

# General and acculturation-related daily hassles and psychological adjustment in first- and second-generation South Asian immigrants to Canada

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According to Lay and Nguyen (1998), in addition to the general daily hassles encountered by most people, immigrants often face chronic difficulties specific to the acculturation experience, including conflicts with family members, members of the ethnic ingroup, and members of ethnic outgroups. Moreover, it has been suggested that the children of immigrants born in Canada (i.e., second-generation immigrants) may experience different acculturative stressors from their parents (i.e., first-generation immigrants). This study examined general and acculturation-related daily hassles in 74 first- and second-generation South Asians in Canada. Participants completed a questionnaire that assessed their experience of different types of daily hassles (general, family, ingroup, and outgroup), acculturation attitudes, and level of psychological adjustment. Second-generation individuals reported significantly more ingroup hassles and marginally lower self-esteem than first-generation immigrants. For first-generation immigrants, more ingroup hassles predicted greater depression, and for second-generation individuals, increased ingroup hassles predicted lower self-esteem and more outgroup hassles predicted greater depression. The results emphasize the importance of considering the acculturation experience of second-generation individuals as being unique to that of first-generation immigrants.

Selon Lay et Nguyen (1998), en plus des embêtements de la vie quotidienne auxquelles tout le monde doit faire face, les immigrants sont souvent confrontés à des difficultés chroniques spécifiques à l'expérience d'acculturation, y compris des conflits avec des membres de la famille, le groupe ethnique d'appartenance et les autres groupes ethniques. De plus, les enfants d'immigrants nés au Canada (immigrants de deuxième génération) seraient confrontés à des stressseurs acculturatifs différents de ceux auxquels leurs parents (immigrants de première génération) sont confrontés. Cette étude examine les embêtements quotidiens généraux et liés à l'acculturation chez 74 immigrants du Canada de première et de deuxième génération provenant de l'Asie du sud-est. Les participants complètent un questionnaire qui évalue leur expérience de différents types d'embêtements quotidiens (général, familial, intragroupe, intergroupe), les attitudes d'acculturation et le niveau d'ajustement psychologique. Les individus de deuxième génération rapportent significativement plus d'embêtements intragroupe et une estime de soi marginalement plus faible que les immigrants de première génération. Chez les immigrants de première génération, des embêtements intragroupe plus élevés prédisent un plus faible estime de soi et des embêtements intergroupe plus élevés prédisent une dépression plus marquée. Les résultats montrent l'importance de considérer l'expérience d'acculturation chez les individus de deuxième génération comme différente de celle des immigrants de première génération.

## INTRODUCTION

Every day individuals encounter stressors. These daily stressors, or hassles, have been the focus of much research because they have been shown to be important indicators of psychological distress (e.g., Kanner, Coyne, Schaefer, & Lazarus, 1981; Monroe, 1983). In fact, it is argued that the cumulative nature of these general hassles makes them a stronger predictor of psychological health than major life

events (e.g., Burks & Martin, 1983; De Longis, Coyne, Dakof, Folkman, & Lazarus, 1982; Eckenrode, 1984). Certain populations are subject to daily hassles unique to their particular experience or position in life (Lay & Nguyen, 1998; Safdar & Lay, 1999). For example, in addition to general daily hassles, Lay and Nguyen (see also Saldaña, 1994; Utsey & Ponterro, 1996) argue that immigrants encounter daily hassles specific to the acculturation process. The present study extends the work of Lay and his

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colleagues by considering the relation between general and acculturation-specific hassles and psychological adjustment in first-generation (G1) and second-generation (G2) South Asian immigrants to Canada.

### Hassles and acculturation

According to Lay and Nguyen (1998), acculturation-specific hassles include perceptions of prejudice and discrimination, difficulties communicating in a new language, problems with family members, and conflict with other members of the cultural group. These stressors can be broadly grouped into three categories. The first category, outgroup hassles, includes hassles associated with interactions with members of "mainstream" society, particularly issues of racial discrimination and, in some cases, communication difficulties in a new language. The effects of prejudice and discrimination on the psychological well-being of ethnic minority groups are well documented. In a study of 5000 immigrant children, Rumbaut (1994) found that perceived discrimination was significantly related to greater incidents of depression, and expectations of future discrimination were related to increased levels of depression and lower levels of self-esteem. In a study of Turkish and Moroccan adolescents in the Netherlands, Verkuyten (1998) found that perceived personal discrimination was related to lower levels of self-esteem and perceived social competence. Such conflicts between ethnic minority individuals and the host society are in line with Essed's (1991) notion of "everyday racism".

Ingroup hassles are stressors that arise from contact with members of one's own ethnic group (Lay & Nguyen, 1998). They include difficulties such as lack of fluency in the heritage language and not feeling accepted by other members of the ethnic group (Lay & Nguyen, 1998). In her discussion of minority student stressors, Saldaña (1994) includes issues such as the perceived lack of support from members of the ethnic ingroup, difficulties in romantic relationships with members of the ingroup (particularly the availability of dating partners), and being perceived by the ethnic ingroup as behaving too much like outgroup members. In addition to these concerns, Lay and Nguyen include issues of fluency in the ingroup language and language choice negotiations with ingroup members. In their sample of Vietnamese immigrants, Lay and Nguyen found that ingroup hassles were significantly related to depression.

Family hassles are a subset of ingroup hassles (Lay & Nguyen, 1998)<sup>1</sup>. Younger immigrants may experience conflict between their parents' traditional cultural values and the contrasting values of the dominant culture (Lay &

Nguyen, 1998). Aycan and Kanungo (1998) found that the conflicts that adolescent children of immigrants experience with regards to their self-identity and the identity of their parents may be associated with behavioral and disciplinary problems. In a similar vein, Pawliuk, Grizenko, Chan-Yip, Gantous, Mathew, and Nguyen (1996) found that, although children's acculturation style was not related to their psychological functioning, the parents' acculturation style was an important predictor of children's functioning. They argued that, because children were more acculturated into the mainstream society than their parents were, the more accepting parents were of the majority culture, and the healthier was the psychological functioning in children. Rumbaut (1994) also found that the strongest predictor of lower self-esteem and higher depression among G2 immigrants was parent-child conflict. Finally, in a study that looked at the relationships between Filipino American individuals and their families, Heras and Revilla (1994) found that high levels of family satisfaction and family cohesion were related to better adjustment. Thus, it is reasonable to expect that family conflict would be related to measures of psychological adjustment.

Immigrants are also expected to experience the same types of general hassles encountered every day by all individuals, such as financial worries, future decisions, and school-related problems (Lay & Nguyen, 1998). The combination of different types of hassles may have significant consequences for the psychological adjustment of immigrants. In their comparison of the contribution of different types of hassles to psychological distress, Lay and Nguyen found support for the relation between acculturation-specific hassles and psychological distress in Vietnamese immigrants. In a subsequent study of Iranian immigrants, Safdar and Lay (1999) found that, when controlling for general hassles, outgroup hassles predicted depression, underscoring the impact of this acculturation-specific hassle. Thus, some of the distress experienced by immigrants is properly attributed to hassles specific to the acculturation process, above and beyond general hassles.

### First- and second-generation immigrants

Although a considerable amount of research has focused on G1 immigrants and their levels of psychological adjustment, there is a smaller, though increasing, body of work that systematically addresses the wellbeing of G2 individuals (see Portes, 1996; Portes & Zhou, 1993; Waldinger & Perlmann, 1998, for overviews). For example, in their multinational comparative study of ethnocultural youth, Sam and his colleagues (1998) examined the association between aspects of youths' acculturation to the host society and behavioral and school adjustment (see also Berry, 1999). In their study of Chinese-Canadian youths, Lay and Verkuyten (1999) found that the life experience of these adolescents, particularly whether they are Canadian-born or foreign-born, has implications for ethnic identity and self-esteem.

<sup>1</sup> Lay and Nguyen (1998) include family hassles with acculturation-specific hassles, but in a later paper, Safdar and Lay (1999) suggest that family hassles are not necessarily acculturation-specific. More research is needed on this issue, particularly whether some family hassles might be acculturation-specific and others might be more general. For the purposes of the present study, family hassles were included with acculturation-related hassles, following the original formulation of Lay and Nguyen.

It also seems likely that these two groups would encounter different types of stressors. Newly arrived immigrants face obstacles such as learning a new language, encountering intergroup hostility and prejudice for the first time, and facing the rejection of their educational qualifications from their country of origin (Hirschman, 1996). Because G2 individuals are socialized and educated in the mainstream society, it might be expected that they would face fewer obstacles in their daily lives (Hirschman, 1996), and hence be less vulnerable to psychological distress than G1 immigrants. The few studies that have compared the two groups, however, suggest otherwise. For example, Rumbaut (1994) found that lower self-esteem was related to being the child of an immigrant. Similarly, Heras and Revilla (1994) found that G2 ethnic minorities reported significantly lower self-esteem and self-concept than did G1 immigrants. No research that we are aware of has systematically compared the types of daily stressors experienced by these two groups to understand why there might be differences in psychological adjustment between them. Thus, the first purpose of our study is to examine these adjustment differences between generations and to consider how daily hassles may be related to wellbeing in the two groups.

### Acculturation attitudes

In plural societies, minority ethnic individuals must decide how to deal with multiple cultural influences in their lives. According to Berry (1997), the type of acculturation strategy that is preferred has implications for psychological adjustment. According to Berry's model, two main issues determine the manner of adaptation chosen. The first concerns cultural maintenance, or the perceived importance of retaining the original cultural identity and characteristics. The second concerns the desired extent of participation in the host or dominant cultural group. Depending on the extent to which one chooses to engage with each cultural group, four distinct acculturation modes are possible.

The first acculturation mode is *assimilation*, whereby individuals do not hold their original cultural identity and characteristics to be important, but value interaction with the other culture. *Separation* is defined as highly valuing the original cultural identity and characteristics and avoiding interaction with the other cultural group. *Integration* refers to valuing cultural maintenance, as well as seeking interaction with other cultural groups. Finally, *marginalization* refers to a lack of interest in either maintaining the original cultural characteristics or seeking interaction with other cultural groups. Previous research has demonstrated that integration is usually the preferred mode of acculturation. The order of preference for the other three modes of acculturation varies depending upon the ethnic group (Berry, Kim, Power, Young, & Bujaki, 1989).

There is little research examining whether G2 individuals differ from G1 immigrants in their acculturation attitudes. In their study of East Indian immigrants, however, Krishnan and Berry (1992) found that the strongest predictor of integration was being born in India as opposed

to being born in the United States, suggesting that integration may be more valued by the G1 than the G2 group. As well, in their study of Indo-Canadians, Aycan and Kanungo (1998) found that, whereas both groups preferred integration relative to all other modes, children scored higher than their G1-immigrant parents on assimilation, whereas parents scored higher than their children on separation and marginalization.

The various acculturation modes have been differentially related to successful adaptation to the host society. According to Berry (1997), the acculturation mode linked with the most positive outcomes is integration, and the one associated with the least positive outcomes is marginalization, with separation and assimilation modes falling in between. This pattern has been demonstrated in several studies on different cultural groups (e.g., Berry, Kim, Minde, & Mok, 1987; see Berry & Sam, 1996, for review). Although it was initially developed to understand sojourners' cross-cultural adaptation, Ward's (e.g., Ward & Kennedy, 1994, 1999; Ward, Okura, Kennedy, & Kojima, 1998; Ward & Rana-Deuba, 1999) model might provide some insight into the link between acculturation attitudes and psychological adjustments of immigrants. Ward and her colleagues argue that strong identification with the original group provides the social support necessary to buffer the acculturating individual from psychological distress, such as depression, anxiety, and low self-esteem. Accordingly, Ward has argued that those acculturation attitudes that emphasize the importance of maintaining ties with the original culture, separation and integration, should be positively related to psychological adjustment.

Although there has been considerable research addressing the link between acculturation attitudes and psychological adjustment (e.g., psychological wellbeing or satisfaction), relatively little research has addressed the link between attitudes and daily hassles. It would seem tenable that the more hassles are experienced with a group, the less positive are attitudes towards that group. Following this rationale, it might be expected that integration would be associated with fewer acculturation hassles overall, separation would be associated with fewer ingroup hassles (and possibly more outgroup hassles), and assimilation would be associated with fewer outgroup hassles (and possibly more ingroup hassles). At the same time, given the possibility that G1 and G2 individuals face different issues in the acculturation process, these two groups may show differences in the relations between attitudes and hassles. Following these considerations, the second purpose of this study is to explore further the link between acculturation attitudes, hassles, and psychological adjustment.

### The present study

In summary, the objectives of the present study are twofold. First, it will compare G1 and G2 immigrants with regards to their level of psychological adjustment and experience of different types of daily hassles, and determine whether different hassles differentially predict

psychological adjustment for these two groups. Second, it will consider the relations between acculturation attitudes, daily hassles, and adjustment in both groups.

The present study focuses on both G1 and G2 South Asians. South Asians include people from Pakistan, India, Nepal, Tibet, Kashmir, Burma, Sri Lanka, and Bangladesh (Ibrahim, Ohnishi, & Sandhu, 1997). The South Asian population is the second-largest visible minority group in Canada, at 670,585 people (2.32% of the national population; Statistics Canada, 1996), and the third-largest group in Saskatchewan, the province in which this study was conducted, at 3,795 people (0.38% of the provincial population; Statistics Canada, 1996). Moreover, a recent national survey (see Berry & Kalin, 1995; Kalin & Berry, 1996) indicated that Canadians of diverse cultural heritages are less comfortable with and less tolerant of groups of South Asian origin (i.e., Moslems, Indo-Pakistanis, and Sikhs) than of most other ethnic groups, suggesting that South Asians in Canada may be at risk of becoming victims of discrimination. In a similar vein, Moghaddam and Taylor (1987) found that Indian immigrant women in Montreal experienced relatively low status and were uncertain about their acceptance by mainstream society. Thus, the individuals examined in this study originate from a province in which the population of South Asians is relatively small and perhaps socially marginalized.

## METHOD

### Participants

A total of 74 university students participated in the study, 40 of whom were G1 immigrants (i.e., born outside of Canada, excluding refugees and international students) and 34 who were G2 immigrants (i.e., children of immigrants born in Canada). The G1 group had been in Canada for a mean of 6.32 years ( $SD = 4.59$ ). The G1 group consisted of 25 males (62.5%) and 15 females (37.5%) and the G2 group consisted of 10 males (29.4%) and 24 females (70.6%). A summary of the participants' characteristics (described in greater detail in the "Preliminary Results" section) is presented in Table 1.

### Materials

The following measures were used, with Cronbach alpha ( $\alpha$ ) indices of internal consistency enclosed in parentheses. An informal poll was conducted to determine which label would be most preferred by the participants. *South Asian* was the term most often chosen and thus was used throughout the questionnaire.

*Hassles inventory.* Developed by Lay and Nguyen (1998), this scale measured extremity of general (e.g., *Lack of money; Not enough time to meet my obligations*), family (e.g., *Overburdened with traditional family duties and obligations; Different values and beliefs from those of my*

**TABLE 1**  
Means, standard deviations, and *t*-values for all background variables

	First generation		Second generation		<i>t</i> -value
	Mean	SD	Mean	SD	
Age (years)	20.82	2.24	19.68	1.72	2.44*
Knowledge of heritage language <sup>a</sup>	5.95	1.41	4.26	1.56	4.87**
Knowledge of English language <sup>a</sup>	5.70	0.97	6.50	0.96	-3.56**
Ingroup contact <sup>b</sup>	4.05	0.85	3.74	0.99	1.47
Family contact <sup>b</sup>	3.37	1.00	2.88	0.98	2.12*
Outgroup contact <sup>b</sup>	4.00	0.88	4.56	0.70	-2.99**
Friends—traditional <sup>c</sup>	2.30	0.61	2.32	0.68	-0.16
Family—traditional <sup>c</sup>	2.87	0.70	2.50	0.71	2.26*
Self—traditional <sup>c</sup>	2.31	0.76	2.12	0.84	1.05

<sup>a</sup> Theoretical range is from 1 to 7. <sup>b</sup> Theoretical range is from 1 to 5.

<sup>c</sup> Theoretical range is from 1 to 4.

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

*N* (First generation) = 40; Family—traditional *N* = 39.

*N* (Second generation) = 34.

*parents*), ingroup (e.g., *People from my ethnic group not understanding my use of our native language; Not feeling well-liked by other members of my ethnic community*), and outgroup hassles (e.g., *Deciding whether certain actions are made because of my ethnic origin or because the person is rude; My fluency in English being underestimated by people from other ethnic groups*). It contained 18 general (G1:  $\alpha = .74$ ; G2:  $\alpha = .81$ ), 10 family (G1:  $\alpha = .75$ ; G2:  $\alpha = .76$ ), 15 outgroup (G1:  $\alpha = .92$ ; G2:  $\alpha = .91$ ), and 11 ingroup (G1:  $\alpha = .76$ ; G2:  $\alpha = .80$ ) hassle items. Respondents were asked to rate the extent to which each hassle has been part of their life over the past few months from 1 (not at all part of my life) to 4 (very much part of my life), such that a high mean score indicated a lot of experience with that stressor type. Informal interviews were conducted with South Asian individuals in order to determine additional acculturation-related hassles. Two consistent responses that did not appear on the original questionnaire were: *Having trouble finding a romantic partner from my ethnic group*, and *Being perceived as "too white" by people of my ethnic group*. These two items were included as ingroup hassles.

*Depression.* The Zung Self-Rating Depression Scale (SDS; Zung, 1965) was used to assess psychological, biological, and mood symptoms of depression. Respondents were asked to indicate how often they experienced a given feeling over the past few days from 1 (none or a little of the time) to 4 (most or all of the time). Positively worded items were reversed so that a high mean score indicated greater depression (G1:  $\alpha = .86$ ; G2:  $\alpha = .80$ ).

*Self-esteem.* To measure self-esteem, five positively worded items from the Rosenberg (1965) Self-Esteem Scale were used. Respondents were rated on the extent to which they agreed with statements such as *I take a positive attitude towards myself* on a 7-point scale (G1:  $\alpha = .80$ ; G2:  $\alpha = .82$ ). A high mean score indicated greater self-esteem.

*Acculturation attitudes.* A scale adapted from that of Berry and his colleagues (1989) was used to measure acculturation attitudes. The scale included six items to measure separation (e.g., *The only events people from my cultural group should go to are those offered within their cultural community; It would be better if people from my cultural group had nothing to do with English-Canadians*), seven items to measure integration (e.g., *People in my cultural group should participate in various aspects of the English-Canadian society and maintain their heritage and culture; It is important that people in my cultural group have friends in both their cultural group and the English-Canadian group*), eight items to measure marginalization (e.g., *People of my cultural heritage in Canada feel accepted neither by other people of the same background nor by English-Canadians; People in my cultural group often have difficulty deciding if they belong to their culture or English-Canadian culture*), and six items to measure assimilation (e.g., *If people of my cultural group are to be successful, they should forget their cultural origins; People from my cultural group should give up their cultural background and become like the English-Canadian majority*). Respondents assessed the extent to which they agreed with the item on a 7-point scale, such that a high mean score reflected strong endorsement of that attitude. The Cronbach  $\alpha$ s for separation, integration, marginalization, and assimilation are .71, .74, .72, and .73, respectively, for the G1 group and .85, .65, .69, and .81, respectively for the G2 group.

*Background information.* Participants recorded their age, sex, cultural heritage, place of birth, immigration status, and years in Canada. In addition, participants rated (1) their (a) English and (b) heritage language competency on two 7-point scales; (2) the amount of contact they have with (a) members of their cultural group, (b) members of their family, and (c) those in the outgroup on three separate 5-point scales; and (3) how traditional they felt (a) they are, (b) their family is, and (c) their friends are on three separate 4-point scales. High scores indicated a high degree of linguistic competency, contact, and traditional values, respectively.

## Procedure

After obtaining permission from the leaders of various religious, cultural, and national organizations, volunteers were recruited through personal contact with members of those organizations. Additional participants were recruited by asking acquaintances of respondents if they would like to take part and by asking for volunteers from the authors' psychology department's participant pool. This sampling strategy resulted in a sample of diverse individuals who were involved in various groups for different purposes. At the same time, given that the number of participants who were not connected with a cultural organization was small ( $N = 7$ ), generalization of the findings is largely limited to South Asians who are involved in such groups.

Respondents were informed of the voluntary and confidential nature of the study and were asked to complete the questionnaires at their convenience. Arrangements were made to pick up or mail in the questionnaires, as was convenient for the participant.

## RESULTS

### Preliminary analyses

The two groups were compared on all demographic variables using independent sample *t*-tests to explore possible differences between the groups. Table 1 presents the means and standard deviations for all demographic variables for both G1 and G2 groups. There was a statistically significant difference between the age of the G1 and G2 groups. However, the mean difference is less than 1 year and thus in practical terms, this difference may not be so important. As expected, G1 individuals indicated significantly greater knowledge of their heritage language than G2 individuals, and G2 individuals a greater knowledge of English than G1 individuals. Also, the G1 group reported significantly more contact with their families back home, and G2 individuals reported significantly more contact with outgroup members. None of the other comparisons yielded significant differences.

A series of *t*-tests examined whether males and females differed significantly on the measures of interest, including the two psychological adjustment measures, the four acculturation attitudes, and the four hassles indices. The results showed that females,  $M = 2.09$ ,  $SD = 0.38$ , reported slightly more depression than males,  $M = 1.86$ ,  $SD = 0.48$ ;  $t(71) = 2.31$ ,  $p = .02$ , which is consistent with previous depression research (e.g., Henriksson, Aro, & Marttunen, 1993; Stoppard & McMullen, 1999). Females also scored somewhat higher on the ingroup hassles index,  $M = 1.85$ ,  $SD = 0.61$ , than did males,  $M = 1.57$ ,  $SD = 0.36$ ;  $t(71) = 2.35$ ,  $p = .02$ . Since there was little evidence of difference between gender groups on the acculturation-related variables, both groups were combined for the major analyses.

### Comparisons between G1 and G2 groups

*Psychological adjustment.* A MANOVA was conducted to compare G1 and G2 individuals on both indicators of psychological adjustment: depression and self-esteem<sup>2</sup>. The multivariate analysis did not indicate a significant effect,  $Pillai's = .07$ ;  $F(3, 70) = 1.77$ ,  $p = .16$ ,  $\eta^2 = .07$ , but inspection of the univariate analyses showed that there was a marginally significant tendency for G1 individuals,  $M = 5.95$ ,  $SD = 0.73$ , to report slightly higher levels of self-esteem than G2 individuals,  $M = 5.61$ ,  $SD = 0.73$ ;  $F(1, 72) = 3.89$ ,  $p = .053$ ,  $\eta^2 = .05$ .

<sup>2</sup> The correlation between Self-Esteem and Depression was  $r = -.68$ ,  $p < .01$  (two-tailed) for the G1 group, and  $r = -.44$ ,  $p < .01$  (two-tailed) for the G2 group.

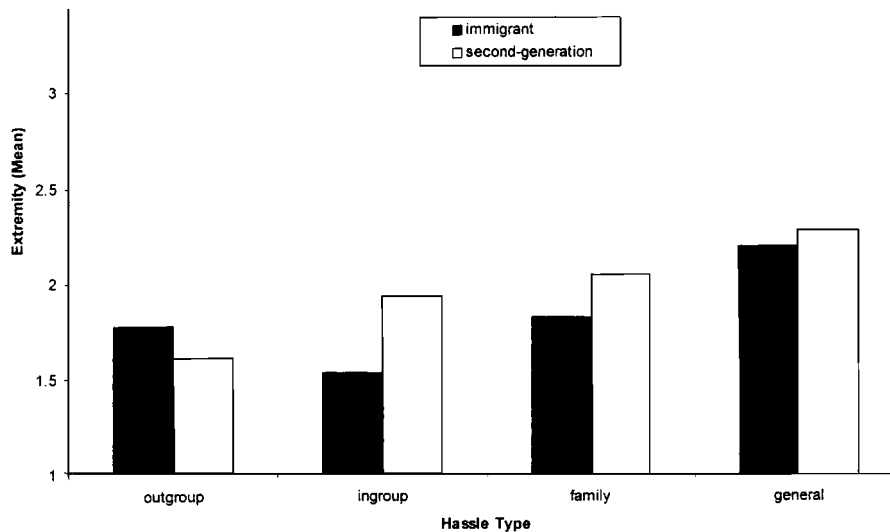


Figure 1. Perceived extremity of daily hassles as a function of hassle type and group.

**Hassles.** A  $2 \times 4$  repeated measures ANOVA was conducted with status (G1 and G2) as the between-subjects factor and hassles (outgroup, ingroup, family, and general) as the repeated measures factor. The status main effect was not significant,  $F(1, 72) = 3.45, p = .07$ , but the hassles main effect was,  $F(3, 216) = 23.29, p < .001$ . This main effect was qualified, however, by a Status  $\times$  Hassles interaction,  $F(1, 72) = 2.35, p = .13$ ; see Figure 1. Post hoc Tukey tests revealed that, within each group, there were significant differences in the intensity of most of the hassles. General hassles were the highest for both groups and higher than all other types of hassles. For the G1 individuals, family hassles were experienced more than ingroup hassles. Outgroup hassles lie midway between family and ingroup hassles, and were not significantly different from either. For G2 individuals the order of the last two types of hassles was reversed. All comparisons between hassles were statistically significant except between general hassles, and family hassles and ingroup hassles. The G2 group reported experiencing more ingroup hassles than the G1 group, but there were no other differences between the two groups with regards to the other hassle types.

**Acculturation attitudes.** A  $2 \times 4$  repeated measures ANOVA was conducted with status (G1 and G2) as the between-subjects factor and acculturation attitude (integration, separation, marginalization, and assimilation) as the repeated measures factor. No differences existed between the two groups overall,  $F(1, 71) = 0.00, p = .98$ , nor was there a significant interaction effect,  $F(3, 69) = 1.13, p = .34$ . There was, however, a main effect for acculturation

attitude,  $F(3, 69) = 318.81, p < .001$ . Post hoc Tukey tests revealed significant differences in the levels of endorsement of all attitudes, such that there was a preference for integration followed by marginalization, separation, and assimilation,  $M = 5.67, SD = 0.88$ ;  $M = 4.01, SD = 0.93$ ;  $M = 2.27, SD = 1.05$ ;  $M = 1.28, SD = 0.51$ , respectively.

### Predicting psychological adjustment

**Hassles.** Correlational and multiple regression analyses examining the relations between hassles and psychological adjustment are presented in Table 2 (see Appendix A for the intercorrelations of the hassles subscales). In the multiple regression analyses, all four hassle types were used as independent variables to predict each psychological adjustment variable<sup>3</sup>. With regards to depression, these analyses revealed that, for the G1 group, high levels of ingroup hassles were significantly related to depression at the bivariate level, although the regression equation was only marginally significant ( $p = .07$ ). For G2 individuals, all types of hassles were related to depression at the bivariate level. The strongest predictors of depression at the multivariate level were outgroup and general hassles.

With regards to self-esteem, for the G1 group, only general hassles proved to be a significant, negative predictor of self-esteem at the bivariate level, and the coefficient was significant at the multivariate level, although the equation was not significant. For the G2 group, only ingroup hassles proved to be a significant predictor at both the bivariate and multivariate levels of analysis.

<sup>3</sup> It is reasonable to maintain that acculturation attitudes moderate the effect of hassles on psychological adjustment, such that the attitude one holds may diminish or increase the relation between hassles and adjustment. To examine possible interactions between acculturation attitudes and hassles, two series of 16 multiple regression analyses were conducted, one set with depression as the dependent variable and one set with self-esteem as the dependent variable (Baron & Kenny, 1986; Jaccard, Turrisi, & Wan, 1990). For each analysis, one acculturation attitude index and one hassle index were regressed onto the dependent variable, along with the interaction term (i.e., the attitude by hassle interaction). Of the 32 analyses, only 1 yielded a significant interaction effect—the interaction of ingroup hassles and the acculturation mode assimilation predicted self-esteem for G2 individuals significantly better than the two main effects alone. Given the likelihood of finding a significant difference by chance with such a large number of analyses, it was concluded that there is little evidence of a moderating relationship between these three variables.

TABLE 2

Summary of standard multiple regression analyses: Hassles predicting self-esteem and depression

Hassles	Self-esteem				Depression			
	R <sup>2</sup>	F	r	Beta	R <sup>2</sup>	F	r	Beta
<i>First generation (N = 40)</i>								
Outgroup			-.14	-.19			.02	0.08
Ingroup			.00	-.04			.39*	0.41*
Family			-.13	-.31			.03	-0.20
General	.16	1.67	-.26	-.37*	.21	2.37	.24	0.24
<i>Second generation (N = 34)</i>								
Outgroup			-.21	-.05			.67*	0.52**
Ingroup			-.53**	-.49**			.49**	0.23
Family			-.26	-.10			.40*	0.05
General	.30	3.05*	-.19	-.01	.69	16.10	.56**	0.37**

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Two-tailed tests were used with all bivariate correlations.

TABLE 3

Summary of standard multiple regression analyses: Acculturation attitudes predicting self-esteem and depression

Attitudes	Self-esteem				Depression			
	R <sup>2</sup>	F	r	Beta	R <sup>2</sup>	F	r	Beta
<i>First generation (N = 39)</i>								
Assimilation			-.23	-.14			.33*	.10
Marginalization			-.21	-.08			.11	-.05
Integration			-.09	-.34			-.08	.22
Separation	.24	2.66*	-.38*	-.42*	.28	3.34*	.50**	.55*
<i>Second generation (N = 34)</i>								
Assimilation			-.12	.19			.17	.08
Marginalization			-.13	-.10			.32	.24
Integration			-.13	-.07			.15	.31
Separation	.05	.41	-.05	-.19	.31	3.24*	.40**	.44*

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Two-tailed tests were used with all bivariate correlations.

*Acculturation attitudes.* A similar strategy to that described with regard to hassles was adopted to examine the relation between acculturation attitudes and psychological adjustment (see Table 3; see Appendix B for inter-correlations of the acculturation attitudes subscales). For G1 immigrants, correlational and multiple regression analyses revealed that separation was linked to lower levels of self-esteem. Although both separation and assimilation were associated with depression at the bivariate level, only separation predicted depression at the multivariate level. For G2 individuals, the correlational and multiple regression analyses indicated that only separation was significantly related to high depression. There were no significant correlates of self-esteem.

### The relations between hassles and acculturation attitudes

Correlational analyses (see Table 4) revealed that, for G1 immigrants, separation was related to increased outgroup hassles and assimilation was related to increased family hassles. Integration was related to fewer ingroup hassles and fewer family hassles. For G2 individuals, separation

and assimilation were both positively related to increased outgroup hassles.

## DISCUSSION

The present study had two objectives. First, it examined G1 and G2 immigrants with regard to their level of psychological adjustment and considered whether the types of daily hassles differentially predict psychological adjustment for these two groups. Second, it examined the relations between acculturation attitudes, daily hassles, and adjustment.

### Hassles, adjustment and immigration status

With regards to the first objective, the results indicated that, consistent with the findings of Rumbaut (1994) and Heras and Revilla (1994), there was a tendency for G2 individuals to have lower self-esteem than G1 individuals. At the same time, it is important to note that both groups have relatively high self-esteem, and the size of this difference is not large.

**TABLE 4**  
Correlations between hassles and acculturation attitudes

Acculturation Attitudes	Hassles			
	Outgroup	Ingroup	Family	General
<i>First generation (N = 39)</i>				
Separation	.41*	.10	.23	.24
Integration	-.21	-.42**	-.42**	-.09
Assimilation	.31	.16	.42**	.27
Marginalization	.15	.14	-.13	-.21
<i>Second generation (N = 34)</i>				
Separation	.80**	.17	.13	.10
Integration	-.27	.21	.05	.18
Assimilation	.55**	.13	.00	-.19
Marginalization	.22	.17	-.15	-.02

\*  $p < .05$ ; \*\*  $p < .01$  (two-tailed).

Parelling this difference in psychological adjustment, the two groups reported that they encountered different types of hassles. G2 individuals were more likely to experience ingroup hassles than G1 individuals. Several explanations might account for this finding. First, in light of the generational differences found with regard to language and contact indices, G2 individuals' experience of more ingroup hassles may be due to a loss of the original culture resulting from more contact with the outgroup and less contact with family members in the country of origin. This shift in contact patterns may contribute to increased conflict with the original ethnic group. An alternative explanation is that G1 individuals experience fewer ingroup hassles because of the ingroup cohesiveness that develops as G1 individuals face a challenging situation. In a study of Chinese students, Pak, Dion, and Dion (1991) found that experiences of discrimination resulted in greater ingroup cohesion. The present study found that G1 individuals reported slightly more outgroup hassles (although not statistically significant) than G2 individuals. It is possible that the fewer ingroup hassles experienced by G1 immigrants may stem from higher levels of ingroup cohesion, which in turn may be associated with higher levels of perceived discrimination.

The type of hassles encountered by each group had different implications for psychological adjustment. Consistent with research on daily hassles (e.g., Kanner et al., 1981; Monroe, 1983), general hassles were a strong predictor of psychological distress for both status groups. Immigration status is important, however, for the link between acculturation-specific hassles and wellbeing. The results indicated that ingroup hassles predicted adjustment in both groups. The more one experiences a lack of fluency in their native language, feels isolated from members of the ethnic community, or fears that they are perceived as rejecting their culture, the greater is depression in the G1 group, and the greater is depression and the lower is self-esteem in the G2 group. These results are consistent with Lay and Nguyen's (1998) findings that ingroup hassles were significantly related to depression. They are also consistent with Ward's (e.g., Ward & Kennedy, 1994) contention that support from the original group is important for buffering

the effects of stressors on individuals' psychological adjustment. The absence of this support or prevalence of problems within this support group may therefore lead to psychological distress.

Outgroup hassles were also linked to depression in the G2 group. As in the Lay and Nguyen (1998) study, however, outgroup hassles were unrelated to distress in the G1 group. Perhaps, as Lay and Nguyen point out, some individuals encounter prejudice in their interactions with the majority group because of their opportunities for contact with the mainstream society, and hence increased exposure to negative societal attitudes towards the immigrant group. Because G2 individuals have greater contact with members of the host society, issues of racism may be more salient to them, and hence more likely to affect their mood state relative to their G1 counterparts. This finding suggests that a critical level of social integration into the outgroup is necessary for negative attitudes to have an effect on wellbeing.

In summary, both ingroup and outgroup hassles play a significant role, and family hassles a minor role, in the psychological wellbeing of G2s, whereas for G1 only ingroup hassles contribute to psychological distress. The combined impact of these three acculturation-specific hassles may account for the somewhat greater psychological distress in G2 compared to G1 immigrants (Heras & Revilla, 1994; Rumbaut, 1994).

### Acculturation attitudes, hassles and adjustment

Whereas no differences existed between the two status groups in terms of preferred acculturation mode, overall there was a strong preference of the whole sample for integration, followed by marginalization, assimilation, and finally separation. This finding is consistent with previous research that demonstrated that South Asians (e.g., Aycan & Kanungo, 1998; Berry, 1999; Krishnan & Berry, 1992), and cultural groups in general (e.g., Berry et al., 1989), tend to prefer integration. This attitude is consistent with the Canadian government's position on multiculturalism, which is that citizens should maintain their heritage while having full participation in the general society. At the same time, marginalization was the second most strongly endorsed acculturation mode (see also Aycan & Kanungo, 1998). At times, then, the individuals in this study feel as though they belong to both cultures and at other times, they feel that they do not belong to either. This finding may be linked to Berry and Kalin's (1995; see also Moghaddam & Taylor, 1987) observation that South Asian groups are somewhat marginalized in Canada. It would seem that the acculturation tendencies within this group reflect the broader, somewhat contradictory, societal attitudes towards the group.

There was no evidence to suggest, however, that these feelings of integration and marginalization were associated with psychological adjustment for either group. These findings contradict other studies which indicated that integration is related positively, and marginalization negatively,



to psychological wellbeing (e.g., Berry & Sam, 1996; Berry, Kim, Minde, & Mok, 1987). Separation, however, predicted low self-esteem and high depression in the G1 sample and high depression in the G2 sample. This finding is contrary to Ward's (e.g., Ward & Kennedy, 1994) hypothesis that psychological adjustment would be positively related to those attitudes that support identification and engagement with the culture of origin (i.e., integration and separation). Separation may be a reaction to negative encounters with the outgroup, which may account for the lower levels of psychological wellbeing associated with this acculturation strategy. Also, separation attitudes may be linked with anxiety associated with feeling unable to be actively involved with other cultures (cf. Krishnan & Berry, 1992).

Although few correlations were found between the acculturation attitudes and adjustment variables, attitudes towards acculturation predicted some acculturation-specific hassles. In line with the hypothesis that outgroup hassles would be associated with negative attitudes towards the outgroup, for both G1 and G2 individuals, separation was linked with more outgroup hassles. This finding is consistent with the possibility that the perception of racism is associated with a rejection of the discriminatory group. In line with the hypothesis that assimilation attitudes would be linked with ingroup hassles (which includes family hassles) for G1 immigrants, a positive attitude towards assimilation was related to more family hassles. This result is in line with studies (e.g., Pawliuk et al., 1996) which suggest that advanced assimilation into the new culture that is inconsistent with a family's traditional values may be problematic for G2 individuals.

Other results were less consistent with the hypotheses regarding the link between acculturation attitudes and hassles. Contrary to expectation, G2 individuals who preferred assimilation were more likely to experience outgroup hassles. This pattern was also marginally evident for G1 individuals ( $p = .054$ ). This result suggests that, despite a desire to become like the majority society, immigrants may face barriers preventing them from doing so. Returning to an earlier point, it may be that a certain level of social interaction with the outgroup must take place before immigrants recognize discriminatory behaviours. Because they have more contact with the outgroup than G1 immigrants, G2 individuals may be more likely to encounter such racist situations, and hence the relationship between outgroup hassles and assimilation attitudes is stronger.

There were also mixed results with regards to the association between integration and hassles. In line with expectation, for G1 immigrants, greater integration was associated with fewer ingroup and family hassles, and there was also a tendency for fewer outgroup hassles. At least for G1 immigrants, the desire to engage with both groups was linked with less hassles with those groups. This pattern, however, was not evident for G2 individuals, and future research might address the reason for this differential pattern across the two groups. Overall, then, acculturation-specific hassles are related to acculturation

attitudes in a meaningful manner, although future research might well continue to address the discrepancies from expected patterns across the two generations in other contexts of intercultural contact.

### Limitations and directions for future research

Although this research extends previous research by pointing to the differential patterns of relations between hassles, acculturation attitudes, and psychological adjustment for G1 and G2 individuals, there are limitations that need to be addressed in future studies. One limitation is that South Asians comprise a very diverse group of people (cf. Kalin & Berry, 1996). The Indian subcontinent is home to several languages and religions (Ibrahim, Ohnishi, & Sandhu, 1997), and these subcultural differences could affect the cross-cultural adaptation process. Depending on the degree of religious, socioeconomic, and political similarity between the immigrant and the host cultures, different types of hassles may be more or less extreme. Although desirable, a comparison of subgroups was not possible in the present study (given the small population of South Asians in the province and the attendant difficulties of obtaining a large sample). Future research could address these limitations by accessing a larger sample and considering the influence of other background variables (e.g., religion, socioeconomic status).

A second limitation relates to the correlational nature of the study. It is not viable to claim any causal directions between acculturation attitudes, daily hassles, and psychological adjustment; longitudinal and, where possible, experimental designs are necessary to determine the causal sequence between these variables. Finally, a third limitation concerns the exclusive focus on South Asian immigrants to Canada. Comparisons with G1 and G2 individuals from other ethnocultural groups would be useful in order to delimit contextual variations in the issues discussed here.

Despite these limitations, this study responds to the call of several scholars who have criticized research on cultural contact for being sporadic, unsystematic, and atheoretical, and called for more attention to "mainstream" models of stress and coping (e.g., Ward & Kennedy, 1994; Young & Evans, 1997). By highlighting the role of acculturation-specific hassles, the present study contributes to the development of models of acculturation stress that are informed by models that have proven useful in other social domains (e.g., Dohrenwend & Dohrenwend, 1981; Kanner et al., 1981; Lazarus & Folkman, 1984). Moreover, the results demonstrate that the unique experience of G2 individuals must be recognized in order to further our understanding of immigration and the acculturation process.

## REFERENCES

- Aycan, Z., & Kanungo, R.N. (1998). Impact of acculturation on socialization beliefs and behavioral occurrences among Indo-Canadian immigrants. *Journal of Comparative Family Studies*, 29, 451–467.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Berry, J.W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, 46, 5–68.
- Berry, J.W. (1999). *Adaptation of Indo-Canadian youth*. Paper presented at the OSA convention, Toronto, Ontario, July.
- Berry, J.W., & Kalin, R. (1995). Multicultural and ethnic attitudes in Canada: An overview of the 1991 national survey. *Canadian Journal of Behavioural Science*, 27, 301–320.
- Berry, J.W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review*, 21, 491–511.
- Berry, J.W., Kim, U., Power, S., Young, M., & Bujaki, M. (1989). Acculturation attitudes in plural societies. *Applied Psychology: An International Review*, 38, 185–206.
- Berry, J.W., & Sam, D. (1996). Acculturation and adaptation. In J.W. Berry, M.H. Segall, & C. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology, Vol. 3. Social behavior and applications* (2nd ed., pp. 291–326). Boston: Allyn & Bacon.
- Burks, N., & Martin, B. (1983). Everyday problems and life-change events: Ongoing versus acute sources of stress. *Journal of Human Stress*, 11, 27–35.
- De Longis, A., Coyne, J.C., Dakof, G., Folkman, S., & Lazarus, R.S. (1982). Relationships of daily hassles, uplifts and major life events to health status. *Health Psychology*, 1, 119–136.
- Dohrenwend, B.S., & Dohrenwend, B.P. (1981). *Stressful life events and their contexts*. New York: Prodist.
- Eckenrode, J. (1984). Impact of chronic and acute stressors on daily reports of mood. *Journal of Personality and Social Psychology*, 46, 907–918.
- Essed, P. (1991). *Understanding everyday racism: An interdisciplinary theory*. Newbury Park, CA: Sage.
- Henriksson, M.M., Aro, H.M., & Marttunen, M.J. (1993). Mental disorders and comorbidity in suicide. *The American Journal of Psychiatry*, 150, 935–940.
- Heras, P., & Revilla, C.A. (1994). Acculturation, generational status, and family environment of Filipino Americans: A study in cultural adaptation. *Family Therapy*, 21, 129–138.
- Hirschman, C. (1996). Studying immigrant adaptation from the 1990 population census: From generational comparisons to the process of “becoming American”. In A. Portes (Ed.), *The new second generation* (pp. 54–81). New York: The Russell Sage Foundation.
- Ibrahim, F., Ohnishi, H., & Sandhu, D.S. (1997). Asian American identity development: A culture specific model for South Asian Americans. *Journal of Multicultural Counseling and Development*, 25, 34–50.
- Jaccard, J., Turrisi, R., & Wan, C.K. (1990). *Interaction effects in multiple regression*. Newbury Park, CA: Sage.
- Kalin, B., & Berry, J.W. (1996). Interethnic attitudes in Canada: Ethnocentrism, consensual hierarchy and reciprocity. *Canadian Journal of Behavioural Science*, 28, 253–261.
- Kanner, A.D., Coyne, J.C., Schaefer, C., & Lazarus, R.S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine*, 4, 1–39.
- Krishnan, A., & Berry, J.W. (1992). Acculturative stress and acculturation attitudes among Indian immigrants to the United States. *Psychology and Developing Societies*, 4, 187–212.
- Lay, C., & Nguyen, T. (1998). The role of acculturation-related and acculturation non-specific hassles: Vietnamese-Canadian students and psychological distress. *Canadian Journal of Behavioral Science*, 30, 172–181.
- Lay, C., & Verkuyten, M. (1999). Ethnic identity and its relation to personal self-esteem: A comparison of Canadian-born and foreign-born Chinese adolescents. *The Journal of Social Psychology*, 139, 288–299.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, coping and adaptation*. New York: Springer-Verlag.
- Moghaddam, F.M., & Taylor, D.M. (1987). The meaning of multiculturalism for visible minority immigrant women. *Canadian Journal of Behavioural Science*, 19, 121–136.
- Monroe, S.M. (1983). Major and minor life events as predictors of psychological distress: Further issues and findings. *Journal of Behavioral Medicine*, 6, 189–205.
- Pak, A.W.P., Dion, K.L., & Dion, K.K. (1991). Social-psychological correlates of experienced discrimination: Test of the double jeopardy hypothesis. *International Journal of Intercultural Relations*, 15, 243–254.
- Pawliuk, N., Grizenko, N., Chan-Yip, A., Gantous, P., Mathew, J., & Nguyen, D. (1996). Acculturation style and psychological functioning in children of immigrants. *American Journal of Orthopsychiatry*, 66, 111–121.
- Portes, A. (1996). *The new second generation*. New York: Russell Sage Foundation.
- Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy*, 530, 74–96.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rumbaut, R.G. (1994). The crucible within: Ethnic identity, self-esteem, and segmented assimilation among children of immigrants. *International Migration Review*, 28, 748–794.
- Safdar, S.F., & Lay, C.H. (1999). *The relations of minority/immigrant-specific and nonspecific daily hassles to psychological distress*. Unpublished manuscript. York University, Toronto, Canada.
- Saldana, D.H. (1994). Acculturative stress: Minority status and distress. *Hispanic Journal of Behavioral Sciences*, 16, 116–128.
- Sam, D.L., Berry, J.W., Westin, C., Virta, E., Kwak, K., Liebkind, K., Schmitz, P., Madden, T.L., Phinney, J.S., Vedder, P., Eldering, L., & Horenczyk, G. (1998). *School adjustment of ethnocultural adolescents in plural societies: Findings from a 7-nation study*. Symposium conducted at the 24th International Congress of Applied Psychology, San Francisco, California, August.
- Statistics Canada. (1996). *Profile census divisions and subdivisions in Saskatchewan, Volume 1*. Canada: Author.
- Stoppard, J.M., & McMullen, L.M. (Eds.). (1999). Depression: Qualitative research approaches [Special issue]. *Canadian Psychology*, 40 (2).
- Utsey, S.O., & Ponterotto, J.G. (1996). Development and validation of the Index of Race-Related Stress (IRRS). *Journal of Counseling Psychology*, 43, 490–501.
- Verkuyten, M. (1998). Perceived discrimination and self-esteem among ethnic minority adolescents. *The Journal of Social Psychology*, 138, 479–493.
- Waldinger, R., & Perlmann, J. (1998). Second generations: Past, present, future. *Journal of Ethnic and Migration Studies*, 24, 5–24.
- Ward, C., & Kennedy, A. (1994). Acculturation strategies, psychological adjustment, and sociocultural competence during cross-cultural transitions. *International Journal of Intercultural Relations*, 18, 329–343.
- Ward, C., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations*, 23, 659–677.
- Ward, C., Okura, Y., Kennedy, A., & Kojima, T. (1998). The U-curve on trial: A longitudinal study of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations*, 22, 277–291.

Ward, C., & Rana-Deuba, A. (1999). Acculturation and adaptation revisited. *Journal of Cross-Cultural Psychology*, 30, 422-442.

Young, M.Y., & Evans, D.R. (1997). The wellbeing of Salvadoran refugees. *International Journal of Psychology*, 32, 289-300.

Zung, W.W. (1965). A self-rating depression scale. *Archives of General Psychiatry*, 12, 63-70.

## APPENDIX A

### Intercorrelations between hassles subscales

	<i>Outgroup</i>	<i>Ingroup</i>	<i>Family</i>	<i>General</i>
<i>First generation (N = 39)</i>				
Outgroup	1.00			
Ingroup	-.08	1.00		
Family	.14	.31	1.00	
General	-.02	.20	.36*	1.00
<i>Second generation (N = 34)</i>				
Outgroup	1.00			
Ingroup	.28	1.00		
Family	.20	.31	1.00	
General	.20	.27	.46*	1.00

\*  $p < .05$  (two-tailed).

## APPENDIX B

### Intercorrelations between acculturation strategies subscales

	<i>Assim</i>	<i>Margin</i>	<i>Integ</i>	<i>Separ</i>
<i>First generation (N = 39)</i>				
Assimilation	1.00			
Marginalization	.01	1.00		
Integration	-.50**	.06	1.00	
Separation	.62**	.27	-.45**	1.00
<i>Second generation (N = 34)</i>				
Assimilation	1.00			
Marginalization	-.01	1.00		
Integration	-.58**	.19	1.00	
Separation	.62**	.07	-.35*	1.00

Assim = Assimilation, Margin = Marginalization, Integ = Integration, Separ = Separation.

\*  $p < .05$  (two-tailed).