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Cultural Communication Competence and Psychological Adjustment

A Study of Chinese Immigrant Children's Cross-Cultural Adaptation in Canada

Cross-cultural adaptation starts with communication, proceeds in and through communication, and is revealed in host communication competence. Based on this conceptualization, this study examines the relationship between psychological adjustment and cultural communication competence among members of immigrant families. Participants included 124 seventh- and eighth-grade Chinese-Canadian adolescents, together with 48 fathers and 64 mothers. The adolescents were group-administered the adolescent version of the Host and Native Communication Competence Scale, the How-I-Feel questionnaire, and the Children's Depression Inventory. Parents completed questionnaires concerning their own host and native communication competence and their children's psychological adjustment. Adolescents' host communication competence was correlated negatively with psychological problems, whereas their native communication competence was nonsignificantly associated with psychological problems. In addition, interactions between adolescents' host and native communication competence and parents' host and native communication competence were found to predict adolescents' psychological adjustment. Implications of findings are discussed.

International migration has created a group of individuals who find themselves in a new host culture, facing the need for at least some level of cross-cultural adaptation. Immigrants often feel pressured to learn new ways to think, feel, and behave so that they can attain membership in the host society. In past decades, communication scholars (e.g., Kealey, 1989; Kim, 1977, 1988) have drawn attention to a communicative perspective of the cross-cultural adaptation process. Communication is seen as crucial in cross-

cultural adaptation because it serves as “an essential mechanism that connects” people from another culture and the host society (Kim, 1997, p. 407). Although age has been identified as an individual factor in a person’s adaptation (e.g., Kim, 1988; Searle & Ward, 1990), studies on cross-cultural adaptation have been conducted mostly among adult immigrant samples (e.g., Chataway & Berry, 1989; Ghaffarian, 1987). Relatively less attention has been given to children of immigrant families. Still fewer in number are studies on communication and cross-cultural adaptation of adolescent immigrants. To help fill this gap, we conducted a study of cross-cultural adaptation among first- and second-generation Chinese adolescents in Canada, examining (a) the relationship between their host and native cultural communication patterns and their psychological adjustment and (b) the parents’ role in the adaptation process of these adolescents.

Cross-Cultural Adaptation

The experience of immigrants in a host culture is illustrated by the four elements in the process of adaptation, namely—enculturation, deculturation, acculturation, and assimilation (Gudykunst & Kim, 1997). Enculturation refers to the socialization of native cultural values and social behaviors prior to entry into the host culture. Acculturation is the resocialization that occurs after entry into another culture, when immigrants interact with a new and unfamiliar culture and learn some of the norms and values of salient reference groups of the host society. Almost simultaneous with the occurrence of acculturation is deculturation, which involves unlearning the old cultural pattern. The final element of the cross-cultural adaptation is assimilation, a stage that features a high degree of acculturation into the host milieu and a high degree of deculturation of the native culture. Although the direction of cross-cultural adaptation is toward assimilation, conflict often occurs in the process between the desire to acculturate to the new culture and the desire to retain the old and familiar one. Continuous interplay of acculturation and deculturation, as well as cyclical stress and adjustment, is a common experience of cross-cultural adaptation (Kim, 1988).

Cross-Cultural Adaptation and Host Communication Competence

It is almost inevitable that immigrants will come into contact with cultural elements of the host society sooner or later. In and through contact and communication, immigrants acquire knowledge of the host language, culture, worldviews, beliefs, norms, and rules of social conduct and interpersonal

relationships; they learn to resonate emotionally and aesthetically with natives (Kim, 1997). In other words, immigrants will learn the mind-sets and behaviors of local people by communicating with them (Fogel, 1993). Adaptation thus starts with and proceeds in and through communication. When immigrants can express their own cognitive and affective experience and communicate that experience to others in the host society, they have acquired a sufficient level of host communication competence (Kim, 1977, 1988). Host communication competence refers to the overall internal capacity to decode and encode information in accordance with the communication practices of the host culture. This communication competence can only be achieved through participating in social communication in the host society, including interpersonal communication and mass communication activities (Kim, 1977, 1988, 1997). Face-to-face interactions with host-culture members are crucial for an individual's adaptation. It is usually such direct, interpersonal contact that triggers the initial realization of the inadequacy of one's taken-for-granted assumptions in the unfamiliar host society and the need to adapt, which leads to making sense of new patterns and then coming to understand new information (L. Chen, 1994). Regular contact and interpersonal communication with host-culture members through various day-to-day social activities thus allows host-culture learning through interaction. Mass communication, on the other hand, enables immigrants to "expand the scope of their adaptive learning beyond the immediate social context with which they have contact" (Kim, 1997, p. 409). Because there is no pressing need to respond and no risk of embarrassment for making mistakes, mass communication activities can provide a less intense and psychologically safer learning environment.

Just as it is through communication that immigrants acquire host communication competence, so it is through their host communication competence that their degree of cross-cultural adaptation is revealed. Based on this conceptualization, we can expect host communication competence to be reflected in communication patterns and to be a measure of cross-cultural adaptation.

Cross-Cultural Adaptation and Psychological Adjustment

An important outcome of cross-cultural adaptation is immigrants' psychological adjustment. Indeed, psychological difficulty, or stress, is part and parcel of the adaptive transformation (Kim, 1988, 1997). For immigrant children, sources of stress include (a) language problems (e.g., Sarda, 1990); (b) separation from former social networks (e.g., Aronowitz, 1984; Baptiste, 1993); (c) feelings of being different from majority peers in the new country (e.g.,

Ramirez, 1991); (d) readjustment to changes in family functioning, including role conflict (e.g., Baptiste, 1993; Leung, 1992); and (e) confusion in behavioral norms between their indigenous culture and the host culture (e.g., Zigler & Stevenson, 1993). Although problems and stress are inevitable results of adaptation and individual growth over time, frequent experience of internal imbalance can adversely affect psychological health and lead to maladjustment. Previous studies have found that immigrant children and adolescents in North America often reported problems such as anxiety, stress, loneliness, low self-esteem, poor concentration, nervousness, loss of appetite and sleep disturbance, feelings of inadequacy, depression, anger, tension, identity crisis, and poor physical health (Baptiste, 1993; Evans & Lee, 1998). On the other hand, although it was observed that some immigrant children had serious psychological adjustment problems, whereas others had scarcely any (Eppink, 1979).

P. W. Chen (1977) suggests that unless adolescents from immigrant families develop effective coping responses, they are likely to feel inadequate in dealing with the external world (e.g., at school). Coping responses are defined as the cognitive or behavioral efforts by individuals to exercise control over an external and/or internal demand that they appraise as taxing or exceeding their resources (Lazarus & Folkman, 1984). People may have different coping responses in dealing with cultural adaptation stress (Lazarus & Folkman, 1984). The attempt to adapt to the host culture by immigrant adolescents is one of the coping responses. Also common is retreating to the comfort of familiar native cultural groups. Wittkower and Fried (1958) observed that if minority children hold onto their heritage, they are likely to experience deprecation and alienation from the dominant society, suggesting a relationship between children's acculturation and their psychological well-being.

Although little is known about the relationship between adaptation and adjustment problems in children and adolescents, research is widely available on similar problems in adult immigrants. It has been found that newly arrived foreigners often report experiencing acute stress in the face of culture shock (Adler, 1987; Furnham, 1988). There is empirical evidence of a negative relation between adaptation and life dissatisfaction among adult American Chinese (Yu & Harburg, 1980). Similarly, American-Iranian adults who were more adapted reportedly were less anxious and less depressed (Ghaffarian, 1987). In light of our conceptualization of host communication competence and degree of cross-cultural adaptation, these findings lead to expectations of a positive relationship between host communication competence and psychological adjustment and a negative relationship between native communication competence and psychological adjustment. One hypothesis is proposed:

Hypothesis 1a: The greater the degree of adolescents' self-reported host communication competence, the less likely they will be to display psychological problems.

Hypothesis 1b: The greater the degree of adolescents' self-reported native communication competence, the more likely they will be to display psychological problems.

Parents' and Children's Cross-Cultural Adaptation

An important element in cross-cultural adaptation is the role of environment, which includes social conditions of both the host culture and ethnic communities. Ethnic group strength is among the variables in ethnic communities (Kim, 1994). In the case of Chinese-Canadian adolescents, that socioeconomic position of the parents and parents' expectations concerning adaptation constitute the ethnic group strength (Eppink, 1979). Parents' own adaptation to the host culture becomes a factor in children's adaptation. More (or less) adapted parents tend to have more (or less) knowledge of the various aspects of the host culture through interpersonal and mass communications and thus are more (or less) capable of facilitating children's adaptive learning. Second, parents' cross-cultural adaptation may appear to the growing child as a statement of the value of the host culture (Rosenthal & Cichello, 1986). Third, according to social learning theory (Bandura, 1977), children learn by observing and imitating behaviors of a social model, which is often their parents. It was found that when children saw their parents read, they, too, wanted to read (Hess, Holloway, Price, & Dickson, 1982). By the same token, it is reasonable to expect that when children observe the acculturated behaviors displayed by their parents, they may learn those behaviors by imitating the parents.

Parents' influence on children's cross-cultural adaptation process is supported by at least one study. Rosenthal and Cichello (1986) examined the relation between Italian-Australian parents' degree of adaptation and their children's ethnic identity. They found that when children perceived their parents to be highly acculturated in the Australian community, they were less likely to maintain their Italian identity and culture. On the other hand, when these children rated their parents to be highly involved in the Italian community, they were more likely to report having a strong sense of "Italiannes." Based on the above, we propose:

Hypothesis 2a: Parents' self-reported host communication competence will be positively correlated with their children's self-reported host communication competence.

Hypothesis 2b: Parents' self-reported native communication competence will be positively correlated with their children's self-reported native communication competence.

Psychological Adjustments and Consistency Between Parents' and Children's Cross-Cultural Adaptation

Age being an important factor in cross-cultural adaptation, it is not uncommon for children to become adapted to the host culture at a faster pace than their parents do (Chiu, Feldman, & Rosenthal, 1992). If parents maintain their original cultural practices while their children become more adapted, familial problems such as communication problems, lack of family support, and intergenerational conflicts are likely to appear (Baptiste, 1993; Eitinger, 1981). These family problems might then create a home environment with negative effects on children's cross-cultural adaptation.

According to Baptiste (1993), immigrant children who have lived in the host country for a long time often find their parents' conversation about the "old" culture boring and outdated. Moreover, when adaptation patterns of parents and children are different, behaviors displayed by the children are unlikely to be supported or approved of by their parents (Baptiste, 1993; Nguyen & Williams, 1989). From the perspective of less adapted parents, their children's adapted behaviors may be viewed as disloyalty to or betrayal of the family (Baptiste, 1993; Nguyen & Williams, 1989). Consequently, a unique intercultural/intergenerational conflict is likely to occur in the family (Sluzki, 1979). Lambert's (1987) study asked immigrants whether immigrants to the United States should "give up their traditional ways of life and take on the American way of life" or "maintain their traditional ways of life as much as possible when they come to America." The results showed that the vast majority of parents took an extreme maintenance position regarding culture and language, as is seen in an Arab father's radical response: "My son couldn't be my son if he were not Arab first!"

From the children's perspective, on the other hand, conflict arises because they perceive that their parents do not understand them and that their acculturated behaviors are regarded as signs of disobedience and disloyalty by their traditional parents. As a result of lack of communication, absence of family support, and intercultural/intergenerational conflict, these children may experience intense stress, insecurity, loneliness, and self-hate (Baptiste, 1993; Eppink, 1979).

In short, inconsistency in the pace of cross-cultural adaptation between parents and children may be associated with negative psychological outcomes

in children. In contrast, consistency between children and their parents in cross-cultural adaptation patterns is likely to be related to feelings of belonging and family support. Adolescents' own cross-cultural adaptation, however, may affect their psychological states in other directions. A research question is posed in the present study to explore the relationship between adolescents' psychological adjustment and consistency of Chinese immigrant parents' and adolescents' cross-cultural adaptation.

Research Question 1a: When parents and adolescents are inconsistent in cross-cultural adaptation, will adolescents be more or less likely to experience psychological problems?

Research Question 1b: Will consistency between parents and adolescents in cross-cultural adaptation negatively or positively predict indexes of psychological problems?

Method

Participants

Participants were 124 (56 males and 68 females) Chinese-Canadian adolescents from a local Chinese school in Ontario and 48 fathers and 64 mothers. Classes met every Saturday morning, and males were roughly equal in number to females in each class. About 65% of the students from Grades 7 and 8 participated in the study. The Chinese make up a large ethnic group in this area. Among Chinese families, children commonly attend weekend Chinese schools.

The mean age of the adolescents was 12.5 years ($SD = 1.1$), ranging from 10 to 15 years. The adolescents' average length of time in Canada was 52.95 months ($SD = 42.6$) ranging from 3 to 180 months. The adolescents' average age at immigration to Canada was 9.5 years ($SD = 6$). About 10% were second-generation Canadians, and the remaining 90% were first-generation immigrants. About 45% of the adolescent respondents indicated that English was their most-used language, whereas 41% chose Chinese (Mandarin or Cantonese). The remaining 14% indicated both English and Chinese were their most-used languages. The majority (83%) of the children had at least one sibling, whereas the rest were the only child in the family. Most (82%) were living with both parents; 14% were living with mothers, 1% with fathers, and 8% with neither.

The mean age of Chinese immigrant fathers was 44.9 years ($SD = 3.8$). The average length of time in Canada for fathers was 57.4 months ($SD = 69.3$). Most fathers (77%) indicated that Chinese/Mandarin was their first

language, and the rest indicated other Chinese dialects. Half of the fathers had a high school education or less, and the other half had a college education or more. Most (90%) were employed; 36% were blue-collar workers, 26% were businessmen, 3% were white-collar workers, and 36% were professionals.

The mean age of Chinese immigrant mothers was 41.5 years ($SD = 3.3$). Their average length of time in Canada was 58.3 months ($SD = 64.6$). Most mothers (99%) indicated that Chinese/Mandarin was their primary language, and the remaining 1% indicated other Chinese dialects. About 60% of the mothers had a high school education or less, and the rest had at least a college education. About 54% of the mothers were employed; among them, 62% were blue-collar workers, 17% were businesswomen, 2% were white-collar workers, and 19% were professionals.

Forty-five adolescents had both parents participating in the present study, 17 adolescents had either mother- or father-only participating, and 62 adolescents had no parents participating. One-way ANOVAs revealed no significant differences among these three groups of adolescents in measurement of adaptation and psychological adjustment. Thus, the combined data were used in subsequent analyses.

Instruments

Adolescent report of host and native communication competence. Researchers studying immigrants' adaptation to the host culture have used such indices as length of time in the host country, citizenship, educational level, and socioeconomic status (e.g., Yu, 1984; Yu & Harburg, 1980, 1981). These indices are informative yet insufficient because they do not necessarily reflect individuals' degree of adapted behaviors that are external expressions of internal states. Therefore, a Host and Native Communication Competence Scale (HNCC Scale) was developed in the present study to examine Chinese-Canadian adolescents' host and native communication competence that reflects cross-cultural adaptation. Adolescent's participation in host and native communication activities served as measures of cross-cultural adaptation.

The Adolescent HNCC Scale was composed of 30 multiple-choice questions tapping Chinese-Canadian adolescents' self-reported pattern of host communication and native communication participation. Based on Kim's (1977, 1988) theory on host communication competence, Chinese-Canadian adolescents' degree of communication competence in Canadian society was measured by items reflecting their self-perceived (a) English language proficiency (e.g., How well do you read in English), (b) interpersonal communication with members of Canadian culture (e.g., How many Caucasian-

Canadian friends do you have?), and (c) mass communication activities in Canadian culture (e.g., How often do you watch English movies?).

By the same token, Chinese-Canadian adolescents' degree of maintenance of communication competence in Chinese culture was measured by their self-perceived (a) Chinese language proficiency (e.g., How well do you speak Cantonese/Mandarin?), (b) interpersonal communication with members of the Chinese community (e.g., How many Chinese friends do you have?), and (c) mass communication activities in the Chinese culture (e.g., How often do you watch Chinese TV?). Some items on the scale (see Table 1) are explicitly about communication activities, whereas some are communication-related by inference, based on a relational perspective of interpersonal communication: A close personal relationship goes hand in hand with quality as well as amount of communication.

The sums of the item scores respectively pertaining to host communication competence in Canadian culture and native communication competence in Chinese culture formed two global indices of Host Communication Competence and Native Communication Competence. A higher score on the subscale of Host Communication Competence was interpreted as an indication of a higher degree of cross-cultural adaptation to Canadian culture. Similarly, a higher score on the subscale of Native Communication Competence indicated a higher degree of native culture maintenance in Chinese culture.

Adolescent report of cultural identity. Respondents were asked to choose one among four categories (Chinese, Chinese-Canadian, Canadian, or Other) that they thought best described the way they felt about themselves. This item concerning their reported cultural identity served to assess the validity of the HNCC Scale.

Adolescent report of rejection of host and native culture. Eight items were developed to examine adolescents' attitudes toward the host and the native cultures. They responded on a 6-point Likert-type scale regarding the degree to which they agreed with each of the statements. Four items tapped rejection of host culture: If there were more stores selling Chinese food and products, I would shop only in those stores; It would be better if we had nothing to do with Canadians; It would be nice to have more Chinese-speaking people in Canada so that I would not have to spend time alone with other Canadians; and Chinese should have their own neighborhoods so that they can reduce the amount of contact with Canadians.

Rejection of native culture comprised the following four items: Chinese should not bother about keeping their traditions and culture; Because we live in Canada, we do not need to know Chinese, we should focus our attention on

speaking English fluently; We are living in Canada and that means giving up our Chinese way of life and adopting a Canadian lifestyle, thinking and acting like Canadians; and Since I am living in Canada, I should learn to speak English fluently and ignore my Chinese background. The internal consistencies were .67 and .51 for rejection of host culture and rejection of native culture, respectively. Given the small number of items on each subscale, the fairly low alpha values were considered acceptable. The scores on rejection of host and native culture were employed for additional validity assessment of the HNCC Scale.

Adolescent reports of loneliness. This is a measure of psychological adjustment. Adolescents were asked to respond to each of the 18 items of the How-I-Feel questionnaire developed by Asher, Hymel, and Renshaw (1984). They indicated on a 5-point Likert-type scale how much each statement was a true description of themselves (5 = *always true*, 4 = *true most of the time*, 3 = *true sometimes*, 2 = *hardly ever true*, 1 = *not true at all*). Responses for the 18 items were then summed to create a total loneliness score for each adolescent, which could range from 16 (low loneliness) to 80 (high loneliness). For the present study, the internal consistency of the 18 items was .88.

Adolescent reports of depression. This served as a second measure of psychological adjustment. The Children's Depression Inventory (CDI) (Kovacs, 1992) was used in the present study. One item concerning children's suicidal thought was deleted from the original 27-item CDI due to ethical concerns. Internal consistency of this modified version of the CDI was .85 in the present study.

Parent report of cross-cultural adaptation. This version was otherwise identical to the adolescent version except that some items were reworded to become more relevant to the adult respondents. The internal consistency of the subscale of Host Communication Competence was .82 and .81 for fathers and mothers, respectively. The internal consistency of the subscale of Native Communication Competence was .70 and .71 for fathers and mothers, respectively. The parents' version of the HNCC Scale was translated into Chinese and then back-translated into English by the first author and an experienced English-Chinese translator. Both Chinese and English versions were available for the parents.

Parent report of child behavior. The subscales of Internalizing Problems (pertaining to children's problems of withdrawal, somatic complaints, and anxiety/depression) of the Child Behavior Checklist (CBCL) (Achenbach,

1991) were used. In the present study, the internal consistency of the Internalizing Problem Scale was .84 and .77 for mothers and fathers, respectively. Both Chinese (Chen, Rubin, & Li, 1995) and English versions were available for the parents.

Procedures

Informed consent from the adolescents and their parents was obtained prior to the study. Adolescents were group-administered three questionnaires (The adolescents' version of the HNCC Scale, the How-I-Feel questionnaire, and the CDI) in one of their Chinese classes. Two questionnaires (the parents' version of HNCC Scale and the modified CBCL) were sent to the parents and collected the following week through the school.

Results

Factor analyses and ANOVA were used in the preliminary analyses. Hypotheses and research questions were being tested through correlations and moderated regressions in the primary analyses. Significance levels will be reported at set intervals of $p < .05$, $p < .01$, and $p < .001$.

Preliminary Analyses

Factor analysis of the adolescent host and native competence data. The Kaiser-Meyer-Olkin score was .73, indicating satisfactory sampling adequacy. Principal component analysis revealed two meaningful factors in the Chinese-Canadian adolescents, collectively accounting for 33.6% of variance. The factor loadings after varimax rotation are presented in Table 1. Items loading on Factor 1 included English language proficiency, interpersonal communication, and mass communication activities in the host society. Thus, this factor clearly was about individuals' host communication participation. On the other hand, items loading on Factor 2 described Chinese language proficiency, interpersonal communication, and mass communication activities in Chinese community. Thus, Factor 2 represented individuals' native communication participation in Chinese culture. The factors are considered reliable as each had at least four loadings at or above the level of .6 (Stevens, 1996).

The factor-loading criterion was .3 (Tabachnick & Fidell, 1989). Two items, 19 and 29, had loadings of less than .3 and thus were not included in the calculation of factor scores. Items 27 and 28 were not included in the calculation of summed scale scores due to the consideration that they might be

Table 1
Varimax-Rotated Two-Factor Structure of the Host and Native Communication Competence Scale in Chinese-Canadian Adolescents

Item	Subscale ^a	Factor 1	Factor 2
1 How many Caucasian friends do you have?	S	<i>.49^b</i>	.14
2 How many Chinese friends do you have?	S	.07	.32
3 How often do you invite your Caucasian friends to your house?	S	.48	.14
4 How often are you invited to your Caucasian friends' gathering?	S	.51	.19
5 How often do you invite your Chinese friends to your house?	S	.02	.41
6 How often are you invited to your Chinese friends' gathering?	S	.00	.37
7 How many English extracurricular activities have you participated in?	S	.65	-.23
8 Do you enjoy being with Caucasian-Canadians?	S	.67	-.17
9 How well do you speak in English?	L	.82	-.23
10 How well do you understand spoken English?	L	.76	-.24
11 How well do you read in English? ^c	L	.78	-.30
12 How well do you write in English?	L	.77	-.11
13 How well do you speak in Cantonese/ Mandarin?	L	-.11	.57
14 How well do you understand spoken Cantonese/ Mandarin?	L	.12	.49
15 How well do you read in Chinese? ^c	L	-.40	.71
16 How well do you write in Chinese? ^c	L	-.32	.69
17 How often do you read English storybooks/novels/fiction/magazines?	M	.47	-.01
18 How often do you read Chinese storybooks/novels/fiction/magazines?	M	-.29	.62
19 How often do you watch English movies (including rental movies)? ^d	M	.26	.16
20 How often do you watch Chinese movies (including rental movies)?	M	.07	.57
21 How often do you listen to English radio?	M	.61	-.21
22 How often do you listen to Chinese radio?	M	-.02	.46
23 How often do you watch English TV?	M	.30	-.24
24 How often do you watch Chinese TV?	M	-.08	.50
25 How often do you listen to Western music?	M	.54	.03
26 How often do you listen to Chinese music?	M	-.14	.69
27 How often do you go to a Chinese restaurant? ^e	S	.15	.51
28 How often do you go to a Western restaurant? ^e	S	.35	.18
29 Do you celebrate Chinese festivals? ^d	S	.16	.26
30 Do you celebrate Western festivals? ^d	S	.28	.29

a. L = language proficiency, S = interpersonal communication activities, and M = mass communication activities.

b. Italicized factor loadings indicate to which factor the item was assigned.

c. Items were double-loaded items.

d. Items were deleted from the scales.

e. Items were not included in the calculation of summed scales.

more of a reflection of availability than cultural preferences. Items 11 (How well do you read in English?), 15 (How well do you read in Chinese?), and 16 (How well do you write in Chinese?) were double-loaded items. All three items were related to language proficiency. A closer examination revealed that the double-loading items seemed to represent two extremes of a factor instead of two different factors. The three items represented almost inseparable relationships between language and cultural identity, on one hand, and language and communication, on the other (Giles & Coupland, 1991). The items were included because of their conceptual importance and assigned to the factor that had the positive loading. The secondary loading of the remaining items was at least .25 away from the primary loading except for Item 23 (How often do you watch English TV?). This item was included in the calculation of the factor scores based on the following: It appeared to be another case of two extremes of a single factor and thus was assigned to the factor with the positive loading.

The ultimate Host Communication Competence subscale consisted of 13 items (Numbers 1, 3, 4, 7, 8, 9, 10, 11, 12, 17, 21, 23, and 25), and the Native Communication Competence subscale was formed with 12 items (Numbers 2, 5, 6, 13, 14, 15, 16, 18, 20, 22, 24, and 26). The internal consistencies of the subscales were .86 and .80, respectively. The coefficient for intercorrelation between the two factors was $r(124) = -.24, p < .005$. Factor analysis for the parents' version was not conducted due to the small sample size.

Gender differences in adolescents' host and native communication competence and psychological adjustment. ANOVAs were conducted to examine whether there were gender differences in adolescents' host and native communication competence and psychological adjustment. Significant gender differences were obtained in their native communication competence, rejection of native culture, self-reported depression and loneliness, and mother-reported internalizing problems (Table 2). Specifically, results revealed that female adolescents scored significantly higher in native communication competence than male adolescents did, $F(1, 119) = 7.59, p < .01, \eta^2 = .06$. It was also found that male adolescents scored significantly higher than female adolescents in their rejection of the native culture, $F(1, 115) = 4.43, p < .05, \eta^2 = .04$, and self-reported depression, $F(1, 115) = 4.21, p < .05, \eta^2 = .04$. The descriptive data for male adolescents and female adolescents are presented in Table 2.

Validity assessment of the Host and Native Communication Competence Scale. Adolescents' attitudes toward the host and native cultures and their self-reported cultural identity were used as measures to check on the validity

Table 2
Means and Standard Deviations of Host Communication Competence, Native Communication Competence, and Psychological Adjustment Scores for Male and Female Adolescents

Variable	Male Adolescents		Female Adolescents	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Host and native communication competence				
Host communication competence	3.52	.73	3.66	.76
Native communication competence ^a	3.36	.84	3.73	.64
Adolescents' rejection of host and native culture				
Rejection of host culture	2.62	.96	2.42	1.00
Rejection of native culture ^a	2.21	.96	1.86	.82
Self-reported psychological adjustment				
Depression ^a	1.35	.20	1.27	.23
Loneliness	2.08	.42	1.88	.57
Parents' reports of adolescents' psychological adjustment				
Mother-reported internalizing problems	.34	.18	.23	.18
Father-reported internalizing problems	.21	.17	.20	.12

a. Indicates significant sex difference.

of the HNCC Scale. Adolescents' rejection of the host culture in Canada was found significantly and negatively correlated with host communication competence, $r(124) = -.50, p < .001$, but significantly and positively associated with native communication competence, $r(124) = .26, p < .01$. No significant correlation was found either between rejection of native culture and host communication competence or between rejection of the native culture and native communication competence.

Self-identification comparison with adolescents' host and native communication competence and psychological adjustment. ANOVAs were conducted to compare adolescents who identified themselves as Chinese and those identifying themselves as Chinese-Canadian in terms of host and native communication competence, rejection of the host culture, rejection of the native culture, and psychological adjustment scores. Results showed that self-identified Chinese-Canadian adolescents scored significantly higher than self-identified Chinese adolescents in host communication competence (Table 3), $F(1, 109) = 25.31, p < .001, \eta^2 = .19$. On the other hand, self-identified Chinese adolescents were found to score significantly higher than self-identified Chinese-Canadian adolescents in native communication competence, $F(1, 114) = 10.10, p < .01, \eta^2 = .08$; rejection of the host culture, $F(1, 111) = 15.71, p < .001, \eta^2 = .12$; self-reported depression, $F(1, 110) = 20.82, p < .001, \eta^2 = .16$; and self-reported loneliness, $F(1, 96) = 18.98, p < .001, \eta^2 = .17$.

Table 3
Means and Standard Deviations of Host Communication Competence, Native Communication Competence, Rejection of Host Culture, Rejection of Native Culture, and Psychological Adjustment Scores for Self-identified Chinese and Chinese-Canadian Adolescents

Variable	Self-Identified Chinese Adolescents		Self-Identified Chinese-Canadian Adolescents	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Adolescents' host and native communication competence				
Host communication competence ^a	3.19	.71	3.85	.66
Native communication competence ^a	3.81	.52	3.38	.84
Adolescents' rejection of host and native culture				
Rejection of host culture ^a	2.93	.98	2.25	.81
Rejection of native culture	2.17	.96	1.93	.88
Self-reported psychological adjustment				
Depression ^a	1.41	.23	1.23	.19
Loneliness ^a	2.22	.53	1.79	.45
Parents' reports of adolescents' psychological adjustment				
Mother-reported internalizing problems	.30	.20	.24	.18
Father-reported internalizing problems	.22	.17	.18	.11

a. Indicates significant differences.

Primary Analyses

Relationship between demographic variables and host and native communication competence. Results showed that adolescents' host communication competence in Canadian culture was significantly and positively correlated with length of time in Canada, $r(124) = .34, p < .01$, but significantly and negatively associated with age, $r(124) = -.21, p < .05$. On the other hand, adolescents' native communication competence was significantly and positively associated with age of immigration, $r(124) = .33, p < .001$, but was significantly and negatively correlated with length in host country, $r(124) = -.44, p < .001$. These results suggested that adolescents who had stayed in Canada for a long time tended to report high host communication competence but low native communication competence. Furthermore, adolescents who immigrated to Canada at older ages tended to maintain more of their native communication competence than those who immigrated at younger ages.

Relationship between adolescents' host and native communication competence and psychological adjustment. Correlation results between the indices

of Chinese-Canadian adolescents' host and native communication competence and psychological adjustment showed that host communication competence was significantly and negatively correlated with their self-reports of depression, $r(124) = -.45, p < .001$, and self-reports of loneliness, $r(124) = -.67, p < .001$, as well as their mothers' reports of internalizing problems, $r(124) = -.57, p < .001$. Hypothesis 1a was confirmed. The results indicated that, in general, adolescents who reported host communication competence tended to adjust better psychologically. On the other hand, there was no significant correlation between their native communication competence and psychological problems. Hypothesis 1b was not confirmed.

Relationship between parents' and adolescents' host and native communication competence. Results of correlation between parents' and adolescents' host and native communication competence showed that adolescents' host communication competence was significantly and positively associated with fathers' and mothers' host communication competence, $r(44) = .32, p < .05$, and $r(53) = .38, p < .01$, respectively. Hypothesis 2a was confirmed. Unexpectedly, fathers' native communication competence was found also to be significantly and positively correlated with adolescents' host communication competence, $r(45) = .34, p < .05$.

Neither parents' native communication competence was found to have significant correlation with adolescents' native communication competence. Hypothesis 2b was rejected. In addition, fathers' host communication competence in Canadian society was found significantly and negatively associated with adolescents' native communication competence, $r(47) = -.30, p < .05$.

Interactions between adolescents' and parents' host and native communication competence and the effects on adolescents' psychological adjustment. A series of multiple regression analyses was conducted to examine consistency between adolescents' host or native communication competence and parents' host or native communication competence and their relationships with adolescents' psychological adjustment (Research Questions 1a and 1b). Predictors were entered in the following order in multiple regression for each of the eight parent-child combinations: (a) Adolescents' score for either cultural communication competence (host or native) was entered first into the equation, followed by (b) a parent's score for either cultural communication competence, and finally by (c) the interaction between the adolescent and the parent cultural communication competence subscores. Three or fewer predictors were entered for each test, the maximum predictors for the current sample size, with probability = .90 and loss of no more than .05 predicting power (Stevens, 1996).

The results revealed four cases in which the interactions accounted for significant variance in adolescents' psychological adjustment. First, the interaction between adolescents' host communication competence and fathers' native communication competence accounted for 17% of variance, $F\Delta(1, 40) = 9.01, p < .01$, in the adolescents' father-reported internalizing problems, $R^2 = .23, p < .01$. Second, the same interaction also accounted for 7% of the variance, $F\Delta(1, 44) = 5.71, p < .05$, in the latter's self-reported depression, $R^2 = .43, p < .05$. Third, the interaction between adolescents' native communication competence and mothers' native communication competence accounted for 10% of variance, $F\Delta(1, 53) = 5.97, p < .05$, in adolescents' mother-reported internalizing problem, $R^2 = .12, p < .05$. Finally, the interaction between adolescents' host communication competence and fathers' host communication competence accounted for 11% of variance, $F\Delta(1, 39) = 5.02, p < .05$, in adolescents' father-reported internalizing problem, $R^2 = .12, p < .05$.

To further understand the meaning of significant interactions and to explore the complex relationships between parents' and children's host and native communication competence and the latter's psychological adjustment, interaction plotting, post-hoc statistical probing for simple slope analyses, was done following procedures described in Aiken and West (1992). All regression equations analyses were based on centered data in which the predictor variables were put in deviation score form so that their means equaled zero. To generate simple regression lines for plotting, values at one standard deviation above (high cultural communication competence group) and below (low cultural communication competence group) the centered mean of parent cultural communication competence were used in the following three steps.

1. Subtracting the above conditional values of standardized parent cultural communication competence (CVz) from the standardized original parent cultural communication competence (Z) created a new variable (Zcv).
2. Multiplying standardized adolescent cultural communication competence (X) with (Zcv) formed a cross-product (XZcv).
3. Adolescents' psychological adjustment (Y) was regressed on standardized adolescent cultural communication competence (X), the new variable created (Zcv), and the cross-product (XZcv).

In post-hoc probing, *t* tests were employed to examine (a) whether the slope of the simple regression line was significantly different from zero and (b) whether the slopes of a pair of simple regression lines differed significantly from one another.

Interaction between adolescents' host communication competence and fathers' native communication competence and its impact on adolescents' father-reported internalizing problems. Our post-hoc probing of the form of the interaction uncovered a positive slope between adolescents' father-reported internalizing problems and adolescents' host communication competence, slope = .05, $t(40) = 1.09$, $p < .01$, among fathers who reported low native communication competence. On the other hand, a negative slope was found, slope = $-.04$, $t(40) = -.52$, $p < .01$, among those fathers who reported higher native communication competence. The two slopes differed significantly from one another, slope = $-.05$, $t(40) = -3.00$, $p < .01$.

Interaction between adolescents' host communication competence and fathers' native communication competence and its impact on adolescents' self-reported depression. Our post-hoc probing of the form of the interaction uncovered a positive slope between adolescents' self-reported depression and adolescents' host communication competence, slope = .04, $t(44) = 1.62$, $p < .05$, among fathers who reported low native communication competence. On the other hand, a negative slope was found, slope = $-.18$, $t(44) = -2.11$, $p < .01$, among those fathers who reported higher native communication competence. The two slopes differed significantly from one another, slope = $-.07$, $t(44) = -2.39$, $p < .05$.

Interaction between adolescents' native communication competence and mothers' native communication competence and its impact on adolescents' mother-reported internalizing problems. Our post-hoc probing in the form of the interaction uncovered a positive slope between adolescents' mother-reported internalizing problems and adolescents' native communication competence, slope = .08, $t(53) = 1.33$, $p < .05$, among mothers who reported high native communication competence. On the other hand, a negative slope was found, slope = $-.18$, $t(53) = -.04$, $p < .01$, among those mothers who reported lower native communication competence. The two slopes differed significantly from one another, slope = .06, $t(53) = 2.44$, $p < .05$.

Interaction between adolescents' host communication competence and fathers' host communication competence and its impact on adolescents' father-reported internalizing problems. Our post-hoc probing in the form of the interaction uncovered a positive slope between adolescents' father-reported internalizing problems and adolescents' host communication competence, slope = .04, $t(39) = 1.37$, $p < .05$, among fathers who reported low host communication competence. On the other hand, a negative slope was found, slope =

-.04, $t(39) = -1.06$, $p < .05$, among those fathers who reported higher host communication competence. The two slopes differed significantly from one another, slope = $-.35$, $t(39) = -0.04$, $p < .05$.

Discussion

Although there is an expanding body of literature on cross-cultural adaptation, relatively little is done about relationships among cross-cultural adaptation, family environment, and psychological adjustment in immigrant children. This study has presented evidence on the dynamic nature of cross-cultural adaptation and how cultural communication competence plays a significant role in Chinese-Canadian adolescents' adaptation.

The Host and Native Communication Competence Scale

The HNCC Scale was developed based on the assumption that the items in the scale were indicators of one's communication competence in Canadian (host) and/or Chinese (native) culture. The scale had good reliability. Validity assessments were limited but promising. Given the robust psychometric properties of the HNCC Scale, it should prove to be a useful alternative for researchers interested in cross-cultural adaptation, approaching the phenomenon from a communication perspective. Further studies need to establish measurement of a person's interpersonal communication with the host and the native cultures' members based on actual rather than inferred communication activities. Also to be considered is the relationship between cultural communication competence and actual communicative behaviors, as well as other aspects of adaptation.

Gender Differences in Host and Native Communication Competence

Preliminary results indicated that, compared to male adolescents, female adolescents scored significantly higher in native communication competence, although there was no difference in their host communication competence. It has been reported that girls are more responsive and sensitive to parental influences than boys are (Hart, DeWolf, Wozniak, & Burts, 1992). In Chinese families, girls are often encouraged to stay indoors and help their mothers with household chores whereas boys are typically encouraged to go out and play with peers (Chen, Dong, & Zhou, 1995). Consequently, family and the native culture may have a greater influence on girls than on boys in Chinese immigrant families.

Relationship Between Cross-Cultural Adaptation and Psychological Adjustment

Overall, the findings have provided support to the theorized importance of host communication competence to adaptation (Kim, 1988). The results confirmed the hypothesis that adolescents' host communication competence would be associated negatively with psychological problems. It was suggested previously that, for immigrant adolescents, the problem of language or communication is mostly likely to be manifested in school settings (Zigler & Stevenson, 1993). Because English is the primary medium of communication with teachers and peers in schools, minority adolescents who have a poor command of English are less likely to attain high academic achievements. This, in turn, may contribute to the development of depression, loneliness, and other psychopathological symptoms (Charron & Ness, 1981; Zigler & Stevenson, 1993). Because communication goes beyond language proficiency, immigrant children who do not display host communication competence may be viewed by their host-culture teachers and peers as unknowledgeable, uncooperative, shy, or unfriendly (Chen, Rubin, & Sun, 1992; Zigler & Stevenson, 1993). Thus, they may not be included in circles with Canadian peers. School adjustment and establishment of Canadian social relationship networks are mediators between cross-cultural adaptation and psychological well-being. On the other hand, frustration in school and social isolation from Western peers are the links between poor host communication competence and psychological problems. The findings in this study thus provide further empirical evidence to support a suggested connection between immigrant adolescents' language proficiency or host communication competence in the Western society and their psychological adjustment.

This study also found that native communication competence in a Western environment may not always be relevant to psychological adjustment. It is possible that native communication competence is indeed not important for psychological adjustment at the adolescent stage. To the immigrant adolescents, the more important task may be to adapt to the Canadian culture, including learning the language, norms, behaviors, and values of Canadian society. Thus, the value of maintaining native communication competence may not be salient in the adolescents' life. If this proves to be the case, it would have important implications to the theorization of cross-cultural adaptation and formation of multicultural identity.

It is interesting that this study found that among Chinese-Canadian adolescents, host communication competence is negatively associated with native communication competence. On the other hand, the relation between host communication competence and native communication competence was

nonsignificant for Chinese-immigrant parents. Thus, it appears that for the Chinese-Canadian adolescents, some degree of deculturation—unlearning of their previously acquired Chinese cultural habits—is needed. It may also be the case that adolescents simply focus on one culture in their cultural socialization. This is consistent with the psychology of identity formation by Erikson (1968), which suggests that 12- to 15-year-old adolescents have just started to seek a stable identity. Dual cultural identity leaves them feeling confused and uncertain. After the resolution of the identity crisis, individuals may become secure in who they are; then they will be better equipped emotionally to deal with the issue of dual cultural identity (Erikson, 1968). This certainly explains why there was a negative association between host communication competence and native communication competence in Chinese-Canadian adolescents but not in their parents. At adolescence, Chinese-Canadian children may simply try to identify with one culture and reject the other. This also supports the view of Chinese communication competence as less relevant to psychological adjustment, which was discussed above. When children identify with one culture only—probably the Canadian (host) culture, in this case—elements of another culture become secondary, even if it is their native culture. The findings in the present study—that self-identified Chinese-Canadian adolescents reported significantly higher host communication competence but significantly lower native communication competence than self-identified Chinese adolescents—also suggest some degree of deculturation in the formation of cultural identity at the adolescent stage. This is a point with theoretical implications regarding the nature and formation of cultural identity and is certainly in need of further investigation.

Relationship Between Parents' and Children's Cross-Cultural Adaptation

Adolescents of parents who demonstrated host communication competence also reported host communication competence in Canadian society. On the other hand, no significant correlation was found between parents' and adolescents' native communication competence. The important role parents play in socialization of their children was thus confirmed with qualification in the context of cross-cultural adaptation. The hypothesized modeling function of parents' cross-cultural adaptation applied only to learning of host (Canadian) communication and not to native communication competence in Chinese culture. The findings suggest that adolescents selectively modeled parents' cultural communicative behaviors. The findings also support Bandura's (1977) social learning theory that children only imitate those observed be-

aviors that are perceived to be rewarding. That is, the adolescents might have perceived host communicative behaviors, but not native communicative behaviors, as rewarding. This points to a fact that other socializing agents than parents, such as peers, may play a significant role in adolescents' cross-cultural adaptation process. As these other socializing agents are most likely to be members of the host culture, the role of the host environment (Kim, 1988, 1995) in adolescent immigrants' cross-cultural adaptation is unmistakably a major explanation for their selective modeling of their parents' cultural communication competence. As communication between parents and adolescents in day-to-day activities is inferred in this study, further investigation is needed for the actual parent-child communicative process and its role in adolescents' cross-cultural adaptation.

Unexpected findings include the positive correlation between fathers' native communication competence and adolescents' host culture communication competence in Western society and the negative correlation between adolescents' native communication in Chinese culture and fathers' host communication competence. Possible reasons for these findings may have to do with the complexity of father-child relationships and its impact on the latter's cross-cultural adaptation. Adolescents might strive for host communication competence as a way to rebel against their fathers' native communication participation. At the same time, they might look up to their fathers' host communicative behaviors as an index for the value of maintaining native communicative behaviors in Chinese culture. In other words, fathers' demonstration of host communicative competence may be interpreted by the adolescents as an indication of the worthlessness of maintaining native communication competence in Chinese culture, and vice versa. Together, the findings suggest that both fathers' host and native communication participation would affect adolescents' adaptation process in some ways, implying that Chinese fathers play a unique role in adolescents' cross-cultural adaptation process. We could speculate this as a result of separate roles by each parent in Chinese immigrant families (Bond, 1986). In a traditional patriarchal Chinese family, the father is the figure of authority who decides on almost all important family matters and takes most responsibility for the family (Chen, Dong, et al., 1995). On the other hand, Chinese mothers are often characterized as *chi*(kind) and are seen as caretakers of the family members (Berndt, Cheung, Lau, Hau, & Lew, 1993). Given that fathers are seen as the authority figures and mothers are seen as caretakers, fathers' influence on adolescents in terms of cross-cultural adaptation tends to be stronger than the mothers' influence. Thus, influences of the native culture on Chinese-Canadian adolescents' cross-cultural adaptation are manifested in yet another way.

*Interaction Between Adolescents' and
Parents' Cultural Communication Competence and
Its Affect on Adolescents Psychological Adjustment*

In this regard, we see a rather complex picture with no straightforward relationships between variables. A pattern emerges, however, pointing to directions for further investigation on the issue. We see a positive regression of adolescents' psychological adjustment problems on adolescents' host communication competence for fathers who self-reported lower native communication competence. In contrast, adolescents' psychological adjustment problems regressed negatively on adolescents' host communication competence for fathers who self-reported higher native communication competence. In other words, for adolescents whose fathers had higher native communication competence in Chinese, the less the adolescents reported host communication competence, the more psychological problems the adolescents would have, as observed by the fathers and reported by the adolescents themselves. On the other hand, for adolescents whose fathers reported lower native communication competence, the more the adolescents reported host communication competence, the more psychological problems the adolescents would have. To explain this pattern, fathers' cultural orientation as well as the identity-related concepts of avowal and ascription must be brought to bear. As fathers of higher native communication competence might tend to think more like Chinese, they would be more concerned about the fit of their children in the social environment, but they would be unable to help, for they might have the same problem themselves. From the perspective of their children, in their problems of adaptation or external misfit, they receive little assistance from fathers ill equipped in this regard. In contrast, fathers of lower native communication competence might tend to think less like Chinese and be more concerned about the social acceptance of their children as who they felt they were: well-adapted Chinese-Canadians. That is, they might worry about incongruence between ascribed and avowed cultural identities of their children, something they probably experienced and may not have resolved. When their children have similar adaptation or identity-acceptance problems, they receive little assistance from the father. That this complex pattern should show up in two aspects, father-reported and child self-reported problems, adds to the probability of its presence.

A similar pattern was yielded in the interaction between mothers' native communication competence and adolescents' native communication competence and its affect on mother-reported internalizing problems. We see a positive regression of mother-reported internalizing problems on adolescents'

native communication competence for mothers who self-reported higher native communication competence. On the other hand, a negative regression of mother-reported internalizing problems on adolescents' native communication competence was found for mothers who reported lower native communication competence. We could interpret this as follows: Mothers of higher native communication competence in Chinese, observing adolescents with higher self-reported native communication competence, might see more psychological problems. Like fathers high in native communication competence, traditional Chinese mothers might also attach greater importance to fitting in well with the social environment. Being traditional mothers, they might be more caring and loving, and sometimes too protective of their children, to the degree that concern for their children's well-being in terms of psychological, social, and academic development in a Western society comes before their concern for Chinese cultural maintenance. To these mothers, native communication-competent behaviors in their children might not be preferred or encouraged, sensitizing them to their children's psychological adjustment problems. In contrast, for adolescents who had Chinese mothers of low native communication competence, the lower the adolescents' degree of native communication competence, the more psychological problems the mothers would observe, and vice versa. Again, adolescents might be struggling between identity avowal and ascription, while their mothers are concerned but unable to help.

Finally, it was found that for adolescents whose fathers self-reported higher host communication competence, the less the adolescents reported host communication competence, the more father-reported psychological problems the adolescents had. Conversely, when fathers self-reported lower host communication competence, the greater host communication competence reported by adolescents, the more father-reported internalizing problems they had. If fathers were indeed a model for children's acculturation, adolescents might experience a sense of inferiority when they perceive themselves as having lower host communication competence than their fathers. On the other hand, they might feel disappointed when their fathers are perceived as less communicatively competent in the host environment. This interpretation supports the differential role of a parent's host versus native communication competence in a child's cross-cultural adaptation.

In summary, the interaction findings discussed above carried the following implications: First, fathers might have a unique role in their children's cross-cultural adaptation process in Chinese immigrant families. In the matter of adolescents' cross-cultural adaptation, traditional parental role divisions in immigrant families should be taken into consideration. Second, the

interaction findings pointed to the need for further investigation into the importance of the host environment, such as host receptivity and host conformity pressure (Kim, 1988, 1995). Adolescents reported psychological adjustment problems even when their cultural communication competence was compatible with that of their parents. This indicates that other external forces, such as host receptivity, may come into play in adolescents' cross-cultural adaptation and adjustment. In addition, the speculation that Chinese immigrant adolescents were experiencing problematic congruence between ascribed and avowed cultural identity also brings attention to the role of host environment, specifically host receptivity, in cross-cultural adaptation. Given the interactive and dynamic nature of cultural identity formation, an interpretation is that adolescents' resolution of cultural identity may also depend on host receptivity, as Chinese adolescents' avowed cultural identity may not be accepted by the members of the host society. Together, these findings draw special attention to the dilemma immigrant adolescents may be facing as to how much host communication competence they should acquire. The cross-cultural adaptation process among immigrant adolescents has been shown to involve complex interaction between the child and the family, the child and the host environment, and the family and the host environment. The three entities are not necessarily in agreement or at peace with one another.

Cautions and Suggestions

First, the Chinese community is relatively large in the city where this study was conducted. For smaller, fragmented, and relatively powerless Chinese communities, the desire to maintain native communication competence and the pressures of cross-cultural adaptation may be different. One should be careful in generalizing the findings of this study to other areas. Also, the fact that the data were collected in a language school might have involved a degree of respondent self-selection, making the sample less representative. Second, adolescents are different in many ways from children in other age groups (Erikson, 1968). For instance, it has been found that adolescents are prone to emotional outbursts, drastic changes in mood, and fits of acute depression (Zigler & Stevenson, 1993). In addition, adolescents are highly peer-oriented (Berndt, 1992; Medrich, Ruizen, Rubin, & Buckley, 1982) and tend to spend more time with their peers than with parents, siblings, or any other agents of socialization (Berndt, 1992; Medrich, Ruizen, Rubin, & Buckley, 1982). Thus, it is conceivable that peers may play a particularly important role in cross-cultural adaptation at the adolescence stage. Also, the influence of Chinese culture on Chinese-Canadian cross-cultural adap-

tation may be culture-dependent. Taken together, generalization of the results of the present study to other ethnic immigrant groups, geographic locations, and age groups should respect the above-mentioned cautions.

The findings on the relation among adolescents' psychological adjustment and their cultural communication competence and that of parents should be understood with extreme caution in terms of causal influences. Although inferring causality from adolescents' cultural communication competence to psychological adjustment in cross-cultural adaptation makes conceptual sense, alternative explanations may be plausible. For instance, it may be equally valid to argue that their psychological health affects cross-cultural adaptation. To establish causal relationships between cultural communication competence and psychological adjustment, stronger evidence from a longitudinal study that starts at the pre-emigration stage is necessary.

Last, the regression analyses are mostly exploratory and the interpretations speculative, as the small sample size in the regression analyses does not allow assessment of all possible predictors. Despite this, the regressions provided an initial understanding of a complex phenomenon and lay the groundwork for further theorization and empirical work. As it is, we have learned something about the interaction between immediate members' communication patterns within immigrant families and the possible impact of such interaction on the younger members' cross-cultural adaptation process as a whole. Comprehensive studies are needed for more conclusive findings.

Note

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