



## BIROn - Birkbeck Institutional Research Online

Comanaru, Ruxandra and Noels, K. and Dewaele, Jean-Marc (2017) Bicultural identity orientation of immigrants to Canada. *Journal of Multilingual and Multicultural Development* , ISSN 0143-4632.

Downloaded from: <https://eprints.bbk.ac.uk/id/eprint/20443/>

*Usage Guidelines:*

Please refer to usage guidelines at <https://eprints.bbk.ac.uk/policies.html>  
contact [lib-eprints@bbk.ac.uk](mailto:lib-eprints@bbk.ac.uk).

or alternatively

# Bicultural Identity Orientations of Immigrants to Canada<sup>1</sup>

**Ruxandra-Silvia Comănanu**, Department of Psychology, University of Alberta, Edmonton, Canada; Present address: Questionnaire Development and Testing Hub, NatCen Social Research, London, UK, Correspondence: ruxandra.comanaru@natcen.ac.uk

**Kimberly A. Noels**, Department of Psychology, University of Alberta, Edmonton, Canada;

**Jean-Marc Dewaele**, Department of Applied Linguistics and Communication, Birkbeck, University of London, UK.

## ABSTRACT

Studies of bicultural identity have claimed conflict-harmony and distance-overlap as relevant axes for describing bicultural identity, whereas other research emphasizes variations across social situations. Based on this literature and focus group interviews, the bicultural identity of 300 young adults from immigrant families was examined, and a new bicultural identity instrument was developed, which included subscales assessing conflicted, monocultural, situationally alternating, complementary, and hybrid identity orientations. The reliability indices and factor structure supported the distinctiveness of each of these subscales, and correlational analyses supported their validity. A second survey confirmed the factor structure and demonstrated meaningful differences between first- and second-generation Canadians (G1: n = 367 and G2: n = 217, respectively). In particular, both groups endorsed identity hybridity and complementarity more strongly than alternation and alternation was endorsed more strongly than monoculturality and identity conflict. As well, the G1 group reported more conflicted, monocultural and alternating identities than did the G2 group, and the G2 group reported more complementary and hybrid identities than the G1 group. These findings provide a more comprehensive understanding of the diversity of identity experiences of bicultural persons, as well as an instrument to assess these orientations.

## Keywords:

acculturation, biculturality, identity, immigrants, Canada

## Introduction

Over the past decades there has been an expansion in social and cultural psychological research on acculturation and biculturality, primarily because of the increased mobility of people within and between societies. Migration contributes to the complex dynamics of current societies, and individuals living in these changing contexts need to juggle their affiliations with the various social and cultural groups with which they interact, and, if possible, integrate them into a coherent sense of self. In response to these changes in societies, researchers from a variety of subfields of psychology and related social sciences have become increasingly occupied with the ways in which people construct their identities and deal with having multiple, and sometimes contradictory, identities. The present study builds on existing research to better understand how young adults from immigrant families

---

<sup>1</sup> Preprint of the version published in the *Journal of Multilingual and Multicultural Development* Pages 1-16 | Received 15 Nov 2016, Accepted 08 Nov 2017, Published online: 22 Nov 2017, <https://doi.org/10.1080/01434632.2017.1404069>

experience their multiple cultural identities. Our main purpose is to develop and validate an instrument for measuring the various orientations they have towards their biculturality. We will present and challenge previous research that discusses what it means to be bicultural through a consideration of existing models of bicultural identity. In order to understand the aspects of bicultural identity and how it is constructed, we describe current research on acculturation, bicultural identity and the various outcomes that the internalization of a second culture into the self might have on the individual (i.e., hybridity, switching between identities, contextual influences, and various studies relating bicultural identity with psychological well-being). Building on this research, we will construct a new model of bicultural identity, which takes into account the challenges encountered in the field to date. This model is then assessed statistically to test its validity and reliability.

## Literature review

### Acculturation and Integration

For several decades researchers have maintained that people who live in bicultural and bilingual contexts may evidence a variety of reactions to their experiences, across many functional domains (e.g., Berry and Annis 1974). One of the best-known models of responses is the bidimensional model of acculturation developed by John Berry (1980; 1997). According to Berry, when two groups come into continuous first-hand contact, cultural change can take place in different ways depending upon the extent to which people wish to have contact and engage with the new culture (i.e., the host society) and the extent to which they wish to retain their original culture and identity. When one wishes to adopt the new culture and disengage from the heritage culture, this strategy is termed assimilation, while the converse is labelled separation or segregation. The decision to reject both cultures is termed deculturation or marginalization. Berry has argued that the fourth option, engagement with the new, mainstream culture and retention of the original heritage culture is the most commonly endorsed strategy, termed integration. This bidimensional model has also been discussed in reference to ethnic identity (e.g., Ward 2001, 2008; Clément and Noels 1992, among others). Although the notion of integration in the context of acculturation and bicultural identity has its roots in Berry's work, the manner in which people experience the combining of cultures is not fully articulated in this model. Other researchers have described a variety of possibilities for how people integrate or manage their bicultural experiences and identities. In their discussion of acculturation, for instance, LaFromboise, Coleman and Gerton (1993) propose assimilation (loss of heritage culture and complete absorption into the host culture), which corresponds with Berry's notion of the same appellation, and acculturation (acquired competency in the majority culture, but continuous membership in the heritage group), which has some similarities to Berry's construct of separation/segregation in that it involves the retention of the original heritage identity. Three other acculturation profiles, including alternation (proficient competence in both culture, and the ability to respond appropriately to the demands of the context), multiculturalism (maintenance of the heritage culture and simultaneous engagement in the host culture, positive regard for both identities), and fusion (blend of two cultures to form a third, new culture, different from the two original ones) could be reasonably suggested to reflect an integrated bicultural identity. Still others have tried to explain identity integration from a developmental perspective. For instance, Amiot et al. (2007) propose a "four stage model that explains the specific

processes by which multiple social identities develop intra-individually and become integrated within the self over time” (p.364). The first stage is anticipatory categorization (the processes that take place even before the immersion in the new culture, as expectations of the future integration of identities). The following stage is categorization, (the individual finds him-/herself in the new environment, and recognizes and groups the characteristics of the heritage group versus the host culture). The next developmental stage is compartmentalization - the individual develops a context dependent membership to various social groups within the host and heritage culture. The final stage is integration, at which point the individual understands that although some of the social identities are conflictual, they form a coherent self, which incorporates identities closer related to both the heritage and host culture, which at this point are no longer context dependent. Nonetheless, integration can have two forms: restrictive or additive; the former is similar to the concept of fusion, where the bicultural individual identifies with the members of the intersection of the heritage and the host group (i.e., a third culture). The latter form is more inclusive, as the bicultural person perceives membership to both groups.

### Identity hybridity

The multicultural and fusion models proposed by LaFromboise et al. (1993) resonate with other theorists’ conceptualization of multi- or bicultural identity. Dallaire and Denis’ (2005) revealed that some Canadian Francophone youths do not identify themselves as either Francophone or Anglophone, but rather as bilingual Canadians whose identity was best described as a fused hybrid of these two Canadian identities. Depending on the socio-political context of French-English relations in their regions, these hybrid identities may be more or less asymmetrical, reflecting the regional power imbalance. In a similar vein, Boski (2008) described a mode of culture perception and evaluation, in which there is perceived similarity of the two cultures or their fusion to form a third one. Boski’s (2008) cultural heteronomy, the achievement of a “universalist self” is similar Bennett’s “constructed marginal individual” (Boski 2008), or the “integrated bicultural” (Roccas and Brewer 2002). Another theoretical model for bicultural identity integration is described by Roccas and Brewer (2002). They posit that there are different ways to manage the requirements of multiple cultural identities. They propose four different orientations: the first is hyphenated identities, where biculturals do not identify with either the heritage or the host group, but rather with a fusion, a hyphenated version of the two. The second is cultural dominance, when a bicultural person finds that the host culture is preferable. The third is compartmentalization, that is, adapting one’s identity to the particular context s/he is in and alternating with ease between the demands of the host and heritage group. The last orientation to manage the requirements of multiple identities is the integrated biculturalism, described as the formation of the identity as a world citizen, rather than belonging to one or more cultural groups.

The model proposed by Hermann, Risse-Kappen and Brewer (2004) argues that membership in different groups can take three different forms at the identity level: nested identities (“concentric circles or Russian Matruska dolls, one inside the next”, p. 8); cross-cutting identities (people from a group could belong to a different group, but not all members of the first group are part of the second); and separate identities (when the same individual is the only member of two groups, which have no other common members). Risse (2010) adds another layer to these models, which he names the marble cake or blended identities,

referring to the scenario when an individual's identities are so interwoven they cannot be looked at separately. The Russian doll and the marble cake models are vivid illustrations of potential hybrid identities developed by bicultural individuals.

### Identity conflict

Benet-Martínez and her colleagues (2002, 2005) found that bicultural experiences are organised around two dimensions: distance (ranging from perceived remoteness of the two cultures to an overlap) and conflict (varying from disagreement to a harmonious relation between cultural identities). The overlap concept is another way of integrating the two identities, but it is not evident whether they form a third, different identity - as in the case of the fusion model (LaFromboise et al. 1993; Brewer et al. 2002) or blended identity, like the marble cake model (Risse 2010). Research with their instrument showed that only the distance scale correlates with most of the predictors, indicating that either the theoretical model of the conflict scale was imprecise or that the particular items of the scale were not valid indicators of the construct (see also Benet-Martínez and Haritatos 2005; Manzi, et al. 2014; Ferrari, Rosnati, Manzi and Benet-Martínez 2015; Hong et al. 2016).

Any doubt regarding the validity of the conflict dimension was resolved in the studies conducted by Ward and her colleagues. In these studies, the concept and the scale used by Ward to measure it proved reliable and valid (Ward, Stuart and Kus 2011). She suggested that conflict was a function of the cultural distance between the two groups, and proposed that developmental factors, family values and dynamics, as well as intergroup factors were relevant predictors of identity conflict. The ethno-cultural identity conflict scale showed that individuals who are integrated (according to Berry's model) experience less conflict than those who were assimilated, marginalised, or separated. The scale also correlated significantly with measures of depression and social difficulty (Ward et al 2011), suggesting that it could be a reliable indicator of well-being in bicultural individuals. A meta-analysis of 83 research studies carried out by Nguyen and Benet-Martínez (2013) suggests that there is a definite positive relation between biculturality and adjustment. The study also indicates that the strength of this relation is higher than the relation between adjustment and either the heritage or host culture. It is thus extremely important to understand the bicultural experience and the various orientations people have to biculturality, since an integrated bicultural identity is strongly related to better adjustment.

### Situational alternation

Whereas some researchers have devoted considerable attention to the notions of identity hybridity and conflict, others have emphasized that bicultural people might alter their identities depending upon the affordances and constraints of social situations and their interpersonal interaction goals. For instance, in their situated ethnic identity approach, Clément and Noels (1992) argue that identities are negotiated through interactions with others in specific social situations, such that at times people might identify relatively strongly with the heritage group (most often in private settings, during interactions with friends and family), while at other times they might identify relatively strongly with the mainstream group stronger (most often in public settings, such as at work or in the broader community). This situational aspect of ethnic identity has also been examined in the diary and palm pilot studies (Yip 2005), which found that the presence of family members, other members of their ethnic group, or use of the heritage language corresponds with an increase in identification the heritage group. The alternation of identities was also discussed by Ward (2013), with reference to young Muslims integrating in the New Zealand society.

This study, which used qualitative research techniques, found strong indications that some participants preferred to alternate between their identities depending on the context and people involved in the interaction. Ward (2013) emphasises the fact that biculturals who alternate do not necessarily perceive their identities to be conflictual, rather they have the option of choosing which aspect of their identity to display in different contexts. This idea is also supported by the research conducted by Grosjean (2015).

The importance of the social context for identity switching is underscored by the experimental work of Hong, Morris, Chiu and Benet-Martínez (2000). They found that behaviour and ethnic identity can also be primed with culturally relevant icons, leading the bicultural individual to being predisposed to making decisions based on that identity or “cultural knowledge system”. This view of identity is also shared by Chao et al. (2007), who argues that essentialist beliefs about race (the beliefs that boundaries between races are rigid, and moving between cultures is difficult) construct a frame of mind that makes it hard for bicultural individuals to navigate between cultures. Two views emerge from these studies: one would suggest that this is an automatic process, triggered by primes in the environment, while the other suggests that biculturals are aware of the norms and rules of both cultures, and display the ones which are appropriate for a particular context. This notion of situational alternation of identities is echoed in Boski’s (2008) concept of functional specialisation of the life domains into public and private spheres (see also Arends-Tóth 2003, see also Roccas and Brewer 2002 notion of compartmentalisation, as well as Hermann and Brewer’s 2004, cross-cutting and separate identities).

## Objectives

Because empirical work in this field is still quite nascent and fragmented, the main purpose of the present study is to explore the diverse ways in which people from immigrant backgrounds describe their bicultural identity in one comprehensive framework, and to develop an instrument that can assess these orientations in a psychometrically sound manner. We frame these dimensions as bicultural identity orientations, in that they describe a perspective or lens through which people living in multicultural contexts frame their experience in relation to their identity with relevant cultural groups. We do not regard these orientations as categorical, but as potentially interrelated, such that one or more orientations could describe a bicultural person’s identity. Based on the theory and research described in the literature review, it is expected that at least three bicultural identity orientations will be evident, including identity hybridity (i.e. “fusion”, “overlap”, “marble cake”), identity conflict, and situational alternation of identities (i.e. “functional specialization”, “compartmentalization”, or “switching”). To elicit alternative orientations, we used a mixed methods research strategy that would allow participants to articulate other possibilities, as described below.

## Study 1

The first study was exploratory in nature, and aimed to construct a model of bicultural identity that included not only the various bicultural orientations identified in the literature but also other orientations described by research participants. As a first step, we conducted ten focus groups with participants who were either born outside of Canada or whose parents had immigrated to Canada. These focus groups explored issues related to bicultural identity as presented in the literature review, but we also encouraged participants to bring up new topics, if they desired. Thematic analysis of the responses indicated three distinct

categories consistent with the hypothesized hybridity, alternation and conflict dimensions. In a second step, we developed a self-report instrument to tap these dimensions using phrasings from the participants, and then conducted a questionnaire survey to collect numerical data, which we analysed with statistical methods to determine the convergent, discriminant and concurrent validity of this instrument. The details of the questionnaire and the analyses appear below.

## Method

### Participants and procedure

Three hundred participants (62.3% female) enrolled in psychology classes at a Canadian university were selected on the basis of their response to a question posed in a pre-screening test, which asked whether they or their parents had been born outside of Canada. They were invited to complete an online questionnaire in group-testing sessions, for which they received partial course credit.

The participants' ages varied between 17 and 47 years ( $M=18.8$ ,  $SD=2.5$ ). All participants had parents who were born outside of Canada, and 39.3% were themselves born outside Canada. Among the latter group, the length of residence in Canada varied from 2 to 20 years ( $M=10.2$ ,  $SD=5.0$ ). Over 90% of the participants were Canadian citizens, while the rest were permanent residents. The countries of ancestral origin were diverse: China (6.3%), Hong Kong (4.3%), India (3.7%), Korea (2.3%), with smaller numbers from Pakistan, the Philippines, Vietnam, Afghanistan, Malaysia and Taiwan, Iraq, Bangladesh, Bosnia, Egypt, Iran, Lebanon, Poland, Russia, Sudan, Ukraine and many more.

### Materials

The questionnaire included a background information section, as well as the sections described below. Most measures included Likert-type items asking the participants to indicate their agreement on a scale from 1 (Strongly disagree) to 6 (Strongly agree). Cronbach alpha indexes of internal consistency are reported in parentheses.

#### Bicultural identity orientation items

As noted above, items of the Bicultural Identity Orientation Scale were derived from focus group interviews and existing bicultural identity assessment instruments. We constructed 40 Likert-type items, including 12 that were hypothesized to reflect identity conflict, 16 items reflecting identity hybridity, and 12 items reflecting situational alternation. Randomly ordered within this section were the 8 items from Benet-Martínez et al.'s (2005, 2006) Bicultural Identity Integration scale: 4 items to reflect conflict ( $\alpha = .46$ ) and 4 to represent overlap ( $\alpha = .77$ ). The BII items were included here in order to assess them alongside the newly developed items.

#### Situated ethnic identity scale

Following the work of Noels and Clément (e.g., Clément and Noels 1992), participants were presented with 16 interpersonal scenarios reflecting four situational domains (family, friends, university and community) and for each situation were asked to reflect on their feelings of identification with their heritage and the Canadian group using two separate 7-point scales. Two indexes were computed, allowing the assessment of situational variability for each identity (cf. Damji, Clément and Noels 1996; Noels and Clément 2015).

### Synchronic and diachronic bicultural identity

Two items used by Simon and Ruhs (2008) tapped whether participants experienced their ethnic identities synchronically or diachronically.

### Circle diagrams

Inspired by Aron, Aron and Smollan (1992), we presented participants with 7 pictures of two circles with varying degrees of overlap, from none at all to almost a perfect overlap. They were asked to select the image that best represented the relation between their heritage and Canadian identities within themselves.

### Ethno-cultural identity conflict scale

Twenty items assessed the ethno-cultural conflict (Ward, Stuart and Kus 2011,  $\alpha = .92$ ).

### Self-esteem scale

The Rosenberg (1965) scale assessed participants' self-esteem on 10 items ( $\alpha = .89$ ).

### Essentialism scale

Five items addressing whether participants held essentialist beliefs about ethnicity were adapted from Chao et al. (2007;  $\alpha = .47$ ).

### Hypotheses:

H1. The scale will show evidence of three bicultural orientations: conflict, hybridity and situational alternation.

H2. Convergent validity:

- Conflict will show positive correlations with the ethno-cultural identity conflict scale;
- Hybridity will correlate with the scores on the circle diagrams.
- Alternation will correlate positively with the variability indices from the situated ethnic identity scale.

H3. Concurrent validity:

- Conflict will be strongly and negatively correlated with self-esteem and most experienced by first-generation (G1) participants;
- Hybridity will be positively correlated with self-esteem and most experienced by second-generation (G2) participants;
- Alternation will correlate negatively with essentialism.

## Results and Discussion

### H1: Exploratory factor analyses

In order to address the first hypothesis and to examine the factor structure of the newly developed scale, we conducted exploratory principal axis factor analyses (EFA) with oblique rotation. An initial analysis yielded a solution with nine factors with eigenvalues greater than 1.00, accounting for a little over 65% of the total variance. Inspection of the scree plot indicated that only the first three factors had an obviously different slope, which suggested that a more parsimonious solution could account for the variance in the data. Additional factor analyses were conducted, including 4-, 5- and 6-factor solutions, and each solution was evaluated based on the variance accounted for, its parsimony, clear definition by at least 3 loadings, and interpretability (Gorsuch 1983). The five-factor model was determined to be the most appropriate because of the combination of items that loaded on each factor



reflected theoretically meaningful and conceptually distinct constructs, while still accounting for a sizeable amount of variance in the data (53%).

We proceeded to repeat the factor analysis in order to eliminate the items that cross-loaded or did not load on any of the five factors (i.e., those with loadings  $< |.30|$ ). In the final solution, each of the items loaded on one factor, yielding five subscales with between three and six items for each factor (see Table 1). The variance accounted for by the five-factor model was 52.5%. The factor correlation matrix showed that some of the factor correlations were moderately high (ranging from .13 to .56). A close examination of the content of items of these factors showed that, despite their intercorrelations, the five factors reflected conceptually distinct aspects of biculturality.

An examination of the factor pattern matrix indicated that the analysis yielded three factors similar to those predicted and two additional factors. The first factor was defined by six items and was named Monocultural Orientation. The items reflected ideas about choosing one culture over the other, being loyal to one cultural group and being uncomfortable in situations that involved both the participants' ethnic group and the Canadian group (Items 1-6 in Table 1).

The next factor was defined by five items and was called the Alternation Orientation because the items reflected the participants' beliefs about the variability and flexibility of their identity depending on the situation and people involved (Items 7, 10, 11 in Table 1). It also captured the idea that depending on the context, biculturals behaved either according to the norms of their ethnic culture or the norms of the Canadian culture, but the two were kept separate and distinct (Items 8 and 9 in Table 1).

Three items loaded on the next factor, which was called the Complementary Orientation, because the items reflected the participants' belief that the two cultures, though different, are compatible and Complementary (Items 12-15 in Table 1).

Table 1. Factor pattern loadings, communalities, eigenvalues and percentage of total variance explained by each factor - Study 1

Items	Factors					$\eta^2$
	1	2	3	4	5	
1. I feel it is easier to belong just to one culture.	<b>.78</b>	-.07	-.05	-.08	.03	.67
2. If I were born again, I'd choose to be part of only one cultural group.	<b>.77</b>	-.13	-.01	.06	-.12	.63
3. I feel one has to make a decision of choosing a particular culture over the other.	<b>.76</b>	.12	-.02	-.06	.05	.66
4. I feel one should be loyal to only one cultural group.	<b>.63</b>	-.01	.07	.03	-.10	.41
5. I feel that I must decide which of my two cultures is more central to my identity.	<b>.46</b>	.23	.02	-.19	-.04	.47
6. I feel uncomfortable when in a situation which involves both my ethnic group and the Canadian culture.	<b>.31</b>	.11	-.13	-.10	.09	.21
7. My ethnic identity varies depending on whom I am with.	-.03	<b>.68</b>	.07	-.25	-.14	.54
8. I often find myself switching between cultures in different situations.	.12	<b>.56</b>	-.14	-.22	.12	.54
9. I can easily choose to behave according to one culture over the other if I need to.	-.04	<b>.55</b>	-.02	.07	.00	.30
10. I either feel as a member of my ethnic group, or as a Canadian, but seldom both at the same time.	.21	<b>.38</b>	-.03	-.06	-.24	.35
11. I identify more with my ethnic culture when I am with people from my ethnic background.	.02	<b>.34</b>	.00	.15	.09	.15
12. I feel my ethnic culture and the Canadian culture complement each other.	.05	-.01	<b>.99</b>	-.09	.00	.90
13. My ethnic culture is compatible with the Canadian culture.	.05	.00	<b>.76</b>	.04	.02	.59
14. My ethnic identity complements my Canadian identity.	-.13	.05	<b>.55</b>	.10	.19	.57
15. There is a conflict within myself between the two cultures I belong to.	.05	.06	-.03	<b>-.73</b>	.08	.57
16. Sometimes I am confused about my ethnic identity.	-.01	.09	.04	<b>-.72</b>	.00	.52
17. I feel it is hard to belong to two cultural groups.	.16	-.07	-.07	<b>-.67</b>	.01	.63
18. I feel there is no difficulty in belonging to two cultural groups.	-.05	.12	.10	<b>.60</b>	.12	.52
19. I am comfortable with my bicultural ethnic identity.	-.17	.16	.06	<b>.53</b>	.16	.55
20. I have difficulty reconciling the differences between my ethnic culture and the Canadian culture.	.12	.14	-.15	<b>-.45</b>	.02	.40
21. I feel my identity is a hybrid of two cultures.	-.08	-.04	.01	-.08	<b>.84</b>	.73
22. I feel my identity is a mix of two cultures.	-.10	.08	.03	-.08	<b>.84</b>	.79
23. If I were to describe the relationship between the two cultures within myself, I'd depict them as integrated.	-.03	-.05	.15	-.05	<b>.72</b>	.60
24. Most of my friends see me as belonging to both my ethnic culture and the Canadian culture.	.04	.01	.01	.23	<b>.44</b>	.29
25. I feel happy to be part of two cultural groups.	-.13	.10	.14	.28	<b>.38</b>	.51
Eigenvalue	7.73	2.17	1.35	1.12	.73	
% of variance accounted for	30.95	8.68	5.41	4.50	2.94	

Note: Suggested names for factors: 1—Monoculture; 2—Alternation; 3—Complementarity; 4—Conflict; 5—Hybridity.

The fourth factor was named the Conflicted Identity Orientation because the items that loaded on it conveyed a sense of discomfort and distress belonging to two ethnic groups. Two items loaded negatively on this factor; they were reversed for the purposes of further analysis, since they referred to the ease of belonging to two cultural groups (Items 16-20 in Table 1).

The last factor was comprised of five items that reflected the idea of mixing and overlapping between the two cultures and thus it was termed the Hybrid identity orientation. These items suggested that the participants who scored higher on them perceived their two cultures as integrated, mixed or overlapped (Items 21, 22, 23 in Table 1), they thought that others saw them as part of two cultural groups (Item 24 in Table 1) and they were happy to be part of this mixed cultural group (Item 25 in Table 1).

Cronbach alpha indices of internal consistency for all the five subscales ranged between  $\alpha = .65$  for Alternation and  $\alpha = .86$  for Conflicted. The pattern of correlations between the 5 factors suggested that Conflicted and Monocultural orientations were positively correlated ( $r = .63$ ), and Alternation was less strongly but positively correlated to these two scales ( $r = .30$ , and  $r = .38$  respectively). Hybrid and Complementary were positively correlated ( $r = .46$ ), and both were negatively correlated with Conflict ( $r = -.45$ , and  $r = -.42$ ) and Monocultural orientation. Alternation evidenced a low but significant negative correlation with Complementary ( $r = -.21$ ), but was unrelated with Hybridity ( $r = -.08$ ).

## H2: Convergent and discriminant validity analysis

Correlational and standard regression analyses were conducted in which the five subscale mean scores served as predictors of the criterion variables (see Table 2). Inspection of the correlations and beta coefficients showed that the Conflicted identity subscale was the strongest correlate and the best predictor for ethno-cultural identity conflict (Ward et al. 2011). All dimensions, except Conflict, predicted the circle diagrams, such that Hybridity and Complementary were positively related and Alternation and Monocultural subscales were negatively related to overlap. Only Alternation predicted the situated ethnic variability index (but was unrelated to the Canadian identity variability index) and the diachronic identity index. The synchronic and diachronic items were predicted by more than one subscale at the multivariate level: both items were predicted by the Hybrid subscale, but Complementary subscale also predicted the synchronic item, whereas the Alternation subscale also predicted the diachronic one. Thus, there is evidence of the convergent and discriminant validity of the three hypothesized scales.

No specific hypotheses were made for the Monocultural and Complementary orientations that unexpectedly emerged from the EFA. However, consistent with expectation, the Monocultural identity subscale predicted little overlap in the circle diagrams and the Complementary orientation predicted high overlap in the circle diagram and high synchronic identity. Thus, the five dimensions were consistently related with measures of similar constructs and did not relate with measures of dissimilar constructs, supporting their convergent and discriminant validity, respectively.

## H3: Concurrent validity

We conducted a series of correlations and regression analyses examining the associations between the five subscales and measures of constructs that were expected to be associated with them. Perceived conflict between the two cultures has been previously linked with low self-esteem (Ward et al. 2011), a finding that was replicated with the BIOS Conflict subscale. At the bivariate level, the Conflict and Monocultural subscales correlated negatively with the self-esteem scale, whereas the Hybrid subscale correlated positively. At the multivariate level, the Conflict subscale proved to be the most significant predictor of low self-esteem. The strong bivariate relation found between hybridity and self-esteem is also consistent with previous research that those people with an integrated sense of self are likely to experience better well-being (Nguyen and Benet-Martínez 2013).

We expected Alternation to positively relate with the essentialism scale, reasoning that people who felt that identity was socially constructed (not a fixed entity) would be more capable and comfortable with identity switching than those who felt that identity was an unalterable personal characteristic. The results of the correlational and regression analyses indicated that the only subscale that predicted essentialism was Alternation, but contrary to our prediction, there was a negative correlation. It appears that if one believes that ethnicity involves stable, unchangeable characteristics, one is likely to switch from identity to identity as the situation demands.

In sum, the results of the EFA indicated that people's descriptions of their bicultural experience could be characterized in terms of five correlated dimensions. Three of them were hypothesized based on previous research: Conflict, Alternation, and Hybridity. Two additional distinct dimensions also emerged: the Monocultural and Complementary dimensions. Correlational and regression evidence supported the convergent, discriminant and concurrent validity, although contrary to expectation, beliefs about essentialism predicted a stronger rather than weaker alternation orientation.

## Study 2

Because the EFA resulted in two more dimensions than we hypothesized, we conducted a confirmatory factor analysis (CFA) to replicate and ascertain the validity of the 5-factor model. Because immigrant generation status was predicted by different orientations in Study 1, we compared the model across G1 and G2 Canadians to ascertain its equivalence across immigrants.

## Method

### Participants and procedure

Participants included 582 university students (61.7% female) enrolled in introductory psychology classes, who had been pre-screened to ensure that they or at least one of their parents had immigrated to Canada. Their ages varied between 17 and 38 years ( $M=19.0$ ,  $SD=1.9$ ). Three hundred and sixty-five participants (62.7%) declared they were born in Canada, whereas 217 (37.3%) were born outside of Canada. G1 participants indicated that they lived in Canada for a mean of 11.06 years ( $SD=5.06$ ). With regards to the ethnic distribution of this sample, participants were asked to choose from a number of options and their responses yielded the following: the largest sample represented (49%) considered themselves to be East Asian, 19% said they were South Asian, 10% European, 5% declared they were Middle Eastern, 5% Euro North American, 5% African, and 1.5% Hispanic, the remaining participants filled in the "other" category. Ninety-three percent indicated they were Canadian citizens, while 7% were permanent residents.

### Materials

Participants completed an online questionnaire that included the items of newly developed Bicultural Identity Orientation Scale (BIOS), that is, the four items from Study 1 with the highest loadings on each of the five factors and no cross-loadings on other factors. In the case of Complementary, an item was added in order that the subscale would have 4 items. The participants were asked to rate each item from 1 (Strongly disagree) to 6 (Strongly agree). The internal consistency was high for both generations, between  $\alpha = .85$  and  $\alpha = .91$ .

## Results and Discussion

### Confirmatory factor analysis

Confirmatory factor analysis (CFA) was carried out using EQS 6.1. The hypothesized model consisted of five factors, each defined by four variables, with the error terms uncorrelated. We also hypothesized that the factors were correlated with each other. One factor loading parameter within each set of indicator variables per factor was fixed at 1.00 (Bryne, 2006).

#### First-generation (G1) Canadians

This first five-factor model yielded a respectable fit to the data ( $\chi^2 = 350.31$ ,  $df = 160$ ,  $p < .000$ , CFI = 0.91, RMSEA = 0.08). The relation between Monocultural and Conflict dimensions proved to be quite high in the standardized solution ( $r = .74$ ), and thus we investigated a second model consisting of four factors, in which the items for these two subscales loaded on one factor. This model produced a poorer fit ( $\chi^2 = 437.90$ ,  $df = 161$ ,  $p < .000$ , CFI = 0.87, RMSEA = 0.09). The difference between these two models was significant ( $\Delta \chi^2 = 87.59$ ,  $df = 1$ ), and so the five-factor solution was deemed the better, even if the correlation between Monocultural and Conflict dimensions was high.

The multivariate Wald test indicated that the goodness of fit might be improved by removing the correlation between Alternation and Complementary orientations. An inspection of the multivariate Lagrange test suggested that some variables could load on more than one factor. Various subsequent models were tested to assess the improvement in fit of the model incorporating these changes. A better fit could be obtained when we allowed five indicators to load each on two factors, while also relaxing the correlation between the two factors ( $\chi^2 = 274.65$ ,  $df = 156$ ,  $p < .000$ , CFI = 0.94, RMSEA = 0.06). This more complex model did not substantially change the interpretation of the dimensions, and so the more parsimonious model that already had an acceptable fit to the data without the cross-loadings was retained.

#### Second-generation (G2) Canadians

A similar 5-factor model was tested with the data collected from the G2 immigrants, and it proved to be a good fit to the data ( $\chi^2 = 446.02$ ,  $p < .000$ ,  $df = 160$ , CFI = 0.92, RMSEA = 0.08). The multivariate Wald test showed that an improved fit would result if the factor correlations between Alternation and Hybridity and between Alternation and Complementary were relaxed. We tested this second model and found that it showed a poorer fit to the data ( $\chi^2 = 620.14$ ,  $p < .000$ ,  $df = 162$ , CFI = 0.88, RMSEA = 0.09). We re-ran a third model by relaxing just the relation between Alternation and Complementary, and the goodness of fit improved ( $\chi^2 = 448.40$ ,  $p < .000$ ,  $df = 161$ , CFI = 0.92, RMSEA = 0.07). An inspection of the multivariate Lagrange test suggested that further improvement could result if six variables loaded on more than one factor. This fourth model was investigated. The goodness of fit showed an improvement after these changes ( $\chi^2 = 336.80$ ,  $p < .000$ ,  $df = 153$ , CFI = 0.95, RMSEA = 0.06). By making these changes however, the interpretability of the obtained model and its relations between variables and factors would be more complex without substantively changing the meaning of the factors. For these reasons, we maintain that although the goodness of fit of the model is improved by allowing the variables to load on more than one factor, it comes at the cost of the parsimony and interpretability of the results. We thus selected the third model, with five factors interrelated except between Alternation and Complementary, as the final model (see Figure 2).

### Test of measurement and structural invariance

We then proceeded to test the equivalency of the factor loadings (i.e., the measurement model) and the factor correlations (i.e., the structural model) across G1 and G2 participants (Bryne 1994). The initial test of the measurement model yielded a CFI value of .92, indicating that the hypothesized model in which all factor loadings were constrained to be equal across groups represented a reasonably good fit for the data ( $\text{Chi}^2 = 823.40$ ,  $p < .000$ ,  $df = 337$ ). A close examination of the Lagrange multiplier test for releasing constraints indicated that in only one of the 15 factor-loading constraints was not equivalent across groups. The problematic item referred to conflict ("Sometimes I am confused about my ethnic identity"): for the G1 model it loaded on the Conflict factor with a loading of .69 (the lowest among the four items), whereas for the G2 model, it had a loading of .82. We proceeded to re-test the invariant structure of the scale, releasing this constraint. The CFI did not change ( $\text{Chi}^2 = 813.20$ ,  $p < .000$ ,  $df = 336$ ,  $\text{CFI} = .92$ ). We concluded that the models obtained from the data for both generations were equivalent, with one minor exception: for the G1 participants the Conflict factor as strongly defined by a sense of confusion as it was for the G2.

### Means analysis

Having concluded that the underlying structure of the bicultural model for the two generations was equivalent, we examined the mean differences between the generations in their bicultural orientations through a 2 x 5 ANOVA, with generation status (G1 vs. G2) as a between-subject factor, the five bicultural orientations as a within-subject factor. The results yielded a significant Generation main effect ( $F(1, 567) = 6.09$ ,  $p < .014$ ,  $\eta^2 = .01$ ) and a significant Orientation main effect ( $F(4, 2268) = 395.83$ ,  $p < .001$ ,  $\eta^2 = .41$ ). The interaction effect was also significant ( $F(4, 2268) = 11.49$ ,  $p < .001$ ,  $\eta^2 = .02$ ; see Figure 1). Post-hoc Tukey tests indicated that both generations most strongly endorsed Hybridity and Complementary (which they equally endorsed) than the other 3 orientations, and they endorsed the Alternation orientation more strongly than the Monocultural and Conflict orientations (which they equally endorsed). The G1 group endorsed Conflict, Monocultural and Alternation orientations significantly more strongly than did the G2 group, whereas the G2 group endorsed Complementary more strongly than did G1 group. For Hybridity, there was no significant difference between the two generations.

### Discussion

The main objectives of this research were to explore the diverse ways in which young adults from immigrant background describe their bicultural identities, and to create an instrument to assess these orientations. We found five interrelated orientations of bicultural identity: conflicted (a perceived discord between the two cultural identities), monocultural (identification with only one of the two cultures), alternating (the shifting of identities according to the cultural context), complementary (compatibility between the two distinct identities) and hybrid (the blending of two cultural identities from which emerges a new identity). A new instrument, the Bicultural Identity Orientation Scale (BIOS), was developed based on the literature review and the accounts obtained through focus groups with bicultural individuals. The instrument showed sound validity and reliability. The analyses revealed that the model of bicultural identity obtained was generally equivalent between G1 and G2 immigrants.

The orientations were generally associated with other constructs in the manner that we expected. Two of the orientations, conflicted and monocultural, were positively interrelated, and bore a more negative connotation (e.g., linked to other conflict measures and distance between identities) and related to lesser well-being. Complementary and hybridity orientations were also interrelated, and suggested distinct but positive identity orientations toward both the heritage and the Canadian group. Contrary to expectation that situational alternation between identities would be associated with the belief that social reality is constructed in specific social interactions and thus identity switching reflected greater adaptability, greater alternation was associated with greater essentialism, as well as conflicted and singularity in identities. This finding implies that alternation instead reflects a belief that the two cultural identities are bounded and separate entities, that are possibly unchangeable, maybe even biologically determined. However, alternation was also positively associated with hybridity and showed no negative relation with complementarity, and so we cannot conclude that alternation never implies that bicultural identities could never be paired or mixed. Clearly more study on how identity alternation functions across diverse groups is necessary.

Across the two generations, the bicultural identity orientations were structurally analogous, but there were differences in how strongly they were endorsed. Both generations most strongly claimed hybrid and complementary identities rather than monocultural, conflicted and alternating identities. People cannot comfortably live in constant conflict and identity struggle, and these results indicate that it is possible to reconcile the differences and conflicts between the two cultures, and find a way to achieve complementarity and/or blendedness. The G1 participants reported that their identities were more conflicted, situation-specific, and particularly monocultural than did the G2 participants. This difference could be an indication that over time and with greater exposure to both groups over the lifespan, bicultural persons who perceive their two ethnic identities as conflicted and distinct could develop a way to integrate their identities.

The five orientations showed strong relationships with each other, with the only exception being the relation between alternation and complementarity. If the five orientations are part of a continuum (see Amiot, de la Sablonniere, & Smith, 2008; Roccas & Brewer 2002), this lack of a relation might suggest that a leap of faith is necessary in transitioning from keeping the two cultures separated and switching between them to finding them compatible, even if distinct. Another explanation could be derived from No and her colleagues' (2008) discussion of the lay theory of race: people who endorsed a more social constructivist approach to race are more inclined to navigate easily between the two cultures, as opposed to the ones who endorse an essentialist set of beliefs. To test a developmental model, a longitudinal study should look at changes over time in biculturals' endorsement of the five orientations and the other variables that might influence these changes.

We conducted 14 follow-up interviews with some of the participants from Study 2 to further assess the validity of the scale. Participants were selected based on their scores on the five subscales. In these interviews, we again found support for the inter-connectivity between the subscales. The participants' discourse revealed connections between the five dimensions. It is worth noting here that some bicultural persons who scored highest on Complementary and Hybridity maintained that they are not part of two separate groups, but rather one hyphenated group (e.g., "It gives you great opportunities, any culture goes well with another. In today's age, everyone is mixing together, it doesn't matter the age,

race... especially, here in Canada”; female of Chinese heritage, born in Canada). Some even surpassed this level, and declared themselves to be above a clear-cut culture and more like a citizen of the world, adopting a universalistic conception of identity. These nuances point to the complex nature of hybridity, complexities that are best identified in a qualitative study involving people with diverse multicultural experiences.

Future studies should investigate the best ways to support bicultural persons to achieve desired orientations. The relation between the five orientations and other measures of well-being, such as life satisfaction, social adaptation, social loneliness, or depression, should be investigated in order to identify which of the five concepts is the best indicator of psychological well-being. In a similar vein, although we have framed conflict as an orientation, it is conceivable that cultural conflict could be an antecedent or consequence of other orientations. The cross-sectional nature of our data did not allow us to examine this possibility. Studies could also further examine the reasons for the relation between essentialism/constructivism and alternation, such as how the social environment, including both the heritage family and community and the broader society, might perpetuate ideologies that cement divisions between cultures and cultural identities.

The results of the studies presented here should be interpreted in light of the characteristics of the participants: they were university students, who probably have a relatively high socio-economic status. As well, because most of the participants migrated before adulthood, they are better described as Generation 1.5 immigrants, those who settled in Canada before adulthood and hence have had a good deal of Canadian experience. Although the results showed clear differences between the generation groups, we would expect more extreme differences in orientations between those who arrived after adulthood and the G2 (and possibly G1.5). Moreover, these orientations might relate to well-being differently across generations (cf. Noels and Clément, 2015). Given these limitations, as with much of the research in the field of bicultural identity, these results should be replicated ideally with a random sample from the general population, and include consideration of more and less recent immigrants, more nuanced generations of immigration, and a greater diversity of socio-economic backgrounds, among other relevant demographics.

## Conclusion

This study extends previous research concerning the facets of bicultural identity both theoretically, and methodologically. From a theoretical point of view, this project expanded on the notions of conflict, alternation, and hybridity, and identified five inter-connected concepts pertinent to bicultural identity. Methodologically, it employed the use of both qualitative and quantitative methods to better understand the meaning of these concepts. Results from this study showed that bicultural persons who perceive their identities to be in conflict tend to be less well adjusted psychologically. Since bi- and multiculturalism is rapidly changing the social composition of the world today, we need to devote ourselves to understanding the underlying processes and possible outcomes of biculturality, as well as what is it that bicultural individuals need in order to integrate their two cultures in their self-concept.

## References

Amiot, C. E., de la Sablonniere, R., Terry, D. J., and Smith, J. R. 2007. “Integration of social identities in the self: Toward a cognitive-developmental model.” *Personality and Social Psychology Review* 11: 364-388.



- Arends-Tóth, J. 2003. *Psychological Acculturation of Turkish Migrants in the Netherlands. Issues in Theory and Measurement*. Amsterdam: Dutch University Press.
- Aron, A., Aron, E.N. and Smollan, D. 1992. "Inclusion of other in the self scale and the structure of interpersonal closeness." *Interpersonal Relations and Group Processes* 63: 596-612.
- Benet-Martínez, V., Leu, J., Lee, F., and Morris, M. 2002. "Negotiating biculturalism: Cultural frame switching in biculturals with oppositional versus compatible cultural identities." *Journal of Cross-Cultural Psychology* 33: 492-516.
- Benet-Martínez, V., and Haritatos, J. 2005. "Bicultural identity integration (BII): Components and psychosocial antecedents." *Journal of Personality* 73: 1015-1050.
- Berry, J. W. 1980. "Acculturation as varieties of adaptation." In *Acculturation: Theory, Models and Findings*, edited by A. Padilla, 9-25. Boulder: Westview.
- Berry, J. W. 1997. "Immigration, acculturation, and adaptation." *Applied Psychology: An International Review* 46: 5-34.
- Berry, J. W., and Annis, R. C. 1974. "Acculturative stress the role of ecology, culture and differentiation." *Journal of Cross-Cultural Psychology* 5: 382-406.
- Boski, P. 2008. "Five meanings of integration in acculturation research." *International Journal of Intercultural Relations* 32: 142-153.
- Chao, M.M., Chen, J., Roisman, G.I. and Hong, Y. 2007. "Essentializing race: Implication for bicultural individuals' cognition and physiological reactivity." *Psychological Science* 18: 341-348.
- Clément, R., and Noels, K. A. 1992. "Towards a situated approach to ethnolinguistic identity: The effects of status on individuals and groups." *Journal of Language and Social Psychology* 11: 203-231.
- Dallaire, C., and Denis, C. 2005. "Asymmetrical hybridities: youths at Francophone games in Canada." *Canadian Journal of Sociology* 30: 143-168.
- Damji, T., Clément, R. and Noels, K.A. 1996. "Acculturation mode, identity variation, and psychological adjustment." *The Journal of Social Psychology* 136: 493-500.
- Doucerain, M., Dere, J., & Ryder, A. G. (2013). Travels in hyper-diversity: Multiculturalism and the contextual assessment of acculturation. *International Journal of Intercultural Relations*, 37(6), 686-699.
- Ferguson, G. M., Nguyen, J., & Iturbide, M. I. (2017). Playing up and playing down cultural identity: Introducing cultural influence and cultural variability. *Cultural Diversity and Ethnic Minority Psychology*, 23(1), 109.
- Ferrari, L., Rosnati, R., Manzi, C., and Benet-Martínez, V. 2015. "Ethnic identity, bicultural identity integration, and psychological well-being among transracial adoptees: A longitudinal study." *New directions for child and adolescent development* 150: 63-76.
- Gorsuch, R. L. 1983. *Factor Analysis*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Grosjean, F. 2015. "Bicultural bilinguals." *International Journal of Bilingualism*, 19: 572-586.
- Herrmann, R. K., Risse-Kappen, T., and Brewer, M. B. 2004. *Transnational identities: Becoming European in the EU*. Lanham, MD: Rowman and Littlefield.
- Hong, Y., Morris, M. W., Chiu, C., and Benet-Martínez, V. 2000. "Multicultural minds: A dynamic constructivist approach to culture and cognition." *American Psychologist* 55: 709-720.
- Hong, Y. Y., Zhan, S., Morris, M. W., and Benet-Martínez, V. 2016. "Multicultural identity processes." *Current Opinion in Psychology* 8: 49-53.

- LaFromboise, T., Coleman, H. L., and Gerton, J. 1993. "Psychological impact of biculturalism: Evidence and theory." *Psychological Bulletin* 114: 395-412.
- Manzi, C., Ferrari, L., Rosnati, R., and Benet-Martinez, V. 2014. "Bicultural identity integration of transracial adolescent adoptees antecedents and outcomes." *Journal of Cross-Cultural Psychology* 45: 888-904.
- Nguyen, A. M. D., and Benet-Martínez, V. 2013. "Biculturalism and adjustment: A meta-analysis." *Journal of Cross-Cultural Psychology* 44: 122–159.
- No, S., Hong, Y., Liao, H., Lee, K., Wood, D., and Chao, M.M. 2008. "Lay theory of race affects and moderates Asian Americans' responses toward American culture." *Journal of Personality and Social Psychology* 95: 991-1004.
- Noels, K.A., and Clément, R. 2015. "Situational variations in ethnic identity across immigration generations: Implications for acculturative change and cross-cultural adaptation." *International Journal of Psychology* 50: 451-662.
- Noels, K. A., Pon, G., and Clément, R. 1996. "Language, identity, and adjustment the role of linguistic self-confidence in the acculturation process." *Journal of Language and Social Psychology* 15: 246-264.
- Noels, K.A., Clément, R. and Gaudet, S. 2004. "Language and the situated nature of ethnic identity." In *Language Matters: Communication, Culture and Identity*, edited by Ng, S.H. Candlin, C. N. and Chiu, C. Y., 245-266. Hong Kong: City University Press.
- Noels, K. A., and Giles, H. 2009. "Social identity and language learning." In *The New Handbook of Second Language Acquisition*, edited by W. Ritchie and T. Bhatia, 647-670 Bingley, UK: Emerald.
- Risse, T. 2010. *A community of Europeans? Transnational identities and public spheres*. Ithaca, NY: Cornell University Press.
- Roccas, S. and Brewer, M.B. 2002. "Social identity complexity." *Personality and Social Psychology Review* 6: 88-106.
- Rosenberg, M. 1965. *Society and the Adolescent Self-Image*. Princeton, NJ: Princeton University Press.
- Rumbaut, R. G. (2004). "Ages, life stages, and generational cohorts: Decomposing the immigrant first and second generations in the United States." *International Migration Review*, 38(3), 1160–1205.
- Simon, B., and Ruhs, D. 2008. "Identity and politicization among Turkish migrants in Germany: the role of dual identification." *Journal of Personality and Social Psychology* 95: 1354-1366.
- Ward, C. 2001. "The ABCs of acculturation." In *The Handbook of Culture and Psychology* edited by D. Matsumoto, 411-445. Oxford: Oxford University Press.
- Ward, C. 2013. "Probing identity, integration and adaptation: Big questions, little answers." *International Journal of Intercultural Relations* 37: 391-404.
- Ward, C. 2008. "Thinking outside the Berry boxes: New perspectives on identity, acculturation and intercultural relations." *International Journal of Intercultural Relations* 32: 105-114.
- Ward, C., Stuart, J. and Kus, L. 2011. "The construction and validation of a measure of ethno-cultural identity conflict." *Journal of Personality Assessment* 93: 462-473
- Ward, C., and Kennedy, A. 1993. "Where's the culture in cross-cultural transition? comparative studies of sojourner adjustment." *Journal of Cross-Cultural Psychology* 24: 221-249.

- Yampolsky, M. A., Amiot, C. E., and de la Sablonnière, R. 2013. "Multicultural identity integration and well-being: a qualitative exploration of variations in narrative coherence and multicultural identification." *Frontiers in Psychology* 4 (126): 1-15.
- Yampolsky, M. A., Amiot, C. E., and de la Sablonnière, R. 2015. "The Multicultural Identity Integration Scale (MULTIIS): Developing a comprehensive measure for configuring one's multiple cultural identities within the self." *Journal of Cultural Diversity and Ethnic Minority Psychology* 22: 166-184.
- Yip, T. 2005. "Sources of situational variation in ethnic identity and psychological well-being: A palm pilot study of Chinese American students." *Personality and Social Psychology Bulletin* 31: 1603-1616.

## Appendix

### Bicultural Identity Orientation Scale (BIOS)

#### Conflict:

1. There is a conflict within myself between the two cultures I belong to.
2. Sometimes I am confused about my ethnic identity.
3. I feel it is hard to belong to two cultural groups.
4. I have difficulty reconciling the differences between my ethnic culture and the Canadian culture.

#### Monocultural orientation:

5. If I were born again, I'd choose to be part of only one cultural group.
6. I feel one has to make a decision of choosing a particular culture over the other.
7. I feel one should be loyal to only one cultural group.
8. I feel that I must decide which of my two cultures is more central to my identity.

#### Alternation:

9. My ethnic identity varies depending on whom I am with.
10. I often find myself switching between cultures in different situations.
11. I adjust my identity depending on whether I am with people from my ethnic group or Canadians.
12. I adapt my ethnic identity according to the circumstances.

#### Complementarity:

13. My ethnic culture is compatible with the Canadian culture.
14. Although they are different, the two cultural groups I identify with go well together.
15. My ethnic identity pairs nicely with my Canadian identity.
16. My ethnic and Canadian identities are in harmony.

#### Hybridity:

17. I feel my identity is a hybrid of two cultures.
18. I feel my identity is a mix of two cultures.
19. If I were to describe the relationship between the two cultures within myself, I'd depict them as integrated.
20. Most of my friends see me as belonging to both my ethnic culture and the Canadian culture.