LANGUAGE, IDENTITY, AND ADJUSTMENT
The Role Of Linguistic Self-Confidence in the Acculturation Process

KIMBERLY A. NOELS
GORDON PON
RICHARD CLÉMENT
University of Ottawa

Research in both cross-cultural psychology and the social psychology of language has examined the changes in identity and language behavior that occur when two ethnolinguistic groups come into contact. This study attempted to integrate these two fields of inquiry through an investigation of the relations between identity, interethnic contact, linguistic self-confidence, and psychological adjustment in 179 Chinese university students. The findings indicated that exclusive identification with either the first or second language group was the most commonly endorsed identity. Correlational and path analyses of the relations between interethnic contact, self-confidence in using the English and Chinese languages, Chinese and Canadian identities, and adjustment variables supported the proposed model in which communication variables mediate the influence of inter-ethnic contact on identity and adjustment. The results are interpreted within the context of current formulations of acculturation and intercultural communication.

Regular contact with members of another ethnic group can have many implications for an individual's identity, language behavior, and psychosocial adjustment and stress (Berry, 1980, 1990). Interest in these acculturation issues is evident in both cross-cultural psychology and the social psychology of language, although it is only recently that researchers have attempted to integrate relevant variables from the two approaches (cf. Gardner, Przedzielewski, & Lysynchuk, 1990; Lanca, Roese, Alksnis, & Gardner, 1992; Young & Gardner, 1990). The

AUTHORS' NOTE: This research was supported by a grant from the Social Science and Humanities Research Council of Canada to the third author and by a doctoral fellowship from the same agency to the first author. The authors would like to thank Peter MacIntyre for his helpful comments on an earlier draft of this article. Correspondence should be addressed to K. A. Noels, Department of Communication, University of California, Santa Barbara, CA 93106, USA.

present research extends this integration by considering the link between ethnic identity, language behavior, and psychosocial adjustment, as it pertains to the acculturation of Chinese university students in a cosmopolitan North American city.

Acculturation refers to “those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact” (Redfield, Linton, & Herskovits, 1936, p. 149). Among these phenomena, one that has received considerable attention is ethnic identity. Ethnic identity refers to that part of an individual’s self-concept that concerns how he or she relates to the native ethnic group and to other relevant ethnic groups (Phinney, 1990). Although it is often indexed through other facets of acculturation, such as ethnic behaviors (e.g., language preference or participation in the cultural community) or through arbitrary labeling by the researcher (e.g., by last name or native language), ethnic identity is probably better assessed as a subjective feeling of belongingness to a particular ethnic group (cf. Barth, 1969; Leets, Giles, & Clément, 1996; Phinney, 1990).

Because interethnic contact implies the existence of at least two ethnic groups, adequate understanding of ethnic identity requires that both membership in the original ethnic culture and membership in the other relevant culture be considered independently of one another (Der Karabetian, 1980; Fernandez & Sanchez, 1991; Sayregh & Lasry, 1993; Szapocznik, Kurtines, & Fernandez, 1980; Zak, 1973, 1976). According to Berry (1980, 1990), depending on the degree of engagement in each of the two groups, four modes of acculturation can be identified. These include (a) separation (i.e., relatively exclusive involvement in the native ethnic community), (b) assimilation (i.e., relatively exclusive involvement in the target ethnic community), (c) deculturation or marginalization (i.e., rejection of both cultures as ethnic reference groups), and (d) integration (i.e., high levels of implication in the native ethnic group as well as high levels of involvement in the other ethnic community). In their investigation of attitudes toward the process of acculturation, Berry and his colleagues have generally found that individuals prefer to experience integration (e.g., Berry, Kim, Power, Young, & Bujaki, 1989).

In their examinations of ethnic identity (as opposed to the acculturation attitudes examined by Berry), Clément and his colleagues have found different results. According to Clément and Noels’s (1991, 1992) situated approach to ethnic identity, feelings of ethnic group belonging vary across a variety of relevant situations. Individuals are motivated to maintain a positive self-regard, such that when confronted with alternative courses of action, they will choose the one that enhances self-presentation given the particular context (cf. Garrett, Giles, & Coupland, 1988; Giles & Johnson, 1981). Individuals will therefore attempt to negotiate that identity that provides the most benefits with
regard to self-esteem in a given situation. One would, in effect, slip in and out of particular ethnic group memberships as required by immediate contextual demands (cf. Collier & Thomas, 1988). Using this situated approach, it has generally been found that individuals do not endorse both identities at the same time, but one or the other identity (Clément, Gauthier, & Noels, 1993; Clément & Noels, 1992; Clément, Sylvestre, & Noels, 1991; Sylvestre, 1992). That is, separation and assimilation profiles best describe acculturation as it is experienced in terms of situated ethnic identity.

Although the previous studies described these two identity profiles, they did not examine the process by which either of the profiles is achieved. In examining factors and processes likely to influence acculturation, several authors maintain that variations in identity are a function of linguistic practices (Clément, 1984; Collier & Thomas, 1988). According to Kim (1988), patterns of communication between members of a group eventually become an established, consensual system of coding and decoding information about the world that is specific to the individuals of that network. Because language is the primary medium through which this communication of cultural information occurs, language and identity are intimately linked. One ramification of this assumption is that as new communication routines become established, as happens when learning a second language, identity may change.

The impact of acquiring a second linguistic system on ethnic identity has been outlined in several social psychological models of language learning (see Gardner, 1985). According to Clément's (1980, 1984) sociocontextual model of second language learning, aspects of contact with the second language group, such as the frequency and quality of contact, lead to variations in the individual's level of linguistic self-confidence. Self-confidence, defined as self-perceptions of communicative competence and concomitant low levels of anxiety in using the second language, leads to increased usage of, and communicative competence in, the second language. These language variables are, in turn, related to variations in identification with the second language group and with the original language group. More specifically, with increased second language competence, the individual will come to identify with the second language community. For minority group members, the development of second language skills and of a second ethnic identity may undermine the original ethnic identity (cf. Lambert, 1978).

Indeed, some empirical research supports the postulated process. Clément (1986) reported results that suggest a strong relation between aspects of interethnic contact and self-confidence in the capacity to use the second language, on the one hand, and level of linguistic assimilation to the second language group, on the other hand. In two studies,
Pak, Dion, and Dion (1985; Dion, Dion, & Pak, 1990) investigated the relations between variables purported to influence second language acquisition and acculturation in Chinese residents of Toronto. Of particular relevance to the present study, the results indicated that self-confidence with using English as a second language was related to linguistic acculturation and may also be related to cultural acculturation in certain contexts. At least for some groups, then, second language variables may relate to identity in a way that suggests that the acquisition of a new language and culture coincides with the loss of the original culture. Nevertheless, these studies did not examine acculturation in terms of feelings of ethnic identity per se. Thus the first goal of this study is to determine whether there is indeed a link between contact, linguistic self-confidence, and ethnic identity.

Interethnic contact and linguistic self-confidence may also be important correlates of psychosocial adjustment (cf. Church, 1982; Kim, 1988; Nishida, 1985; Wong-Rieger & Quintana, 1987). According to Kim (1988), it is through communication that we learn to relate to the environment and are able to fulfill various human needs. Consequently, harmonious adaptation occurs to the extent that we are capable of communicating with individuals in that environment. In a situation of interethnic contact, then, it becomes necessary to acquire the skills and knowledge necessary to operate effectively and appropriately in that culture (LaFromboise, Coleman, & Gerton, 1993; Rogler, Cortes, & Malgady, 1991; Tran, 1990a, 1990b). Second language variables—including a preference for, knowledge of, and self-confidence in using the second language—have been shown to be linked to lower levels of stress (Chataway & Berry, 1989) and higher levels of satisfaction with the self and society and/or a greater sense of personal control (Dion, Dion, & Pak, 1992; Dion et al., 1990; Krause, Bennett, & Tran, 1989; Pak et al., 1985) in a variety of ethnic groups. These findings indicate that communicative competence in the second language may be a potential mediator of the stressors of acculturative contact.

In summary, the goals of this study are threefold. First, because previous research on acculturation attitudes demonstrated that people desire to maintain two cultures simultaneously, patterns of identification were examined to determine if similar results are evident with regard to ethnic identity. Second, to understand the acculturation process, particularly as it is elaborated in the sociocontextual model, the interrelations between identity, interethnic contact, and linguistic self-confidence were investigated. Third, to determine whether communication variables mediate the influence of contact on adjustment, these variables' interrelations were examined.
METHOD

SUBJECTS

Two hundred and one students attending the University of Ottawa and Carleton University completed the questionnaire. Respondents whose mother tongue was not Chinese were eliminated from the sample, resulting in 179 participants. Eighty-eight percent of the sample were unmarried, and 44% were female. The students ranged in age from 17 to 38 years, with a mean of 21.8 years.

In terms of birthplace, 47% were born in Hong Kong; 17% in Canada; 11% in China; and 19% in Taiwan, Malaysia, and other East Asian areas. The length of time these individuals had spent in Canada ranged from 1 month to 29 years, with a mean of 8.25 years. Forty-seven percent were in Canada as foreign "visa" students, 14% had landed immigrant status, and 38% were Canadian citizens. With regard to educational background, 46% received their secondary education in Canada, 10% had started their secondary education abroad and completed it in Canada, whereas 39% completed it before coming to Canada. The students were in their first (31%), second (26%), third (20%), or fourth (11%) year at the university. The most popular majors were social sciences (25%), business (22%), engineering (16%), and computer science (13%).

As these descriptors show, this sample is heterogeneous on numerous aspects. Because the purpose of this study is to understand the process of acculturation, and not simply group differences in the level of acculturation, the scores were not standardized within demographic groups. It was felt that this strategy preserved the sample variation in degree of exposure to the Canadian culture and hence preserved the acculturation continuum created by including participants of diverse social standing. Given the goals of this study, and in comparison with other studies of acculturation, the composition of the present sample is therefore deemed to be an advantage.

Furthermore, whereas earlier studies of situated ethnic identity have generally focused on groups with minimal differences (usually only in terms of language), the present group represents a rigorous test of the replicability of previous findings because it differs from the contrast group ("Canadians") in terms of linguistic, cultural, and physical characteristics. In the Ottawa-Hull region, the Chinese community represents a small proportion of the population. According to Statistics Canada (1992), approximately 1% of Ottawa residents claim Chinese as their mother tongue and declare themselves to be of Chinese ethnic origin. At the same time the community is quite active: For example, both of the universities from which the present sample was drawn support numerous South-East Asian student organizations. Thus, although it is a small group, the opportunity for individuals to be involved in both the Chinese and Canadian communities remains.
MATERIALS

The instruments used in this study were developed in English. To satisfy those respondents who would prefer to answer in their first language, the questionnaire was translated into the Chinese language, with back translation to English to check for accuracy. A description of the English version of the scales follows, along with the Cronbach alpha index of internal consistency (α) where appropriate.

Lifestyle and Contact with First and Second Language Groups

*Chinese lifestyle.* The participants were presented with five statements describing various activities (e.g., The movies I attend are . . . ). Each activity was rated on a 5-point scale ranging from 1 (only Canadian) to 5 (only Chinese) (α = .78).

*Chinese language use.* Three statements described different language use milieus (i.e., work, school, and home). Respondents chose from five available responses that ranged from 1 (only English) to 5 (only Chinese) the one that best corresponded to actual language use in the different settings (α = .73).

*Chinese community participation.* Respondents placed themselves along a 5-point scale that indicated the frequency of their participation in the activities of the Chinese community. A high score indicates a high degree of participation in these activities.

*Frequency of contact.* The participants evaluated the frequency of contact with Canadians during the 6 months prior to the survey by placing themselves on a 5-point scale, defined at one end by 1 (not frequent at all) and at the other end by 5 (extremely frequent).

*Quality of contact.* This two-item scale, derived from Clément (1988), evaluated the extent to which the participants considered their contact with Canadians to be generally pleasant (α = .50), using a 6-point Likert-type scale anchored at one end by disagree strongly and at the other end by agree strongly. A high score indicated high-quality contact.

Linguistic Self-Confidence

*Self-perceptions of linguistic competence.* Self-perceptions of English competence were determined through the use of four 7-point scales (Clément, 1988). The four scales were related, respectively, to four aspects: writing, comprehension, reading, and speaking. The respon-
Students indicated the extent to which they felt they were competent in each of these areas on scales, from 1 (not at all) to 7 (very well) (α = .93). Another set of four 7-point scales assessed the respondents' self-perceptions of Chinese competence (α = .94).

Anxiety when communicating in English. Four statements taken from Clément (1988) measured the subject's anxiety when communicating in English on a 6-point Likert-type scale, anchored at one end by disagree strongly and at the other end by agree strongly. A high score indicated great anxiety when using English (α = .75).

Psychological Adjustment

Self-esteem. The students rated their agreement with five items adapted from Rosenberg's (1965) self-esteem scale on 6-point Likert-type scales. A high score indicated high self-esteem (α = .78).

Sense of control. This scale consisted of five items drawn from Rotter's (1966) Internal-External Control Scale. Two items were worded positively and three items were worded negatively. Subjects indicated their agreement with the item, using 6-point Likert-type scales, anchored at one end by disagree strongly and at the other end by agree strongly. Negatively worded items were reversed prior to scoring. A high score reflects a strong belief of personal control over life events (α = .80).

Stress symptoms. Six items were drawn from Langner's (1962) screening instrument of psychophysiological symptoms. A high score (maximum = 30) indicated a high level of distress (α = .68).

Life satisfaction. A single 3-point item measured how satisfying the respondents felt their lives were, in general, at the time of the study. The respondents indicated whether they felt life was 1 (not very satisfying), 2 (pretty satisfying), or 3 (completely satisfying).

Happiness. The students indicated whether they were generally 1 (not too happy) to 3 (very happy) on a single 3-point scale.

Situated Ethnic Identity

To assess situated ethnic identity, 22 descriptions of everyday situations were presented, followed by two 5-point scales (see Clément & Noels, 1992). The first scale assessed the degree of identification with the Chinese group, and the second assessed the degree of identification with
the Canadian group. In accordance with the proposition of situated ethnic identity theory, these situations were preceded by instructions explaining to the respondent that, depending on the situation, they could identify with both target groups (Chinese and Canadian), with one group, or with neither. The options in the first scale ranged from *not at all Canadian* to *very Canadian* and in the second scale from *not at all Chinese* to *very Chinese*, a high score indicating a high level of identification with that ethnic group. For example,

When I listen to music, I feel . . .

<table>
<thead>
<tr>
<th>Not at all Canadian</th>
<th>Very Canadian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all Chinese</td>
<td>Very Chinese</td>
</tr>
</tbody>
</table>

High internal consistency was evident for both the Canadian (α = .96) and Chinese (α = .94) versions of the scale.

**Personal Background of the Respondent**

The final part of the questionnaire was used to identify the participant. It included questions pertaining to age, sex, place of birth, marital status, length of time in Canada, citizenship status, and the area and level of university study.

**PROCEDURE**

Potential participants were approached individually and asked to take part in the study by filling out a questionnaire. They were informed that all responses would be confidential. The volunteers completed either the Chinese or the English questionnaire, according to their preference, on their own time.

**RESULTS**

After consideration of preliminary analyses, separate subsections will deal with the distribution of individuals across modes of acculturation and the relations among identity, language, and adjustment variables.

**PRELIMINARY ANALYSES**

Preliminary analyses considered the effects of several demographic variables on the dependent variables. To account for the heterogeneity
of the sample with respect to the degree of implication in the Canadian culture, an index was calculated to represent this demographic construct for use in the following analyses. This was done by calculating the proportion of life spent in Canada in terms of the number of years spent in Canada relative to one's age (cf. Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987). The results of $t$ test analyses showed that those born in Canada ($M = .96$) and people who filled out the English questionnaire ($M = .44$) spent a greater proportion of their life in Canada than did those born outside of Canada, $M = .24$; $t_{(159)} = 19.70; p < .001$, and those who filled out the Chinese questionnaire, $M = .14$; $t_{(163)} = 4.41$, respectively. One-way analysis of variance showed that Canadian citizens ($M = .76$) spent a longer proportion of their life in Canada than did students with landed immigrant status ($M = .21$), who in turn spent more time in Canada than did students with foreign citizenship, $M = .13$; $F_{(2, 160)} = 190.27; p < .001$. These findings support the use of proportion of life in Canada to represent these demographic constructs.

The results of a multivariate analysis of variance comparing men and women on the means of all dependent variables, including age and time in Canada, showed that only quality of contact and age were significantly different, Wilks’s lambda = .76; $F_{(21, 121)} = 1.85; p = .02$. The females enjoyed better quality contact with Canadians, $M = 4.89$; $F_{(1, 141)} = 5.59; p = .02$, and they tended to be younger, $M = 20.87$; $F_{(1, 141)} = 8.45; p = .004$, than the males ($M = 4.57$ and $M = 22.32$, respectively). Given the minimal differences between gender groups, all respondents were pooled together for subsequent analyses.

**GENERAL DISTRIBUTION ACCORDING TO SITUATED ETHNIC IDENTITY**

To determine the extent to which individuals endorsed the acculturation modes on a moment-to-moment basis, each participant was classified as either high or low in each of the two identities by means of a median split on the distribution of the two identification scores. The median score for identification with the Chinese community was 3.14 and that for identification with the Canadian community, 3.27. Through the cross-tabulation of the two dichotomous classifications, this procedure reconstructed the four categories described by Berry (1990). Thus, if the participant falls below the median for both scales, he or she is considered marginalized. On the other hand, if the participant falls above the median for both scales, he or she is considered integrated. A participant’s tendency toward separation is deduced from a score of identification with his or her group of origin that falls above the median and a score of identification with the second group that falls below it. The reverse is true for the assimilation category.
Table 1

<table>
<thead>
<tr>
<th></th>
<th>Canadian Identity</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Total</td>
</tr>
<tr>
<td><strong>Deculturation</strong></td>
<td><strong>Assimilation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>24</td>
<td>60</td>
<td>84</td>
</tr>
<tr>
<td>( P )</td>
<td>14.9%</td>
<td>37.3%</td>
<td>52.2%</td>
</tr>
<tr>
<td>( sr )</td>
<td>-2.8</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td><strong>Chinese identity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>57</td>
<td>20</td>
<td>77</td>
</tr>
<tr>
<td>( P )</td>
<td>35.4%</td>
<td>12.4%</td>
<td>47.8%</td>
</tr>
<tr>
<td>( sr )</td>
<td>2.9</td>
<td>-3.0</td>
<td></td>
</tr>
</tbody>
</table>

*Note. \( f \) = frequency; \( P \) = percentage; \( sr \) = standardized residual.*

The results (see Table 1) showed that the distribution was primarily anchored in two quadrants: 35.4\% felt highly Chinese and less Canadian and 37.3\% felt highly Canadian and less Chinese, \( \chi^2(3) = 33.20; p < 0.001 \). An examination of the standardized residuals showed that these figures were greater than would be expected by chance alone. At the same time, 27.3\% of the distribution indicated that they felt high or low on both identities simultaneously. The negative standardized residuals suggested that these figures were less than would be expected by chance.

**THE RELATION AMONG IDENTITY, CONTACT, LINGUISTIC SELF-CONFIDENCE, AND ADJUSTMENT**

To understand the mechanism by which these variables might be related, two sets of analyses were conducted. First, intercorrelations between Canadian and Chinese identities and contact, language, and adjustment indexes were computed. For each of the variables, a higher score indicates greater endorsement of the variable. Second, the variables representing each construct were aggregated and the causal sequence proposed by the sociocontextual model was tested by using path-analytic techniques via LISREL 7.2 (Jöreskog & Sörbom, 1991).

**Correlations: Identity, contact, and linguistic self-confidence.** From the pattern of correlations presented in Table 2a, it is clear that, in line with the sociocontextual model, greater self-confidence in the second language (English) is related to more frequent contact. Furthermore, it is associated with better quality of contact with Canadians and less
Table 2

<table>
<thead>
<tr>
<th></th>
<th>Self-Confidence</th>
<th>Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English</td>
<td>Chinese</td>
</tr>
<tr>
<td>Chinese lifestyle</td>
<td>-.61**</td>
<td>.62**</td>
</tr>
<tr>
<td>Chinese language use</td>
<td>-.54**</td>
<td>.60**</td>
</tr>
<tr>
<td>Participation in Chinese activities</td>
<td>-.08</td>
<td>.27**</td>
</tr>
<tr>
<td>Quality of contact with Canadians</td>
<td>.34**</td>
<td>-.34**</td>
</tr>
<tr>
<td>Frequency of contact with Canadians</td>
<td>.46**</td>
<td>-.39**</td>
</tr>
<tr>
<td>Anxiety in English</td>
<td>-.63**</td>
<td>.49**</td>
</tr>
<tr>
<td>Canadian identity</td>
<td>.58**</td>
<td>-.53**</td>
</tr>
<tr>
<td>Chinese identity</td>
<td>-.29**</td>
<td>.43**</td>
</tr>
</tbody>
</table>

b. Correlations Between Psychological Adjustment, Linguistic Self-Confidence, and Situated Ethnic Identity Variables

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>Chinese</th>
<th>Canadian</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td>.35**</td>
<td>-.13*</td>
<td>.32**</td>
<td>-.12</td>
</tr>
<tr>
<td>Personal control</td>
<td>.27**</td>
<td>-.20**</td>
<td>.16*</td>
<td>-.05</td>
</tr>
<tr>
<td>Stress</td>
<td>-.23**</td>
<td>.11</td>
<td>-.15*</td>
<td>-.04</td>
</tr>
<tr>
<td>Happiness</td>
<td>.12</td>
<td>-.09</td>
<td>-.10</td>
<td>.06</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>.11</td>
<td>-.11</td>
<td>-.21*</td>
<td>.06</td>
</tr>
</tbody>
</table>

*p < .01; **p < .001.

anxiety while speaking the second language. It is also related to less involvement in the Chinese culture, at least in terms of Chinese language use and Chinese lifestyle, although not necessarily participation in the Chinese community. Almost mirroring this image, greater self-confidence in Chinese is related to less involvement in the Canadian community and greater involvement in the Chinese community. It seems that self-confidence in one language implies greater involvement in that language community and less involvement in the other.

Identity is strongly related with both patterns of interethnic contact and with self-perceptions of competence in the second language. A stronger sense of Canadian identity is associated with more involvement in the Canadian culture and less involvement in the Chinese culture, whereas a stronger sense of Chinese identity is associated with more involvement in the Chinese culture and less involvement in the Canadian culture. Also, greater self-confidence in English is related to feeling more Canadian and less Chinese, but the reverse is true for self-confidence in Chinese. Thus the pattern of results largely upholds the theoretical expectations of the sociocontextual model with regard to contact and self-confidence and with regard to the hypothesis that self-confidence in a second language relates to increased identification with that cultural group and decreased identification with the native ethnic group.
Correlations: Identity, linguistic self-confidence, and adjustment. Replicating the findings of Dion and his colleagues (Dion et al., 1990; Pak et al., 1985), the pattern of correlations presented in Table 2b indicates that greater self-perceived proficiency in English is related to a greater sense of personal control and greater self-esteem and less stress, whereas greater proficiency in Chinese is related to a sense of less personal control. It appears, then, that ease in using the second language is indicative of better adjustment, whereas self-confidence in using Chinese is related to lower levels of adjustment. Chinese identification is not related to adjustment although Canadian identity is.

A test of the sociocontextual model. The patterns of correlations presented above are consistent with the theoretical positions elaborated earlier. They do not, however, provide evidence of the mediational processes governing the relation between the variables studied here. To test the causal sequence outlined in the sociocontextual model more directly, a path analysis using LISREL 7.2 was conducted. To create global indexes of contact, self-confidence, and adjustment, the items included in the scales representing each of these constructs were standardized and added together, reversing scores where necessary. Thus, for Contact (i.e., Chinese community participation, Chinese lifestyle, Chinese language use, frequency and quality of contact with Canadians), a high score indicated a high degree of implication in the Canadian culture and a low score indicated a high degree of involvement in the Chinese culture. For Self-Confidence (including Chinese and English self-confidence, anxiety when communicating in English), a high score indicated more self-confidence in English and a low score more self-confidence in Chinese. Finally, a high score for Adjustment (i.e., more internal control, more self-esteem, more happiness and satisfaction, and less stress) indicated better adjustment. The demographic index of the Proportion of life spent in Canada described earlier was also included as a predictor of the extent of contact with either ethnic group. Figure 1 outlines, in solid lines, the model tested.

The results of the initial analysis provided poor support for the proposed model: the $\chi^2$ index was highly significant ($\chi^2_{10} = 175.19, p < .001$), and other indexes of fit did not reach the cutoff level of .90, Goodness of Fit Index (GFI) = .78 (Jöreskog & Sörbom, 1991); Comparison Fit Index (CFI) = .84 (Bentler, 1990). The fit was improved significantly, however, once two additional paths were included in the model where it was deemed conceptually and statistically viable (see Figure 1, broken lines). Although the $\chi^2$ for the final solution remains significant ($\chi^2_{8} = 49.83, p < .01$), other indexes support the goodness of fit of the model to the data (GFI = .91; CFI = .91).

The results of the final analysis show that the data are consistent with a model in which the proportion of life spent in Canada is causally
prior to the extent of contact with the Canadian/Chinese communities. High contact with the Canadian community (and low contact with the Chinese community) is indicative of greater self-confidence with English (and low self-confidence with Chinese). High English self-confidence (and low Chinese self-confidence) is indicative of greater identification with Canadians and less with Chinese. It is also indicative of better adjustment.

The two posthoc modifications showed that, first, the proportion of life affected self-confidence not only indirectly through contact but also directly. This may be due to the fact that other factors, not measured specifically in the present study, may also mediate the relation between the length of time spent in Canada and linguistic self-confidence (e.g., childhood experiences, language of education, motivation to acculturate). The second modification takes into account the negative correlation between Chinese and Canadian identities documented earlier in the $\chi^2$ analysis.

**DISCUSSION**

For most of this group of Chinese university students, acculturation is an issue of exclusivity. Chinese and Canadian identities were in-
versely related, such that most people claimed that they felt either Canadian or Chinese, but not both simultaneously. That is, two modes of acculturation characterize the identity of most of these Chinese students: separation and assimilation. These findings are consistent with several other studies that have found a negative relation between two relevant ethnic identities (e.g., Elias & Blanton, 1987; Elizur, 1984), including those studies that adopted a situated approach similar to that used here (Clément & Noels, 1992; Clément et al., 1993).

These results are, however, inconsistent with those presented by Berry and his colleagues, who found that with regard to acculturation attitudes, integration is the preferred mode of acculturation. Although a small number of individuals did claim both identities, this pattern was not typical of most of the sample. One reason for the discrepancies between the present findings and those of Berry and his colleagues may be related to conceptual and operational differences between studies. When assessed as an attitude about the forms of acculturation they would prefer to experience, respondents usually retain the option of combining both cultures. When asked more specifically how they feel at a particular moment, as in the case of situated ethnic identity, individuals may be constrained to claim membership in only one or the other group (cf. Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

Attitudes reflect an ideological orientation toward the cross-cultural adaptation process. In a country such as Canada, where multiculturalism is a national policy, this ideal for intercultural relations is likely widely espoused. This position, however, may not be compatible with everyday experiences. On a day-to-day basis, decisions about with whom to associate, which lifestyle to follow, which language to speak, and so on may mean making choices between cultures. These decisions may ultimately have implications for the self-concept, as suggested by the findings obtained here.

The contrast between the present results and the results reported by Berry demonstrates the importance of a multivariate approach to the study of the acculturation process (cf. Berry, 1990; Gardner et al., 1990; Mendoza, 1989; Young & Gardner, 1990). As has been amply described elsewhere, behavior is often not consistent with attitudes (e.g., Elias & Blanton, 1987; Szasapoznick et al., 1980). The research discussed here demonstrates that identity does not necessarily follow the same acculturation patterns as attitudes. Depending on the facet of acculturation examined, different modes of acculturation may be evident, even within the same individual.

Consistent with the theme of exclusivity found in the situated ethnic identity ratings, the correlations between identity on the one hand, and the language and contact variables, on the other, can be well summarized in terms of two profiles. A separation profile describes the individual who feels more Chinese/less Canadian in terms of situated ethnic identity, who is more likely to be involved in the Chinese culture
and is more comfortable in Chinese, and who is less likely to have contact with the Canadian culture and to be less confident in using English. In contrast, an assimilation profile describes the individual who feels less Chinese/more Canadian, who is less involved in the Chinese culture and has less self-confidence in using Chinese, and who has more engagement in the Canadian culture and has more self-confidence in his or her English abilities.

As shown by the patterns of correlations and the results of the more rigorous path analysis, the emergence of both profiles would be a consequence of the causal pattern outlined in the sociocultural model. Although demographic characteristics represented by proportion of life in Canada predict levels of identification, the manner by which they do so involves a relatively complex psychological process (Clément, 1984). It is obvious that the decision to remain in Canada involves motivational considerations that deserve further attention. As hypothesized by the model, however, that decision determines the network of contacts with the original and other relevant ethnic groups. A greater sense of competence in using the second language arising from such contacts is associated with relinquishing the native ethnic identity while acquiring a second ethnic identity. Communication variables, therefore, and particularly linguistic self-confidence, are important mediators of the influence of interethnic contact on ethnic identity.

In line with Kim’s (1988) hypothesis, communication variables were also found to be important for psychological adaptation to interethnic contact. It is possible that lower levels of contact with the Canadian culture and linguistic competence in English contribute to less ability to meet daily needs in a strange society, thereby explaining its relation with adjustment difficulties. People with low communicative competence may feel isolated, and their lack of helpful skills, such as competence in English, prevents the new society from becoming familiar and personally controllable. In such circumstances, self-esteem is lowered and stress symptoms arise (cf. Rogler et al., 1991). In contrast, individuals with a greater sense of linguistic efficacy and comfort in using the L2 are likely to experience a stronger sense of mastery, self-esteem, and less stress. Thus developing ease in using the second language is critical for psychological well-being in situations of contact with other cultures.

The fact that integration is not found to be a common occurrence raises the possibility that the “balanced” state, which has been shown by Berry (1980, 1990) and his colleagues to be desired by many in Canada, may be difficult to achieve in practice. Involvement in one community, particularly in terms of increased social contacts and language proficiency, seems to exclude the possibility of involvement in the other community and to imply an exclusivity of identity as well. Such findings might suggest that language acquisition ultimately
poses a double bind: Proficiency may serve as a coping tool that allows one to interact in the second language community. It may, however, also instigate lowered original group identity. Acculturation, then, may entail trade-offs in the process of attaining an optimal level of cultural adaptation.

NOTES

1. The two identity scales followed one after the other after each situation was presented. It is possible that the degree of polarization found in the present study is due to an artifact in the manner of data collection. An earlier study by Clément and Noels (1990), however, examined situated ethnic identity by separating the two identities and randomly ordering the items. The results yielded similar patterns as those found for the simultaneous presentation, although somewhat attenuated. Such results suggest that the present findings are not a result of the manner of presentation.

2. A similar cross-tabulation was calculated, using a midpoint split (i.e., 3). The results of this analysis were analogous to those found when using the median split, leading to the same interpretation of the findings.

3. Analyses of internal consistency showed that Cronbach’s alpha for each of these global indexes was satisfactory (Contact: \( \alpha = .85 \); Language: \( \alpha = .82 \); Adjustment: \( \alpha = .82 \)).

4. Because \( \chi^2 \) is likely to be significant with large sample sizes, other indexes of fit have been developed that take into account the degrees of freedom in the model. These goodness-of-fit indexes generally range between 0 and 1.0. A model fits the data well if it is above .90 (Byrne, 1989, 1992).

REFERENCES


