International Journal of Intercultural Relations 49 (2015) 33–45

Contents lists available at ScienceDirect

International Journal of Intercultural Relations

journal homepage: www.elsevier.com/locate/ijintrel

Cultural distance and emotional problems among immigrant and refugee youth in Canada: Findings from the New Canadian Child and Youth Study (NCCYS)

Morton Beiser[a,b,*], Sofia Puente-Duran[a], Feng Hou[c]

[a] Department of Psychology, Ryerson University, 350 Victoria Street, Toronto, ON, Canada M5B 2K3
[b] Keenan Research Centre Li Ka Shing Knowledge Institute, St. Michael's Hospital, 30 Bond Street, Toronto, ON, Canada M5B 1W8
[c] Department of Sociology, University of Victoria, PO Box 3050 STN CSC, Victoria, BC, Canada V8W 3P5

ARTICLE INFO

Article history:
Received 13 October 2014
Received in revised form 29 May 2015
Accepted 2 June 2015
Available online 14 July 2015

Keywords:
Immigrant youth
Cultural distance
Resilience
Immigration and settlement stressors
Discrimination
Acculturation
Parenting

ABSTRACT

This study examines the widely accepted but under-studied proposition that the greater the cultural distance (CD) between home country and country of resettlement the greater the mental health risk for immigrant and refugee youth. The study also explores pathways through which CD, a macro-social stressor, might exert its mental health effect through meso-environmental stressors including poverty and discrimination, as well as micro-environmental familial stressors. Acculturation strategies and personal competencies are also examined as sources of resilience. The study sample consists of 2074 immigrant and refugee girls and boys, ages 11–13, belonging to 16 different ethnocultural communities, and living in six different Canadian cities. Study data consist of interviews with youth and with the parent deemed the most knowledgeable. Results reveal that CD did adversely affect youth mental health but the effect was relatively small. Family environment variables, particularly parental depression and harsh parenting, accounted for about one third of the effect of CD. Parents in ethnocultural communities that were culturally distant from Canada were more likely to employ harsh parenting practices than parents coming from culturally closer countries. Immigrant youth from culturally distant backgrounds were more likely to perceive discrimination than youth from culturally closer backgrounds. Social competence had an inverse relationship with emotional symptoms. An integration style of acculturation was more advantageous than an isolated, assimilated or marginalized style. The longer youth from culturally distant backgrounds lived in Canada, the worse their mental health tended to be: for youth from culturally closer backgrounds, the opposite was true. The discussion addresses implications for resettlement interventions and policy.
© 2015 Elsevier Ltd. All rights reserved.

Helping immigrant and refugee youth stay mentally healthy as they meet the challenges of integration is an important goals for all immigrant receiving countries. However, gaps in knowledge about what promotes and what jeopardizes mental well-being hamper the development of effective policy and practice (Bernhard, Landolt, & Goldring, 2008; Canadian Task Force, 1988a, 1988b). Although some research has been directed at uncovering predictors of mental health in immigrant and refugee youth, the topic of cultural distance (CD) has been neglected. Given the changes in contemporary immigration flows

* Corresponding author at: Ryerson University, Psychology, JOR 927, 350 Victoria St., Toronto, ON, Canada M5B2K3. Tel.: +1 416 979 5000x2267; fax: +1 416 921 7080.
E-mail address: mail@mortonbeiser.com (M. Beiser).

http://dx.doi.org/10.1016/j.ijintrel.2015.06.005
0147-1767/© 2015 Elsevier Ltd. All rights reserved.

characterized by migrations across ever-greater cultural divides, this omission is particularly glaring. For example, until the 1970s, Western Europe was the largest source of immigration for Canada. Most immigrants now come from the culturally more distant regions of Asia, Africa and the Middle East. The cultural divide between newcomer and native-born is wider than it has ever been in Canadian history. The mental health consequences remain largely unexplored.

The idea that movement across cultures can affect emotional well-being as much as, or even more strongly than movement across space has been vigorously asserted (Caldwell-Harris & Ayçiçegi, 2006; Omidvar & Richmond, 2003; Triandis, 2000; Wachs, 2000) but only rarely tested. Furthermore, prior studies of the relationship between cultural distance (CD) and emotional problems have, for the most part relied on a *subjective* measure of CD—a personal reflection on the distance between home and resettlement country cultures. Since both CD and symptoms are measured subjectively, it is impossible to conclude that a positive association between the two evidences a causal relationship. One phenomenon may cause the other, but an association could also mean that the two are components of a general syndrome of resettlement estrangement and malaise. The current study, with data from migrant youth in 16 different ethnocultural communities in Canada, uses objective measures of CD to explore direct and indirect links with emotional problems. The study also explores coping strategies that may attenuate mental health risk.

1. Societal cultures: Concepts and measures

Parsons (1968) was one of the earliest writers to propose that underlying pattern values could account for cross-societal differences in the behavior of institutions and individuals. More recently, Schwartz (2014) has expanded the concept. According to Schwartz, the concept of societal culture does not mean that there is consensus among all individuals belonging to a particular society. In fact, survey research demonstrates that responses to questions about values (e.g. Hofstede, 1980; Kandogan, 2012; Taras, Steel, & Kirkman, 2012) invariably reveal inter-individual variance in endorsement of particular values. However, population surveys do reveal central tendencies, and these provide a basis for inferring the cultural values that underlie the functioning, policies and practices of social institutions.

Social psychological studies of expatriates and immigrants have shown that the greater the distance between the culture of origin and of resettlement (cultural distance or CD), the greater the difficulties with integration and the greater the threat to well-being. Conversely, the better the fit between home and adopted country cultures, the better the chance of success (Caldwell-Harris & Ayçiçegi, 2006; Dressler, Balieiro, Ribeiro, & Dos Santos, 2007; Harvey & Moeller, 2009; Lundborg, 2013; Sagiv & Schwartz, 2000; Schiefer, Mollering, & Daniel, 2012; Sortheix & Lonnqvist, 2014a,b; Triandis, 2000; Wachs, 2000).

An early study of CD and mental health focused on international students attending a university in Scotland (Babiker, Cox, & Miller, 1980). Student scores on an index of CD used in the study correlated with the number of anxiety symptoms experienced and with the number of medical consultations sought throughout the school year. However, since cultural distance and mental health were based on individual self-report, CD and anxiety may not have been causally related, but, instead, co-occurring cognitive and affective components of a syndrome of alienation.

More recent investigations have relied on putatively objective measures to investigate the relationship between CD and mental health (Sortheix & Lonnqvist, 2014a,b). These studies refer to objective cultural fit as the difference between an individual's score on a particular trait and a group or national score on the same trait (Schiefer et al., 2012), subjective fit to an individual's perception of the discrepancy between personally held attitudes or values and his or her perceptions of reference group adherence to the same attitudes or values. According to this paradigm, a score on CD is "objective" by virtue of its being based on the difference between a subjective rating of cultural inclinations and an independent measure of group tendency. Despite the use of the term objective, the method does not guarantee clear separation between the subjectively assessed dependent measure, mental health, and the measure of home culture – also based on subjective report – that is used to calculate CD. For example, an emotionally distressed immigrant might be inclined to romanticize the home culture more than he or she would in a more euthymic state. Conversely, during the early years after escape, a distressed refugee might be more condemnatory of the home culture than he or she would be in a more settled condition. Using a CD measure based on national scores from both the home and resettlement country and relating this to individual mental health would obviate the potential confounding of dependent and independent variables.

2. Predictors of mental health among immigrant youth: Macro-, meso- micro-stressors, and personal sources of resilience

The current study draws on Bronfenbrenner's (2005) bioecological approach to human development and the Total Environment Assessment Model for Early Child Development (TEAM-ECD; Siddiqi, Hertzman, Irwin, & Hertzman, 2011). The concept that systems at varying degrees of proximity to the individual affect behaviour and development both uniquely and in interaction with each other is common to both models and is an essential feature of the current study's conceptual framework. According to this framework, youth emotional symptoms are affected by CD, a macro-environmental influence, poverty and discrimination at the meso-environmental level, and family functioning and parenting practices at the micro-level. Personal characteristics including acculturation strategies and personal competencies are examined as potential sources of resilience. Fig. 1 describes the model guiding the study.

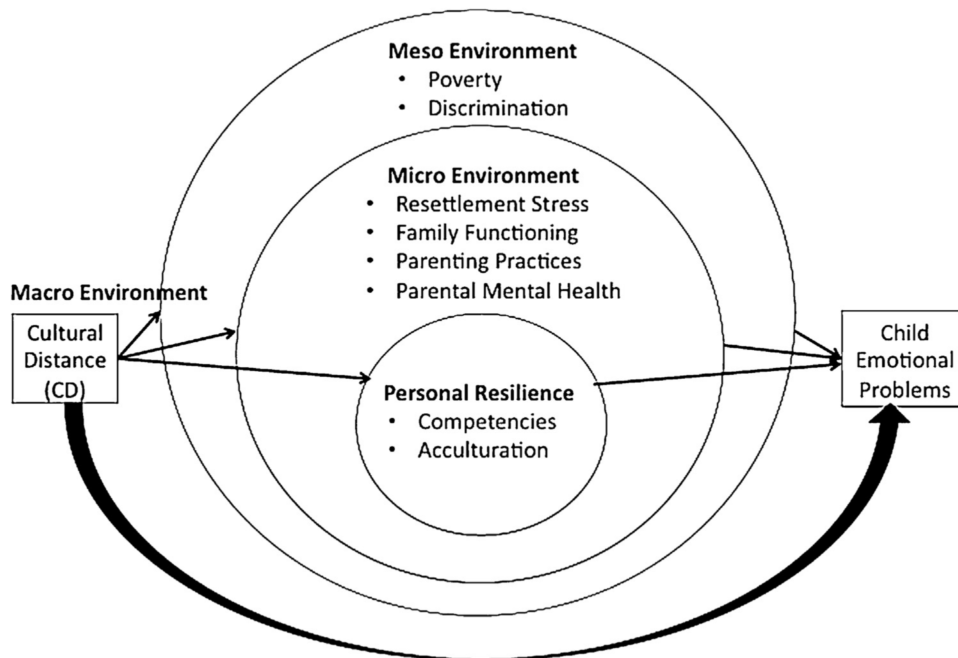

Fig. 1. Predictors of migrant youth emotional problems.

3. CD

The number of distinct cultural value dimensions most popularly used in research ranges from two to nine but there is considerable overlap among them (Schwartz, 2011). A superordinate factor called Traditionalism versus Secularism, derived from the World Values Survey (Inglehart & Welzel, 2011), is particularly appropriate for a study of CD and mental health. One end of this dimension describes a value orientation supporting intellectual freedom, equality of opportunity, tolerance and democratic participation. The opposite end emphasizes privilege derived from factors such as inherited position, and rigid social stratification based on factors such as birth and gender. According to Welzel and Inglehart (2010), Secularism's emancipative value orientation supports feelings of agency, and feelings of agency support psychological equilibrium. Whether or not Secularism is better for mental health than Traditionalism is not germane to this study. Instead, the question for the current investigation is whether lack of fit between immigrant groups and Canada on a cultural dimension presumably salient for well-being jeopardizes mental health.

In 2014, 21 percent of the Canadian population was foreign-born, making Canada the country with the highest proportion of immigrants among the G8. Prior to 1971, more than 80 percent of all immigrants to Canada came from Europe or the United States, 8.5 percent from Asia and 2 percent from Africa. Between 2006 and 2011, only 17.6 percent of all immigrants came from Europe and the US, 57 percent from Asia and 12.5 percent from Africa. Given the increasing cultural divergence among immigrant groups coming to Canada (as well as to other countries of resettlement), the need to understand the mental health consequences of discordance between sending and receiving country cultures is particularly compelling.

4. Meso-level predictors: Poverty and discrimination

Poverty jeopardizes youth mental health (Elder, Nguyen, & Caspi, 1985; Ponnet, 2014; Schor & Menaghan, 1995) and families new to Canada tend to be poor. According to at least one study, almost one third of immigrant families present in Canada for ten years or less lives in deep poverty (Beiser, Hou, Hyman, & Tousignant, 2002). Fig. 1 links CD to poverty because research suggests that high CD is related to unemployment (Lundborg, 2013) as well as compromised job performance (Harvey & Moeller, 2009). It may well be the case that finding and keeping work is a more acute problem for immigrants from culturally distant, than from culturally proximate countries of origin.

Ample research suggests that perceived discrimination jeopardizes immigrant youth mental health (Finch, Kolody, & Vega, 2000; Liebkind & Jasinskaja-Lahti, 2000; Liebkind, Jasinskaja-Lahti, & Solheim, 2004; Oxman-Martinez et al., 2012; Rumbaut, 1995; Verkuyten, 2003). Non-white skin, foreign accents and exotic clothing – badges of otherness worn by members of

groups culturally distant from the main-stream – increase the chances of encountering discrimination (Statistics Canada, 2003).

5. Micro-environment: The family

Previous research (Beiser et al., 2002; Ponnet, 2014) demonstrates that the effect of poverty may be accounted for, in part, by its adverse effects on the family environment. In comparison with immigrant families originating in countries culturally similar to Canada, families from culturally distant origins can be expected to experience more resettlement stress arising from language problems, isolation and discrimination. Resettlement stress may give rise to harsh parenting, parental emotional withdrawal, and intrafamilial conflict all of which jeopardize youth mental health, migrant and non-migrant alike (Beiser et al., 2010; Beiser, Goodwill, Albanese, McShane, & Nowakowski, 2014; Downey & Coyne, 1990; Ponnet, 2014). Mental ill-health in parents has an adverse effect on youth mental health (Beiser, 1999; Beiser et al., 2010, 2011, 2012, 2014; Downey & Coyne, 1990; Ponnet, 2014) and research (Schwartz, 2011; Sorthiex, Olakvi, & Helkama, 2013; Sortheix and Lonnqvist, 2014a,b) shows that parents from culturally distant source regions are at higher risk for mental distress than parents from culturally proximate areas.

6. Personal resilience

Personal factors, including self-esteem and acculturation strategies help determine the mental health impact of stressful circumstance (Spencer, 1995, 2008).

Sometimes thought of as synonymous with, or else a component of mental health, self-esteem is, on the contrary, both conceptually distinguishable and distinctively important. For example, self-esteem is a significant predictor of well-being over the life-course (Orth & Robins, 2014) as well as a mediating pathway between ethnic identity and well-being (Smokowski, Evans, Cotter, & Webber, 2014). Self-esteem can be conceptualized as comprised of a number of different components among which instrumental and social competence have received the most attention. Instrumental competence, referring to the perception of self as able to perform school and home-related tasks, contributes to minority children's academic success (Beiser, Sack, Manson, Redshirt, & Dion, 1998; Spindler & Spindler, 1989) and social competence, referring to the perception of the self as able to make and retain social relationships, contributes to successful integration (Leidy, Guerra, & Toro, 2010; Wong, 2004). Youth migrating to Canada from culturally close backgrounds could be expected to feel more competent than youth from more culturally distant backgrounds because the arenas in which they are called upon to act are more likely to resemble those they are used to.

Creating a personal path between opposing social forces – the centripetal pull of heritage cultures and the centrifugal force of the larger society – is a major challenge for immigrant and refugee youth. Early theorists assumed that immigrants would inevitably be absorbed into receiving societies, relinquishing their heritage cultures during the process (Gordon, 1964). However, researchers such as Berry and Phinney have challenged this view, arguing that there are two underlying dimensions of preference for cultural involvement—one with the ethnic culture and the second with the larger society (Berry, Phinney, Sam, & Vedder, 2006), and a similar bidimensional approach to the evolution of a new identity (Phinney, 1992). Crossing the two acculturation/identity dimensions results in four acculturation profiles: *integration* in which individuals privilege both heritage and new cultures simultaneously, *assimilation* in which there is little interest in cultural maintenance combined with a preference for the larger society and its way; *separation* which privileges heritage cultural maintenance meanwhile avoiding contact with the larger society, and *marginalization*, a condition in which there is neither cultural maintenance nor participation in the larger society. Of the four, integration appears the most favorable for psychological adjustment, marginalization the least (Berry et al., 2006), and particularly so in Canada where a long-standing policy of multiculturalism supports the integration strategy (Berry & Sabatier, 2010).

7. Control variables

Like age and gender, years of residence in a receiving country is routinely included as a control variable in immigration studies. Some research, based on the so-called "healthy immigrant" paradigm (e.g. Ali, 2002) suggests that, at arrival, immigrants enjoy better mental health than the native-born but that, with increasing length of residence, the immigrant advantage deteriorates. Other studies (Beiser, 1999; Beiser et al., 2014) suggest the opposite. No research to date has explored a possible role for CD in explaining discrepancies: for example, low CD may not only confer initial mental health advantage but may also facilitate psychological adjustment over time.

8. Study framework and hypotheses

The aim of the current study is to examine the proposition that cultural distance (based on the difference between an objective measure of home and resettlement country adherence to Traditionalism versus Secularism) has an adverse effect on the mental health of immigrant and refugee youth and to investigate societal, sociopsychological and personal factors affecting this relationship. Hypotheses derived from the model in Fig. 1 include:

1. High CD will be associated with elevated levels of emotional problems.
   However, much if not all of the mental health effects of CD may be explained by mediating pathways described in points 2 through 6 that follow:
2. The greater the CD, the more likely that an immigrant family will be living in poverty, and poverty will be associated with elevated levels of emotional problems.
3. The greater the CD, the higher the level of perceived discrimination and the higher the level of perceived discrimination the higher the level of emotional problems.
4. High CD will be associated with both harsh parenting and lack of warm parenting, each of which will be associated with elevated levels of emotional problems among immigrant youth.
5. High CD will be associated with parental depression and parental depression will be associated with elevated levels of youth emotional problems.
6. CD will compromise self-perceptions of instrumental and social competence and compromised instrumental and social competence will be associated with elevated levels of emotional problems.
7. An integrated acculturation strategy will be the most advantageous for mental health, a marginalized strategy the least.
8. Length of residence in Canada will have a negative association with emotional problems. CD will, however, moderate this association: high CD in interaction with increasing length of residence will be associated with increased symptoms.

9. Methods

Immigrant and refugee youth taking part in the study had either been born outside Canada or were living with at least one foreign-born parent who had immigrated to Canada during the 10 years preceding the study's inception. Since most immigrants settle in cities (Statistics Canada, 2008a, 2008b) samples were recruited from Canada's six major urban areas—Montreal, Quebec; Toronto, Ontario; Winnipeg, Manitoba; Calgary, Alberta; Edmonton, Alberta; and Vancouver, British Columbia. In each city, the local NCCYS research team recruited community advisory councils (CAC) made up of representatives from immigrant and refugee organizations, resettlement agencies, school and health personnel, and different levels of government. The CAC's helped develop the NCCYS conceptual framework, developed strategies to inform and engage communities, helped recruit and train interviewers, and participated in data interpretation and dissemination.

10. Sampling

The current study utilizes data from an NCCYS inception cohort of immigrant and refugee youth (ages 11–13) belonging to 16 different ethnocultural groups. The 16 different ethnocultural group design helped ensure the inclusion of important small groups such as refugees and recently arrived small immigrant communities who have little chance of showing up in probability-based population samples. The ethnocultural groups included Hong Kong Chinese, Mainland Chinese, Filipino, Ethiopian, Somali, Caribbean, Serbian, Vietnamese, Lebanese, Haitian, Latin American, Kurdish, Iranian, Punjabi, Sri Lankan Tamil, and Afghani. The initial survey, on which the current study is based, was completed in 2006.

Since privacy laws prohibit the release of government data about immigrants, it was impossible to use official sources to create a sampling frame. Instead, the researchers used strategies recommended for difficult to identify, hard to find, and highly mobile groups (Thompson & Seber, 1996; Watters & Biernacki, 1989). In each of the six NCCYS study cities, members of the local CAC's first privately identified families from their respective communities who fit NCCYS inclusion criteria. After requesting the family's permission, the CAC member then introduced a research team member who explained the study and obtained written informed consent. Each participating family was then asked to think of other families with children meeting the study's inclusion criteria. They were asked to contact these families to request permission for follow-up communication by the research team. Signed informed consent was then obtained from a parent and from the youth him or herself as well. The NCCYS received REB approval from an institution in each of the participating cities as follows: the University of British Columbia (Vancouver); University of Alberta (Edmonton); University of Calgary (Calgary); University of Manitoba (Winnipeg); Centre for Addiction and Mental Health (Toronto); University of Montreal (Montreal).

Ninety boys and girls were recruited for each ethnoculturally homogeneous group. For the most part, each group came from one city or region where the respective ethnic groups tended to be the most concentrated (Caribbeans in Montreal and Tamils in Toronto, for example). The Hong Kong Chinese, Mainland Chinese and Filipino groups were, however, an exception. Because the team wished to study the effects of regional differences, these three groups were sampled in each of the four study regions, yielding a total of 360, rather than 90, for each. The projected total sample was 2250 but, because of insufficient numbers among some of the selected groups, the final tally of immigrant and refugee youth was 2076. Based on a population model using 200I census data, each sample was weighted to the Census Subdivision (CSD) level (the CSD is usually a provincially defined municipality).

11. Study procedures

Data sources for the current report include the Parent about Family (PAF), Parent about Child (PAC), Child about Child (CAC) and Child Identity (CID) questionnaires. The PAF and PAC, administered in more than 95 percent of cases to a participating youth's mother, elicit information about parents' ethnic and religious backgrounds, education, labor force activity, income, health status, parenting behaviors, and pre-and post-migration stressors. The CAC elicits self-reports about symptoms and competencies, and the CID is a self-report concerning youth's ethnic and Canadian identity as well as experiences with discrimination.

Prior to including an item in any of the questionnaires, the Community Advisory Councils in each study region judged its acceptability, the likelihood that it could be appropriately translated, and its face validity. The team then assembled the surviving items into draft versions of the respective questionnaires, arranged translation into each of the heritage languages, and back-translation to uncover and resolve ambiguities. Each bilingual interviewer took part in a two-day group training session. To ensure standardization, a senior member of the investigative team conducted training in five of the six sites, and personally trained the Montreal-based French-speaking person who then trained the francophone interviewers. Trained bilingual interviewers then carried out the surveys with a parent (PAF and PAC) and a youth (CAC and CID).

12. Study measures

12.1. Emotional problems (EP)

Emotional problems (EP), an eight-item self-report symptom scale appearing on the CAC, was adapted from the Ontario Child Health Survey (Statistics Canada, 1995) and previously used by the first author (MB) in studies of aboriginal children and youth (Dion, Gotowiec, & Beiser, 1998). Each EP item has three forced choice responses: (1) never or not true, (2) sometimes or sometimes true, and (3) often or very true. Sample items include: How often would you say you (a) are unhappy, sad or depressed? (b) Are not as happy as others? (c) Are miserable, unhappy, troubled or distressed? (d) Cry a lot? The scale had an alpha of 0.77, and scores ranged from 8 to 22 ($M = 10.12$, SD = 2.34).

12.2. Cultural distance (CD)

The CD measure was based on data from the World Values Survey (WVS) (www.worldvaluessurvey.org), an international survey that measures beliefs and values of individuals nested within countries. Since most of the immigrant families taking part in the NCCYS arrived in Canada during the 1990s, we used country-level values on the Traditionalism versus Secularism scale from wave three of the Inglehart and Basanez (1998). Each ethnocultural group in the NCCYS received a CD score arrived at by calculating the difference between the published score value for their home country and for Canada. The values for each of the country of origin groups fell into two clusters, Small CD with scores ranging from 0.61 to 0.77 and Large CD with scores ranging from 1.12 to 2.13. With values this highly skewed, it was appropriate to treat CD as a categorical rather than a continuous variable.

12.3. Poverty

The PAF asked for total household income. Poverty was defined by Statistics Canada's low-income cut-offs (LICOs). LICOs identify poverty according to the proportion of total income a family is forced to spend on life's essentials. Updated yearly, the cut-offs vary according to family sizes and area of residence (such as urban versus rural). The current study uses the 2001 LICOs for large metropolitan areas. According to this measure, a family of four with total household income below $29,800 was defined as poor. The variable was scored as 0 = Above LICO; 1 = Below LICO.

12.4. Perceived discrimination

This CID-based measure was originally developed for research among adult immigrants (Beiser, Noh, Hou, Kaspar, & Rummens, 2001) but has been used more recently in NCCYS-based publications (Oxman-Martinez et al., 2012). Youth were asked whether, during the month prior to the interview, they had been treated unfairly because of "Who you are." Who you are was further defined as "the way you look, your language, your accent or because you were born outside Canada." Peer-based discrimination questions included: (a) "Have children/peers (inside or outside school): hit, pushed, shoved you?" (b)"Called you names?" (c) "Sworn at you?" (d) "Ignored you?" "No" was scored as zero but a "yes" response was followed by a frequency probe ranging from 1 = once to 4 = almost regularly. Discrimination by teachers was measured by one question with responses ranging from never = 0 to all the time = 4: "During the past month, have you been treated unfairly by a teacher because of who you are?" Responses to the 10 peer-based discrimination measures and the one teacher-based measure were summed to produce a perceived discrimination measure with potential scores ranging from 0 to 44.

12.5. Resettlement stress

A component of the PAF, this 24-item scale includes items such as (a) "I worry about the future of my children" (b) "I am unable to do things I used to enjoy" (c) "I am disappointed that my standard of living is not what I had hoped for before I came to Canada," (d) "I do not understand the school or educational system in Canada," and (e) "I feel helpless to make political decisions." Item scores ranged from never = 1, to very often = 4. The scale had an alpha of 0.92 and scores ranged from 24 to 107 (M = 47.04, SD = 12.87).

12.6. Family functioning

A 10-item scale appearing in the PAF, this variable has the following response categories: 1 = strongly disagree, 2 = disagree, 3 = not sure, 4 = agree, 5 = strongly agree. Items include: (a) "Family members can see things from other's viewpoint"; (b) "Family willing to compromise when making plans"; (c) "Family members support each other in crises"; (d) "All family members accepted for who they are." The alpha was 0.87 and scores ranged from 18 to 50 (M = 40.98, SD = 4.53).

12.7. Harsh/ineffective parenting

A 5-item scale included in the PAF. The forced-choice responses range from 1 = never to 5 = many times each day. Items include: (a) "How often do you find yourself annoyed when child says/does something he/she not supposed to;" (b) "How often do you find yourself telling your child you disapprove of his/her behavior" (c) "How often does the way you punish your child depend on your mood"; (d) "How often do you have problems managing your child in general." The alpha for this scale was 0.64 and scores ranged from 5 to 24 (M = 12.31, SD = 3.08)

12.8. Warm/supportive parenting

A 5-item PAF scale with forced-choice responses ranging from 1 = never to 5 = many times each day. Items include: "how often do you... (a) "Praise child," (b) "Talk or play together?" Scoring was identical to harsh parenting. The alpha was 0.76 with scores ranging from 5 to 25 (M = 16.18, SD = 3.64).

12.9. PMK depression

Part of the PAF, this 16-item measure of depressive symptoms has been used in previous cross-cultural studies (Beiser, 1999; Beiser et al., 2012). PMK depression is scored on the basis of forced choice responses ranging from "rarely" or "none of the time" = 1 to "most or all of the time" = 4. Questions included whether: During the past few weeks... (a) "Have you been low and hopeless?" (b) "Have your thoughts seemed mixed up?" (c) "Have you been feeling remorseful?" This scale had an alpha of 0.92 and scores ranged from 16 to 64 (M = 24.81, SD = 7.81).

12.10. Instrumental competence

Administered as part of the CAC, this 11-item scale with 4 forced-choice responses is derived from Beiser, Lancee, Gotowiec, Sack, and Redshirt (1993). Items include: (a) "I am good at school/work"; (b) "I can do my schoolwork/work quickly"; (c) "I am able to figure out problems at school/work"; (d) "I catch on quickly." The alpha was 0.92 with scores ranging from 11 to 44 (M = 35.06, SD = 6.64).

12.11. Social competence

Administered to the youth participant as part of the CAC and derived from Beiser et al. (1993), this 11-item scale with 4 forced-choice responses includes items such as: (a) "Other people like me"; (b) "I enjoy being with other people"; (c) "I'm easy to get along with." This scale had an alpha of 0.87 and scores ranged from 17 to 44 (M = 38.24, SD = 5.79).

12.12. Acculturation strategies

Following a method employed by Berry and Sabatier (2010), this measure is based on crossing two relatively independent identity measures derived from Phinney's (1992) multigroup ethnic identity measure (MEIM) administered to youth respondents. MEIM scales were included in the CID. The first MEIM dimension, ethnic exploration, is a four item scale with forced-choice responses ranging from "not at all like me" = 0 to "A lot like me" = 5 (a) "I have spent time trying to find more about identity X (identity X refers to the heritage culture)," (b) "I talk to others to learn more about identity X," (c) "Parents talk to me about identity X way of life/tradition/history," and (d) "I have a clear sense of identity X and what it means to me." Alpha = 0.68; mean = 12.18, (s.d. 1.87). The second, Canadian exploration, is comprised of nine items such as: (a) "I feel Canadian," (b) "I try to find out more about the Canadian people," (c) "I talk to other people to learn more about Canadian way of life," and (d) "I have a clear sense of being Canadian and what it means to me." The alpha for this scale was 0.87 (M = 26.95,

Table 1
Outcome and explanatory variables by cultural distance.

	Small cultural distance	Large cultural distance	Significance of the difference
Outcome			
Emotional problems	9.82	10.34	***
Demographic			
Age	11.87	11.93	
Female	0.50	0.49	
Years in Canada	5.06	5.74	***
Meso-environment			
Poverty	0.44	0.42	
Income missing	0.13	0.11	
Perceived discrimination	12.76	15.31	**
Micro-environment			
Resettlement stress	45.70	48.02	***
Family functioning	40.39	41.42	***
Harsh parenting	11.85	12.65	***
Warm parenting	15.82	16.45	***
PMK depression	24.48	25.10	
Personal resilience			
Instrumental competence	36.21	34.17	***
Social competence	38.35	38.07	
Integration	0.37	0.38	
Assimilation	0.14	0.15	
Separation	0.27	0.24	

Note: ** significant at $p < 0.01$, *** significant at $p < 0.001$.

SD = 4.06). After performing a median split on each of these scales, the dimensions were crossed to create four groupings corresponding to Berry's categories: (i) Integration: high on both measures (775 cases/2076 = 37.3%) (ii) Assimilation: high on Canadian identification but low on ethnic (14.8%) (iii) Separation: Low on Canadian and high on ethnic identification (25.3%) and (iv) Marginalization or confusion (22.4%): low on, or rejecting of both.

13. Control variables

Since adaptation improves with increasing length of residence (Berry et al., 2006), length of time in Canada was included along with age and gender.

14. Data analysis

The research team used *T*-tests to examine differences between the small and large CD groups, followed by a hierarchical multiple regression analysis to examine the study's theoretical models. For Model 1, Emotional Problems was regressed on CD, Model 2 added sociodemographic (age, gender and length of residence in Canada) and socio-environmental predictors (poverty and resettlement stress), and Model 3 added family environment. Model 4 added youth stress and resilience variables. Three acculturation strategies – integration, assimilation and separation – were entered using a dummy variable analysis. The fourth category, marginalization, was the reference variable. Finally, to examine the hypothesis that increasing length of residence in a resettlement country should mitigate the effects of cultural strangeness among immigrants from low CD situations, Model 5 added an interaction term—cultural distance and years of residence in Canada.

15. Results

Table 1 examines bivariate relationships between cultural distance and the study dependent and independent variables.

Youth in the large CD group had higher scores on Emotional Problems than youth in the small CD condition. There were no age, gender or income differences between the groups but the large CD group tended to have been in Canada longer than the small CD group. Youth in the high CD condition perceived more discrimination than youth in the low CD condition. The large CD families were experiencing more resettlement stress but conversely maintaining a higher level of family functioning. Parents in the large cultural distance group were more likely to be practicing warm parenting than their small CD counterparts. There were no differences between the two groups in their acculturation/identity strategies but youth in the small CD distance group reported higher levels of instrumental competence.

Table 2 the results of regressing emotional problems (EP) on the predictor variables.

The predictor equation accounted for 22.5 percent of the variance in Emotional Problems scores.

CD had an adverse effect on youth mental health but the r-squared value for Model 1 suggests that this effect was relatively small. None of the sociodemographic factors affected mental health but resettlement stress was associated with higher levels of youth emotional problems. When family environment variables were added in Model 3, the *r*-squared

Table 2
Predictors of EP among immigrant youth.

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	9.822***	9.830***	8.340***	9.670***	9.961***
Large cultural distance	0.514***	0.465***	0.357***	0.339***	0.350***
Age		−0.016	−0.025	−0.021	−0.031
Female		0.030	0.075	0.098	0.085
Years in Canada		0.010	0.024	0.030*	−0.028
Poverty		−0.077	−0.098	−0.099	−0.092
Income missing		−0.294	−0.297	−0.300	−0.305
Perceived discrimination		0.015***	−0.010***	−0.008***	−0.008***
Resettlement stress		0.014***	−0.005	−0.003	−0.002
Family functioning			−0.033**	−0.026*	0.027*
Harsh parenting			0.177***	0.173***	0.166***
Warm parenting			−0.055***	−0.048***	−0.038**
PMK depression			0.078***	0.076***	0.075***
Instrumental competence				0.003	0.004
Social competence				−0.046	−0.044
Integration				−0.299*	−0.259*
Assimilation				−0.035	−0.021
Separation				−0.190	−0.164
High cultural distance × Years in Canada					0.098***
R squared	0.001	0.0032	0.206	0.220	0.225

Note: * significant at $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

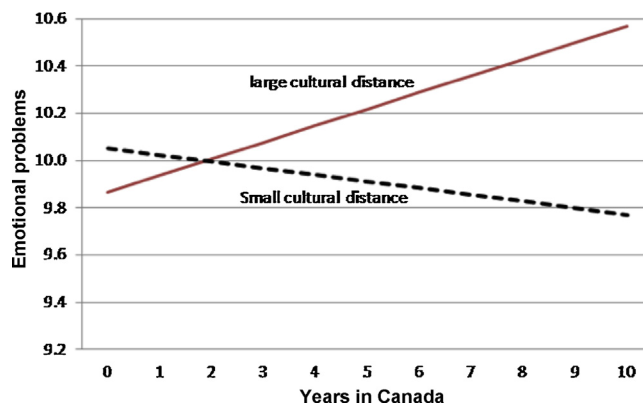

Fig. 2. Mental health, CD and length of residence.

value spiked from about 3 percent to almost 21 percent. The statistically significant contributions of PMK depression, harsh parenting and warm parenting in model 3 also accounted for the association between resettlement stress and EP observed in Model 2. Model 4 accounted for an additional 2 percent gain in the observed variance of EP. Instrumental competence did not make a contribution, but social competence mitigated the adverse effect of CD on mental health. Each of the three acculturation strategies had a negative association with EP, suggesting that they militated against the adverse effects of CD, whereas marginalization did not. However, of the three, integration had the only statistically significant relationship. Finally, the interaction term in Model 5 – CD and time of residence in Canada – made a statistically significant contribution to the prediction of EP. From Model 1 to Model 4, the coefficient of cultural distance decreased from 0.514 to 0.339, suggesting that about one third of the cultural distance effect was through the covariates. Further analysis (not shown), based on a regression decomposition approach (Hou, 2014), showed that two variables – harsh parenting and PMK depression – were the most powerful predictors.

As Fig. 2 shows, emotional problems tended to diminish over time for youth in the small CD group but to increase over time for youth in large CD condition.

16. Discussion

A large difference between culture of origin and the culture of Canada had a negative impact on immigrant youth mental health. A considerable amount of that impact appears to have been mediated through associated resettlement stress and

its impact on familial functioning—harsh parenting and parental depression in particular. The final model accounted for approximately 23 percent of the total variance in youth scores on EP.

The total variance in EP scores is similar to what other investigators have reported (see for example Fleche, Smith, & Sorsa, 2011; Oxman-Martinez et al., 2012; Sortheix & Lonnqvist, 2014b). These results point to the need to consider additional variables in future investigation of mental health among migrant youth. Previous NCCYS publications (Beiser et al., 2010, 2011, 2012) have, for example, demonstrated the mental health salience of home–school tensions, prejudice, and region of resettlement.

Poverty rates of the magnitude demonstrated in this study are unacceptable in a country that recruits immigrants and prides itself on its receptivity. Nevertheless, and consistent with previous studies (Beiser et al., 2002), the current results suggest that poverty is not a salient mental health stressor for immigrant and refugee youth. These findings direct attention to other stressors with potentially greater mental health relevance as well as to factors that protect youth mental health even in the face of considerable adversity.

Well-functioning families with mentally healthy parents practicing good parenting skills are, on the basis of this study's findings, key sources of resilience (see also Ponnet, 2014). On a methodological note, parent and youth ratings of mental health in the current study came from independent sources. Many previous studies of psychopathology in youth rely on parents to rate not only their children's mental health but their own as well (Grizenko & Fisher, 1992). The obvious methodological problem, that parents with depression may be more apt than mentally healthy parents to perceive their children as distressed, was, as a result, averted.

The findings underline the need for a whole-family approach to promoting mental health and adaptation (see Barozzino et al., 2013). Adults burdened by their own mental health problems are unlikely to be optimally effective parents. Because they often come from cultures that stigmatize mental health problems even more severely than Canada does, immigrant youth with depressed parents may find their parents' moods difficult to understand, with the result that they experience an even greater sense of burden than their North American counterparts (Russel, Crockett, & Chao, 2010; Yen, Robins, & Lin, 2000).

Harsh parenting had a deleterious effect on youth mental health and warm parenting a protective effect. Culture of origin helps shape parenting style (Beiser et al., 2014), but the current study results suggest that resettlement stress also makes a contribution. Stress may make parents less patient and less emotionally giving than they might otherwise be if they were not confronting the challenges of resettlement. The immigrant mental health literature repeatedly points out that language training and employment programs, promoting feelings of welcome to overcome isolation, and combating discrimination, could have a salutary effect on parental mental health and promote good family functioning (Canadian Task Force, 1988a, 1988b). These are important policy directives for the integration and well-being of migrant adults, and the current study results show their importance for youth as well. Even if supported by tradition, harsh parenting may not export well. In fact, some research suggests that, even in countries such as China, where harsh parenting is culturally normative, this style of parenting can jeopardize children's mental health (Chen & Liu, 2012).

As an intervention, Parke and Buriel (2006) suggest that ethnic minority children could be taught how to interact effectively in dual cultural contexts by encouraging adolescents to understand ethnic as well as dominant cultural norms of parenting (see also Wu & Chao, 2005). However, it is at least equally important that parents be encouraged to be part of intrafamilial cultural negotiations. Moving beyond mental health impasses within the family may well call for both parents and children to appraise the functionality of traditional parenting styles in resettlement countries (Forehand & Kotchick, 1996).

The experiences and capacities of youth themselves should not be overlooked. Perceived discrimination is associated with compromised emotional well-being among youth just as it is among adults (Oxman-Martinez et al., 2012) and the larger the CD between home and resettlement society, the more discrimination immigrant youth are likely to experience. Youth coming from countries whose values more closely resemble the new society feel a greater sense of instrumental competence than their counterparts coming from more culturally distant countries. Instrumental competence may contribute to school achievement but the current results show that social competence – the ability to form friendships and to get along with others – is critical for the well-being of youth confronting changes in country, values and cultures.

The results with the measures derived from John Berry's well known theories of acculturation are striking. Consistent with the results of a recent meta-analysis of studies on biculturalism (Nguyen & Benet-Martinez, 2013), youth who adopted an integration approach, combining interest in and adherence to heritage culture while at the same time being open to incorporating values and attitudes from the larger Canadian society, had better mental health than youth pursuing an assimilation, separation or marginalization pattern. These results support the importance of Canada's much-beleaguered multiculturalism policy, the ideal of which is to promote cultural retention and at the same time encourage incorporation of resettlement country values. Berry and Sabatier's (2010) research suggests the mental health advantages of adopting an integration strategy even in a country (France) that favours assimilation over multiculturalism. At the same time, Berry and Sabatier's paper suggests that sociopolitical context affects acculturation strategy and moderates the effectiveness of different strategic choices. The current study points to the importance of including CD in future studies of national policy and its impact on the emotional health of immigrants.

Time, long regarded as a panacea for many things, does not necessarily help overcome the challenges of CD. On the contrary, the current study data suggest that, unless immigrant youth from culturally distant origins can be helped to overcome

the challenges cultural difference creates, time brings with it increased, rather than decreased mental health risk. The data in the current study suggest some of what that help might consist of, including policies and programs to reduce resettlement stress and the sting of discrimination, as well as mental health interventions sensitive to the importance of culture and of cultural distance. Focusing on strengths as well as on stresses will promote successful resettlement. Encouraging immigrant youth to develop their social skills and to participate in and learn about the culture of their adopted countries while still honoring their heritage can help them to meet the challenges of adapting to the new and making sense of the strange.

Acknowledgments

This paper is a product of the New Canadian Children and Youth Study (Principal Investigators: Morton Beiser, Robert Armstrong, David Este, Anne George, Linda Ogilvie, Jacqueline Oxman-Martinez, Joanna Anneke Rummens, Lori Wilkinson), a national longitudinal survey of the health and well-being of more than 4000 newcomer immigrant and refugee children living in Montreal, Toronto, Winnipeg, Edmonton, Calgary and Vancouver. The NCCYS is a joint collaboration between university researchers affiliated with Canada's four Metropolis Centres of Excellence for research on immigration and settlement, and community organizations representing Afghani, Hong Kong Chinese, Mainland Chinese, Latin American (El Salvadorean, Guatemalan, Colombian), Ethiopian, Haitian, Iranian, Kurdish, Lebanese, Filipino, Punjabi, Serbian, Somali, Jamaican, Sri Lankan Tamil, and Vietnamese newcomers in Canada. Major funding for the project has been provided by the Canadian Institutes of Health Research (CIHR grants FRN-43927 and PRG-80146), Canadian Heritage, Citizenship and Immigration Canada (CIC), Health Canada, Justice Canada, Alberta Heritage Foundation for Medical Research, Alberta Learning, B.C. Ministry of Social Development and Economic Security, B.C. Ministry of Multiculturalism and Immigration, Conseil Quebecois de la Recherche Sociale, Manitoba Labour and Immigration, the Montreal, Prairies, and Ontario Metropolis Centres of Excellence for research on immigration and settlement, and the Ontario Mental Health Foundation.

References

Ali, J. (2002). Mental health of Canada's immigrants. *Health Reports*, *13*(Suppl.), 101–113.

Babiker, I. E., Cox, J. L., & Miller, P. M. (1980). The measurement of cultural distance and its relationship to medical consultations, symptomatology and examination performance of overseas students at Edinburgh University. *Social Psychiatry*, *15*(3), 109–116.

Barozzino, T., Hui, C., Baïlon-Poujol, J., Banerji, A., Baxter, C., & Beiser, M., et al. (Eds.). (2013). *Caring for children and youth new to Canada, an electronic peer reviewed book*. The Canadian Pediatric Society. ⟨www.kidsnewtocanada.ca⟩

Beiser, M., Sack, W., Manson, S. M., Redshirt, R., & Dion, R. (1998). Mental health and the academic performance of first nations and majority culture children. *American Journal of Orthopsychiatry*, *68*(3), 455–467. ⟨http://www.kidsnewtocanada.ca/⟩.

Beiser, M. (1999). *Strangers at the gate: The "Boat Peoples" first ten years in Canada*. Toronto, ON: University of Toronto Press.

Beiser, M., Fenta, H., Baheretebib, Y., Pain, C., Arraya, M., & Taa, B. (2012). A comparison of emotional problems and their determinants among Ethiopian children in Addis Ababa, Ethiopia, and Toronto, Canada. *Transcultural Psychiatry*, *4*(5), 651–677.

Beiser, M., Goodwill, A. M., Albanese, P., McShane, K., & Nowakowski, M. (2014). Predictors of immigrant children's mental health in Canada: Selection, settlement contingencies, culture, or all of the above? *Social Psychiatry and Psychiatric Epidemiology*, *49*, 743–756.

Beiser, M., Hamilton, H., Rummens, J. A., Oxman-Martinez, J., Ogilvie, L., Humphrey, C., et al. (2010). Predictors of emotional problems and physical aggression among children of Hong Kong Chinese, Mainland Chinese and Filipino immigrants to Canada. *Social Psychiatry and Psychiatric Epidemiology*, *45*, 1011–1021.

Beiser, M., Hou, F., Hyman, I., & Tousignant, M. (2002). Poverty, family process, and the mental health of immigrant children in Canada. *American Journal of Public Health*, *92*, 220–227.

Beiser, M., Lancee, W., Gotowiec, A., Sack, W., & Redshirt, R. (1993). Measuring self-perceived role competence among first nations and non native children. *Canadian Journal of Psychiatry*, *38*(6), 412–419.

Beiser, M., Noh, S., Hou, F., Kaspar, V., & Rummens, J. (2001). Southeast Asian refugees' perceptions of racial discrimination in Canada. *Canadian Ethnic Studies*, *33*(1), 46–70.

Beiser, M., Zilber, N., Simich, L., Youngmann, R., Zohar, A., Taa, B., et al. (2011). Regional effects on the mental health of immigrant children: Results from the New Canadian Children and Youth Study (NCCYS). *Health and Place*, *17*, 822–829.

Bernhard, J. K., Landolt, P., & Goldring, L. (2008). Transnationalizing families: Canadian immigration policy and the spatial fragmentation of care-giving among Latin American newcomers. *International Migration*, *47*(2), 3–31.

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied Psychology: An International Review*, *55*(3), 303–332.

Berry, J. W., & Sabatier, C. (2010). Acculturation, discrimination, and adaptation among second generation immigrant youth in Montreal and Paris. *International Journal of Intercultural Relations*, *34*(3), 191–207. ISSN 0147-1767.

Bronfenbrenner, U. (2005). *Making human being human. Bioecological perspectives of human development*. Thousand Oakds, CA: Sage.

Caldwell-Harris, C., & Ayçiçegi, H. A. (2006). When personality and culture clash: The psychological distress of allocentrics in an individualist culture and idiocentrics in a collectivist culture. *Transcultural Psychiatry*, *43*(3), 331–361.

Canadian Task Force on Mental Health Issues Affecting Immigrants and Refugees in Canada. (1988a). *After the door has been opened, no. Ci96-38/1988E*. Canada: Ottawa, Ministry of Supply and Services.

Canadian Task Force on Mental Health Issues Affecting Immigrants and Refugees in Canada. (1988b). *Review of the literature on migrant mental health*. Canada: Ottawa, Ministry of Supply and Services.

Chen, J. J., & Liu, X. (2012). The mediating role of perceived parental warmth and parental punishment in the psychological well-being of children in rural China. *Social Indicators Research*, *107*, 483–508.

Dion, R., Gotowiec, A., & Beiser, M. (1998). Depression and conduct disorder in native and non-native children. *Journal of American Academy of Child and Adolescent Psychiatry*, *37*(7), 736–742.

Downey, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin*, *108*, 50–76.

Dressler, W. W., Balieiro, M. C., Ribeiro, R. P., & Dos Santos, E. (2007). Cultural consonance and psychological distress: Examining the associations in multiple cultural domains. *Culture, Medicine and Psychiatry*, *31*, 195–224.

Elder, G. H., Nguyen, T. V., & Caspi, A. (1985). Linking family hardship to children's lives. *Child Development*, *56*, 361–375.

Finch, B. K., Kolody, B., & Vega, W. A. (2000). Perceived discrimination and depression among Mexican origin adults in California. *Journal of Health and Social Behavior*, *41*, 295–313.

Fleche, S., Smith, C., & Sorsa, P. (2011). Exploring determinants of subjective wellbeing in OECD countries: Evidence from the world value survey. In *OECD economics department working papers no. 921*. OECD Publishing.

Forehand, R., & Kotchick, B. A. (1996). Cultural diversity: A wake-up call for parent training. *Behavior Therapy*, *27*(2), 187–206.

Gordon, M. (1964). *Assimilation in American Life*. New York, NY: Oxford.

Grizenko, N., & Fisher, C. (1992). Review of studies of risk and protective factors for psychopathology in children. *Canadian Journal of Psychiatry*, *3*, 711–721.

Harvey, M., & Moeller, M. (2009). Expatriate managers: A historical review. *International Journal of Management Reviews*, *11*(3), 275–296.

Hofstede, G. (1980). Motivation, leadership, and organization: Do American theories apply abroad? *Organizational Dynamics*, *9*(1), 42–63.

Hou, F. (2014). A general approach to effect decomposition. *Social Science Quarterly*, http://dx.doi.org/10.1111/ssqu.12074

Inglehart, R., & Basanez, M. (1998). *Human values and beliefs: A cross-cultural sourcebook: Political, religious, sexual, and economic norms in 43 societies: Findings from the 1990–1993 World Values Survey*. University of Michigan Press.

Inglehart, R. &Welzel, C. (2011). *The WVS Cultural Map of the World*. Retrieved from: ⟨http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_54⟩.

Kandogan, Y. (2012). An improvement to Kogut and Singh measure of tulrual distance considering the relationship among different dimensions of culture. *Research in International Business and Finance*, *26*, 196–203.

Leidy, M. S., Guerra, N. G., & Toro, R. I. (2010). Positive parenting, family cohesion, and child social competence among immigrant Latino families. *Journal of Family Psychology*, *24*(3), 252–260. ISSN 0893-3200.

Liebkind, K., & Jasinskaja-Lahti, I. (2000). The influence of experiences of discrimination on psychological stress: A comparison of seven immigrant groups. *Journal of Community and Applied Social Psychology*, *10*, 1–16.

Liebkind, K., Jasinskaja-Lahti, I., & Solheim, E. (2004). Cultural identity, perceived discrimination, and parental support as determinants of immigrants' school adjustments: Vietnamese youth in Finland. *Journal of Adolescent Research*, *19*(6), 635–655.

Lundborg, P. (2013). Refugees' employment integration in Sweden: Cultural distance and labor market performance. *Review of International Economics*, *21*(2), 219–232.

Nguyen, A-M. T., & Benet-Martinez, V. (2013). Biculturalism and adjustment: A meta-analysis. *Journal of Cross-Cultural Psychology*, *44*(1), 122–159.

Omidvar, R., & Richmond, T. (2003). *Immigrant settlement and social inclusion in Canada*. Toronto, ON: The Laidlaw Foundation's working paper series.

Orth, U., & Robins, R. W. (2014). The development of self-esteem. *Current Directions in Psychological Science*, *23*(5), 381–387. ISSN 0963-7214.

Oxman-Martinez, J., Rummens, J. A., Moreau, J., Choi, Y. R., Beiser, M., Ogilvie, L., et al. (2012). Perceived ethnic discrimination and social exclusion: Newcomer immigrant children in Canada. *American Journal of Orthopsychiatry*, *82*(3), 376–388.

Parke, R. D., & Buriel, R. (2006). Socialization in the family: Ethnic and ecological perspectives. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 429–504). Hoboken, NJ: John Wiley & Sons Inc.

Parsons, T. (1968). *The structure of social action*. New York, NY: Free Press.

Phinney, J. (1992). The Multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, *7*(2), 156–176.

Ponnet, K. (2014). Financial stress, parent functioning and adolescent problem behavior: An actor–partner interdependence approach to family stress processes in low-, middle-, and high-income families. *Journal of Youth and Adolescence*, *43*(10), 1752–1769. http://dx.doi.org/10.1007/s10964-014-0159-y

Rumbaut, R. (1995). The New Californians: Comparative research findings on the educational progress of immigrant children. In R. G. Rumbaut, & A. W. Cornelius (Eds.), *California's immigrant children: Theory, research, and implications for educational policy* (pp. 17–69). San Diego, CA: Center for U.S.—Mexican Studies, University of California.

Russel, S. T., Crockett, L. J., & Chao, R. K. (Eds.). (2010). *Asian American parenting and parent–adolescent relationships*. , ISBN 978-1-4419-5727-6. Berlin: Springer.

Sagiv, L., & Schwartz, S. H. (2000). Values and subjective well-being: Direct relations and congruity effects. *European Journal of Social Psychology*, *30*, 177–198.

Schiefer, D., Mollering, A., & Daniel, E. (2012). Cultural value fit of immigrant and minority adolescents: The role of acculturation orientations. *International Journal of Intercultural Relations*, *36*, 486–497.

Schor, E. L., & Menaghan, E. G. (1995). Family pathways to child health. In B. C. Amick, S. Levine, A. R. Tarlov, & D. C. Walsh (Eds.), *Society and health* (pp. 18–45). New York, NY: Oxford University Press.

Schwartz, S. H. (2011). Studying values: Personal adventure, future directions. *Journal of Cross-Cultural Psychology*, *42*(2), 307–319.

Schwartz, S. H. (2014). Rethinking the concept and measurement of societal culture in light of empirical findings. *Journal of Cross-Cultural Psychology*, *45*(1), 5–13.

Siddiqi, A., Hertzman, E., Irwin, L. G., & Hertzman, C. (2011). In WHO Commission on Social Determinants of Health Knowledge Network, Jennifer Lee, & Ritwin Sadara (Eds.), *Early child developments: A powerful equalizer in improving equity in health by addressing social determinants*. ⟨www.who.int⟩.

Smokowski, P. R., Evans, C. B., Cotter, K. L., & Webber, K. C. (2014). Ethnic identity and mental health in American Indian Youth: Examining mediation pathways through self-esteem, and future optimism. *Journal of Youth and Adolescence*, *43*(3), 343–355. ISSN 0047-2891.

Sorthiex, F. M., Olakvi, A., & Helkama, K. (2013). Values, life event, and health: A study in a Finnish rural community. *Journal of Community and Applied Social Psychology*, *23*, 331–346.

Sortheix, F. M., & Lonnqvist, J.-E. (2014a). Personal value priorities and life satisfaction in Europe: The moderating role of socioeconomic development. *Journal of Cross-Cultural Psychology*, *45*(2), 282–299.

Sortheix, F. M., & Lonnqvist, J.-E. (2014b). Person-group value congruence and subjective well-being in students from Argentina, Bulgaria and Finland: The role of interpersonal relationships. *Journal of Community & Applied Social Psychology*, *25*, 34–48.

Spencer, M. B. (1995). Old issues and new theorizing about African American youth: A phenomenological variant of ecological systems theory. In R. L. Taylor (Ed.), *Black youth: Perspectives on their status in the United States* (pp. 37–69). Westport, CT: Praeger.

Spencer, M. B. (2008). Phenomenology and ecological systems theory: Development of diverse groups. In W. Damon, & R. M. Lerner (Eds.), *Child and adolescent development: An advanced course* (pp. 696–740). Hoboken, NJ: Wiley.

Spindler, L., & Spindler, G. (1989). Instrumental competence, self-efficacy, linguistic minorities, and cultural therapy: A preliminary attempt at integration. *Anthropology & Education Quarterly*, *20*(1), 36–50. ISSN 0161-7761.

Statistics Canada and Human Resources Development Canada. (1995). *National longitudinal survey of children: Overview and survey instruments for 1994–1995, data collection cycle 1*. Ottawa: Ministry of Industry.

Statistics Canada. (2008a). Census snapshot-immigration in Canada: A portrait of the foreign-born population, 2006 census. In *Component of Statistics Canada Catalogue no. 11-008-X Canadian Social Trends*. Ottawa, ON: Statistics Canada.

Statistics Canada. (2008b). *2006 census data products. Ethnic origins, 2006 Counts for Canada*. Statistics Canada (release date April 2, 2008, cata. No. 97-562-XWE2006002).

Statistics Canada. (2003). *Ethnic diversity survey: Portrait of a multicultural society (Catalogue No. 89-593-KIE)*. Ottawa, ON: Statistics Canada.

Taras, V., Steel, P., & Kirkman, B. L. (2012). Improving national cultural indices using a longitudinal meta-analysis of Hofstede's dimensions. *Journal of World Business*, *47*, 329–341.

Thompson, S. K., & Seber, G. A. F. (1996). *Adaptive sampling*. New York, NY: Wiley.

Triandis, H. C. (2000). Cultural syndromes and subjective well-being. In E. F. Diener, & E. M. Such (Eds.), *Subjective well-being across cultures* (pp. 87–112). Cambridge, MA: MIT Press.

Verkuyten, M. (2003). Positive and negative self-esteem among ethnic minority early adolescents: Social and cultural sources and threats. *Journal of Youth and Adolescence*, *32*(4), 267–277.
Wachs, T. D. (2000). *Necessary but not sufficient: The respective roles of single and multiple influences on individual development*. Washington, DC: American Psychological Association.
Watters, J. K., & Biernacki, P. (1989). Targeted sampling: Options for the study of hidden populations. *Social Problems*, *36*(4), 416–430.
Welzel, C., & Inglehart, R. (2010). Agency, values, and well-being: A human development model. *Social Indicators Research*, *97*, 43–63.
Wong, D. F. K. (2004). The impacts of acculturative stress and social competence on the mental health of Mainland Chinese immigrant youth in Hong Kong. *The British Journal of Social Work*, *34*(7), 1009–1024.
Wu, C. X., & Chao, R. K. (2005). Intergenerational cultural conflicts for Chinese American youth with immigrant parents: Norms of parental warmth and the consequences. *International Journal of Behavioral Development*, *29*, 516–523.
Yen, S., Robins, C. J., & Lin, N. (2000). A cross-cultural comparison of depressive symptom manifestation: China and the United States. *Journal of Consulting and Clinical Psychology*, *68*(6), 993–999.