g., festivals, heritage days) and celebrate holidays or go to

parties about their culture.

The community-based cultural socialization measure was moderately stable across waves for the overall samples of visible ethnic minority and ethnic majority Caucasian parents and for most parents from the separate ethnic groups, with the exception of Southeast/East Asian and Latin American parents. Similar to the home-based cultural socialization practices measure, the community-based cultural socialization measure may also have been a less stable assessment over time because Southeast/East Asian and Latin American parents are less consistent in their use of these specific practices and few parents from these ethnic groups completed the surveys at all data collection points. Overall, the community-based cultural socialization measure was most stable across time for Black/African American and West/South Asian parents. This measure may have demonstrated low test-retest reliability across some of the separate ethnic groups due to the measure consisting of only two indicators. Constructs based on less than three items generally demonstrate poorer psychometric properties than constructs with three or more items (Costello & Osborne, 2005). Future studies that increase the number of items measuring community-based cultural socialization practices may demonstrate adequate reliability of this measure within and across time and across separate ethnic groups.

**Do mean levels of parent cultural socialization practices differ across ethnic groups?** The overall and separate samples of visible ethnic minority and ethnic majority Caucasian parents reported engaging in moderate levels of home-based and community-based cultural socialization at each wave, but West/South

Asian parents reported engaging in high levels of these practices. Overall, this suggests that, on average, parents from diverse ethnic groups report teaching their young children values and attitudes about their ethnic group at a moderate level. As expected, visible ethnic minority parents reported engaging in significantly higher levels of home-based and community-based cultural socialization than ethnic majority Caucasian parents at each wave, particularly Southeast/East and West/South Asian parents. West/South Asian parents were more likely to engage in home-based and community-based cultural socialization practices than parents from other ethnic groups (except for Southeast/East Asian parents). Although previous research suggests ethnic group differences in levels of parent cultural socialization practices (Phinney & Chavira, 1995; Rivas-Drake, Hughes, & Way, 2009), very few studies have examined ethnic group differences in levels of parent cultural socialization among Southeast/East and West/South Asian parents of young children. Southeast/East and West/South Asian parents may be more likely to engage in parent cultural socialization practices because these parents hold strong cultural values and customs and place great importance in passing these values and customs onto their children (Inman et al., 2007; Moua & Lamborn, 2010). In addition, religious beliefs that are practiced by Southeast/East and West/South Asian parents that are not typically characteristic of other ethnic groups may be a means of transmitting cultural values to children (e.g., wearing traditional clothes, reading books, attending events, or celebrating holidays that are connected to both religion and ethnic group values) and play an integral role in their parenting practices (Inman et al., 2007; Jambunathan & Counselman,

2002; Moua & Lamborn, 2010).

The effects of immigrant family status and child first language on home-based and community-based cultural socialization practices were also tested in follow-up analyses. Researchers suggest that immigration status may shape parent cultural socialization practices because parents' perspectives on ethnic heritage and on the type of cultural knowledge they transmit to their child is likely to change over time when in a country that is not their country of origin (Hughes et al., 2006; Inman et al., 2007). As a secondary component of ethnicity, language may play a role in parent cultural socialization practices because parents can utilize language to transmit messages of culture and ethnic identity to their child (Schieffelin & Ochs, 1986). Our findings indicate that parents from immigrant families and whose children spoke a first language other than English generally engaged in higher levels of cultural socialization practices. The majority of the Black/African Canadian, Southeast/East Asian, West/South Asian, and Latin American parents came from immigrant families while the majority of Canadian Caucasian, European Caucasian, and Aboriginal parents came from non-immigrant families. Many Black/African Canadian, Southeast/East Asian, West/South Asian, and Latin American parents also had children who spoke a first language other than English. These findings suggest that the ethnic differences found for parent cultural socialization practices could also be driven by immigrant family status and child first language. However, the majority of Aboriginal parents were not from immigrant families and had children who only spoke English as a first language. Still, these parents reported levels of cultural

socialization practices comparable to most of the other visible ethnic minority parents (to the exclusion of West/South Asian parents) who were from immigrant families and had children who spoke a language other than English. In addition, Southeast/East and West/South Asian parents engaged in higher levels of cultural socialization practices than parents from other visible ethnic minority groups that were also largely comprised of immigrant families and children who spoke a language other than English. Overall, these findings suggest that although immigrant family status and child first language may also affect parent cultural socialization practices, child ethnicity plays a unique role in these experiences.

### **Peer Ethnic Victimization**

**Can peer ethnic victimization be measured adequately across ethnic groups?** The current study also investigated the peer ethnic victimization construct as a factor that was distinct from other experiences of peer victimization including relational and physical victimization. The peer ethnic victimization construct measures children's reported experiences of peer aggression specifically focused on their ethnic characteristics or cultural practices (e.g., being made fun of because of their skin color or because of the holidays they celebrate; Hoglund & Hosan, in press; Verkuyten, 2002). Overall, the assessment of peer ethnic victimization demonstrated some empirical distinction from the assessments of peer relational (e.g., being left out of groups or lied about by other children) and physical (e.g., being hit, kicked, or shoved, by other children) victimization. However, the variance in the peer ethnic victimization construct demonstrated substantial overlap with the other peer victimization constructs, particularly

relational victimization. It may be that among this young age group children have difficulty distinguishing among these conceptually distinct forms of peer victimization. Recently, Høglund and Hosan (in press) also identified the empirical distinction between peer ethnic victimization and peer relational and physical victimization among a sample of Canadian Caucasian, Aboriginal, and Asian adolescents in grades 6 and 7. While the findings from the current study and from Høglund and Hosan (in press) provide initial support for a theoretical and empirical distinction between peer ethnic victimization and other experiences of peer victimization, follow-up of these analyses with other ethnically diverse samples representing a wider range of ages is needed to clarify whether this is indeed a unique subtype of peer victimization.

The peer ethnic victimization construct showed good construct validity, with consistency in the factor loadings across the three occasions of measurement and between the overall visible ethnic minority and ethnic majority Caucasian groups. Variability in children's average level of endorsement of the peer ethnic victimization indicators across time may not necessarily be due to limitations in young children's understanding of the meaning of this construct across time. It is possible that this variability was due to changes in children's experiences of peer ethnic victimization across the 5 months of study given that previous studies have found children's reported experiences of peer relational and physical victimization during middle childhood change over time (Kawabata & Crick, 2011; Kochenderfer-Ladd & Wardrop, 2001). Young children tend to use acts of peer aggression indiscriminately and often experience transient episodes of peer

victimization. Chronic episodes of peer victimization tend to become more common for a select group of children during the later years of middle childhood (Kochenderfer-Ladd & Wardrop, 2001). It is also possible that the current assessment of peer ethnic victimization was a more valid measure for children from some of the separate visible ethnic minority or ethnic majority Caucasian groups. Future investigations of this construct with larger samples of the separate ethnic groups assessed here are needed to test this possibility.

**Can peer ethnic victimization be measured reliably across ethnic groups?** The peer ethnic victimization indicators demonstrated adequate internal consistencies at each wave for the overall and separate samples of visible ethnic minority and ethnic majority Caucasian children, with some lower reliabilities for Aboriginal, Southeast/East and West/South Asian children at some data collection points. It may be that these children experienced some of the indicators of peer ethnic victimization less consistently than other indicators. The peer ethnic victimization construct also showed adequate test-retest reliability for the overall and separate samples of visible ethnic minority children across waves, particularly for Aboriginal, Southeast/East Asian, and West/South Asian children. This construct showed low test-retest reliabilities for Canadian Caucasian and European Caucasian children across waves. These findings suggest that even in ethnically diverse settings ethnic majority Caucasian children may be only transient targets of peer ethnic victimization whereas children from visible ethnic minority groups may be more likely to be consistent targets of this form of peer victimization. It is possible that this construct would demonstrate higher internal



consistencies and test-retest stabilities among samples of older children than the younger children assessed in the current study due to younger children's emerging cognitive awareness of the abstract concept of ethnicity (Quintana, 1998). Even though the peer ethnic victimization indicators focused on literal characteristics of ethnicity, younger children may be less likely than older children to interpret aggression towards these literal characteristics as intentionally spiteful. Follow-up studies using multi-item peer ethnic victimization constructs such as the one assessed here across the span of middle and late childhood and using larger samples of the diverse ethnic groups represented here are needed.

**Do mean levels of peer ethnic victimization differ across ethnic groups?** Children from the overall and separate visible ethnic minority and ethnic majority Caucasian groups reported experiencing low levels of peer ethnic victimization at each wave. In general, visible ethnic minority children experienced significantly higher levels of peer ethnic victimization than ethnic majority Caucasian children, in particular Black/African Canadian children relative to Canadian Caucasian children. These findings are consistent with previous studies on experiences of peer ethnic victimization among older children and adolescents that also suggest visible ethnic minority children are more often targets of peer ethnic victimization than ethnic majority Caucasian children (Hoglund & Hosan, in press; Larochette et al., 2010; Moran et al., 1993). Larochette et al. (2010) also found that Black/African Canadian adolescents experienced more ethnic taunts by peers than Canadian Caucasian adolescents. Our study extends these findings by indicating that these negative peer

experiences are also particularly a risk factor for young Black/African Canadian children. Black/African Canadian children may be more likely to be teased or made fun of because of their skin color since they are generally the most visible ethnic minority group in terms of obvious physical characteristics. Research that examines ethnic differences in the experiences of peer ethnic victimization among the diverse ethnic groups studied in the current sample and that focuses on why these experiences seem to be particularly likely for Black/African Canadian children is needed to expand on the current findings.

The effects of immigrant family status and child first language on children's experiences of peer ethnic victimization were tested in follow-up analyses. Previous research shows that children from immigrant families may be more likely to experience higher rates of peer ethnic victimization than children from non-immigrant families because children from immigrant families may be less socially powerful than children from non-immigrant families (McKenney et al., 2006). Research on the effect of language on peer ethnic victimization has not been specifically examined to date. However, as a secondary component of ethnicity it is possible that language may have an effect on children's experiences of peer ethnic victimization. In the current study children from immigrant families generally experienced higher levels of peer ethnic victimization than children from non-immigrant families. The ethnic differences found in children's experiences of peer ethnic victimization may be partly due to the fact that the majority of the visible ethnic minority children (to the exclusion of Aboriginal children) came from immigrant families and spoke a language other than English.

Yet, although the majority of Aboriginal children were from non-immigrant families, these children reported comparable levels of peer ethnic victimization to most of the other visible ethnic minority children. These findings suggest that child ethnicity plays a unique role in children's experiences of peer ethnic victimization. Findings on the effect of child first language on children's experiences of peer ethnic victimization were inconsistent.

### **Do the Associations among Parent Cultural Socialization Practices and Peer Ethnic Victimization Differ across Ethnic Groups?**

The home-based cultural socialization construct was positively associated with community-based cultural socialization practices within and across waves for the overall visible ethnic minority and ethnic majority Caucasian parents, but these associations were less consistent for the separate ethnic groups. These low correlations for the separate ethnic groups may be a function of the small sample sizes. Nonetheless, it appears that when parents frequently engage in home-based cultural socialization practices they may also be likely to engage in community-based cultural socialization. Home-based and community-based cultural socialization practices both represent the mechanisms by which parents transmit values and attitudes about a child's ethnic group.

In contrast to expectations, parent home-based and community-based cultural socialization practices were predominantly unrelated to children's experiences of peer ethnic victimization across all the ethnic groups. These associations have generally not been examined as most research has focused on the associations between parent cultural socialization practices and ethnic

discrimination among older children and adolescents (Brown, Tanner-Smith, Lesane-Brown, & Ezell, 2007; Miller & MacIntosh, 1999). Research on the association between parent cultural socialization and ethnic discrimination suggests that parents engage in higher levels of cultural socialization when their children experience ethnic discrimination (Stevenson et al., 2002). Drawing from this research, parents' engagement in cultural socialization practices (home-based and community-based) may have been generally unrelated to children's experiences of peer ethnic victimization in the current study because children generally experienced low levels of peer ethnic victimization. In addition, some parents may not be aware of their child's experiences of peer ethnic victimization because they do not communicate with their child about these social experiences for a variety of reasons (e.g., parents may be overworked at their job or may be busy attending to their other children). As a result these parents may not responsively engage in protective parenting practices such as cultural socialization. Future studies examining parent cultural socialization practices and young children's experiences of diverse forms of peer victimization (including ethnic, relational and physical) as well as ethnic discrimination are needed to unravel whether these constructs are indeed unrelated.

### **Limitations and Future Directions**

The current findings contribute to the study of parent cultural socialization practices by identifying home-based and community-based cultural socialization practices that parents from diverse ethnic groups appear to engage in with some frequency, particularly visible ethnic minority parents. In addition, the current

study extends the literature on young children's experiences of peer ethnic victimization as a relevant subtype of peer victimization that is a reality for children from diverse ethnic groups, particularly children from some visible ethnic minority groups.

Nonetheless, data on parent cultural socialization practices were based solely on parents' self-reports and data on peer ethnic victimization relied on children's self-reports. It is possible that parents did not perceive themselves as engaging in the cultural socialization practices identified in the survey if they did not engage in these practices to specifically transmit messages of culture and ethnic heritage to their child. This may have been particularly pronounced among Canadian Caucasian and European Caucasian parents who may not perceive themselves as having a unique cultural identity. While the degree to which parents identified with their ethnic or cultural group was not assessed here, it may be that ethnic identity is what drives parents to engage in the cultural practices assessed here (Hughes & Chen, 2001; Hughes et al., 2006; White-Johnson et al., 2010). In addition, it is possible that children's understanding of the peer ethnic victimization items was limited by their cognitive appreciation of ethnicity (Quintana, 1998). Studies using multiple informants may uncover findings that diverge from those identified here.

The modest consent rate (37%) in the current study may limit the representation of the findings to the population from which the sample was drawn. It may be that the sample better represents and is more generalizable to children and parents from low-risk families that are more likely to volunteer in research

than high-risk families in low-income, ethnically diverse settings. Our limited parent response rates (~64% overall) also contributed to a reduced sample size. While substantial efforts were made to gather surveys from parents (e.g., sending replacement surveys home with children and calling parents who had not returned surveys, using small incentives such as receiving a five dollar bookstore gift card per completed parent survey), it is unclear whether the parents who did not complete surveys differed from parents who did complete surveys. Our preliminary comparisons indicated that children without parent-reported data initially reported experiencing higher levels of peer ethnic victimization than children with parent-reported data, but did not differ based on children's gender, age or grade level.

The focus on the measurement properties of the parent cultural socialization practices (home-based and community-based) and peer ethnic victimization constructs contributes to the literature on construct validity and reliability across diverse ethnic groups. Overall, the construct validity analyses for parent cultural socialization and peer ethnic victimization show that *a priori* assumptions alone should not be used to support the use of newly developed constructs without validity checks to ensure that the constructs adequately assess the intended phenomena across diverse ethnic groups (DiStefano & Hess, 2005). The parent cultural socialization practices and peer ethnic victimization measures were developed to be used across diverse ethnic groups in Western Canada (Canadian Caucasian, European Caucasian, Aboriginal, Black/African Canadian, Southeast/East Asian, West/South Asian, and Latin American). The home-based

cultural socialization practices and peer ethnic victimization constructs generally demonstrated adequate construct validity and reliability for most of the separate ethnic groups but more research on these constructs is needed to expand on these findings. Further research using a multi-item assessment of community-based cultural socialization practices is needed. The ethnic diversity in this study has seldom been represented in single studies of parent cultural socialization practices and peer ethnic victimization, especially among younger children. By including diverse visible ethnic minority and ethnic majority Caucasian groups, this study contributes to better understanding of ethnic group differences in parent cultural socialization practices and experiences of peer ethnic victimization during middle childhood.

In conclusion, the current study extends past research by examining the factor structure and psychometric properties of these constructs among an ethnically diverse sample of young children and their parents. Overall, findings from the current study suggest that there are modest ethnic differences in levels of parent cultural socialization practices and peer ethnic victimization. Better understanding of whether and under what circumstances parent cultural socialization practices relate to young children's experiences of peer ethnic victimization among diverse ethnic groups during middle childhood is needed.

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## Appendix A

Table A1

*Parenting Practices Indicators*

<b>Constructs</b>	<b>Item</b>	<b>Geomin Rotated Loadings<sup>1</sup></b>	<b>Statement</b>
<b>Parent Cultural Socialization</b>			
<b>Excluded Item</b>	1	0.10	I teach my child to respect older people (e.g., brothers/sisters, grandparents, or aunts and uncles).
<b>Home-Based</b>			
<b>Retained Items</b>	2	0.55	I read books with my child about people from our ethnic group.
	3	0.50	I take my child to get traditional clothes or hairstyles from our ethnic group.
	4	0.47	I take my child to see artwork (e.g., pictures, crafts) about our ethnic group.
	5	0.76	I cook or buy traditional food from our ethnic group.
	6	0.76	My home has traditional items from our ethnic group (e.g., artwork, books, figures, movies).
	7	0.58	I teach my child to be proud of his/her ethnic group.

(Table A1 con't on next page.)

Table A1 continued.

<b>Constructs</b>	<b>Item</b>	<b>Geomin Rotated Loadings</b>	<b>Statement</b>
<i>Community-Based</i>			
<b>Retained Items</b>	8	0.54	I take my child to events about our ethnic group (e.g., festivals, heritage days).
	9	0.41	My child and I celebrate holidays or go to parties about our ethnic group.
<b>Parent Involvement</b>			
<b>Excluded Item</b>	10	0.21	I take my child to the library.
<b>Retained Items</b>	11	0.66	My child and I play games together.
	12	0.61	My child and I plan things together.
	13	0.63	My child and I do arts and crafts together.
	14	0.64	I teach my child how to play new games.
	15	0.51	I read to my child.
	16	0.58	My child and I work on projects together.
	17	0.25	My child and I go on outings together.
	18	0.30	My child and I take walks together.
19	0.34	My child and I do things together outdoors.	

(Table A1 con't on next page.)

Table A1 continued.

<b>Constructs</b>	<b>Item</b>	<b>Geomin Rotated Loadings</b>	<b>Statement</b>
<b>Positive Parenting</b>			
<b>Retained Items</b>	20	0.24	I reward or give something extra to my child for obeying me or behaving well.
	21	0.74	I let my child know when he/she is doing a good job with something.
	22	0.89	I compliment my child when he/she has done something well.
	23	0.82	I praise my child if he/she behaves well.
	24	0.63	I hug or kiss my child when he/she has done something well.
	25	0.60	I tell my child that I like it when he/she helps out around the house.

*Note.* <sup>1</sup>The geomin rotated loadings for the deleted items are the loading values for these items on the overall parenting practices measure. The geomin rotated loadings for the retained items are the loading values for these items on their respective constructs: home-based cultural socialization, community-based cultural socialization, parent involvement, and positive parenting.

## Appendix B

Table B1

*Peer Victimization Indicators*

<b>Constructs</b>	<b>Item</b>	<b>Geomin Rotated Loadings<sup>1</sup></b>	<b>Question</b>
<b>Ethnic</b>			
<b>Victimization</b>			
<b>Retained Items</b>	1	0.74	How often do other kids make fun of you because of the language you speak?
	2	0.29	How often do other kids make fun of you because of the clothes you wear?
	3	0.32	How often do other kids make fun of you because of the holidays you celebrate?
	4	0.20	How often do other kids make fun of you because of the color of your skin?
	5	0.15	How often do other kids make fun of you because of the food you eat?
<b>Relational</b>			
<b>Victimization<sup>2</sup></b>			
<b>Excluded Item</b>	6	0.29	How often do other kids leave you out on purpose when it is time to play or do an activity?

(Table B1 con't on next page.)

Table B1 continued.

<b>Constructs</b>	<b>Item</b>	<b>Geomin Rotated Loadings</b>	<b>Question</b>
<b>Retained Items</b>	7	0.65	How often do other kids tell lies about you to make other kids not like you anymore?
	8	0.68	How often do other kids get back at you by not letting you be in their group anymore
	9	0.60	How often do other kids say that they won't like you unless you do what they want you to do?
	10	0.63	How often do other kids try to keep others from liking you by saying mean things about you?
<b>Physical Victimization<sup>2</sup></b>			
<b>Retained Items</b>	11	0.57	How often do other kids push or shove you at school?
	12	0.49	How often do other kids kick you or pull your hair?
	13	0.73	How often do other kids hit you at school?
	14	0.62	How often do other kids say they will beat you up if you don't do what they want you to do?

*Note.* <sup>1</sup>The geomin rotated loadings for the deleted items are the loading values for these items on the overall peer victimization measure. The geomin rotated loadings for the retained items are the loading values for these items on their

respective constructs: ethnic, relational, and physical victimization. <sup>2</sup>The items for the relational and physical victimization constructs load onto one factor but are retained as 2 separate factors due to substantial empirical evidence that the items measure unique constructs.