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TOWARDS A SITUATED APPROACH TO ETHNOLINGUISTIC IDENTITY: 
THE EFFECTS OF STATUS ON INDIVIDUALS AND GROUPS

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Abstract Much research has been concerned with the relationship between identity, language and the status of ethnonlinguistic groups. Likewise, much attention has been devoted to the acculturative consequences of contact between two cultural groups. The present research was an attempt to bring together these two traditions of research within the context of English–French relations in Canada. Accordingly, Francophone and Anglophone students originating from majority and minority settings, attending a Canadian bilingual university were requested to fill out a questionnaire containing indices of identification to first and second language groups. The results showed that, at the individual level, both the immediate and the North American status of the respondents were related to their identity. At the group level, similar results were obtained with the qualification that the ethnonlinguistic evolution of status would appear to be of some importance. Finally, important inter-situational variations were noted for all groups, supporting the approach to situated identity adopted here. These results are discussed in terms of their implication for the relationship between language and identity as well as for current theories of acculturation.

Current theories of inter-cultural communication posit the existence of a relationship between cultural identity and linguistic practices (e.g. Clément, 1984; Collier & Thomas, 1988; Gudykunst & Ting-Toomey, 1990). Whether construed as a cause or consequence of identity, linguistic practices are further hypothesised to vary as a function of situational factors (e.g. Forgas & Bond, 1985) as well as the relative status afforded the group identified with a particular language, dialect or style (e.g. Haslett, 1990; Beebe & Giles, 1984; Giles & Johnson, 1987). These phenomena all imply a form of contact between members of different cultural groups. Studied within the realm of cross-cultural psychology, such contact is hypothesised to produce acculturative stress (see Berry, 1990) which, in turn, will influence the patterns of identity adopted by the individual. Both trends of research have identity and identity change as key concepts. To this point, however, there are no attempts at integrating the predictions made by the
two approaches. Following that goal, this research was therefore meant to investigate the effects of situational and status factors on patterns of acculturation.

The cultural changes resulting from the contact between two cultures have been said to result from the process of acculturation (Redfield, Linton & Herskovits, 1936). As originally defined, acculturation encompasses all cultural changes, whether such changes occur at the societal or individual level. According to Berry (e.g. 1990) these changes correspond to modes of acculturation which can be understood as the outcome of two decisions: (1) whether or not retention of the original cultural identity is valued and (2) whether or not identification with the other cultural group is desired. Assimilation results from the willingness to identify with the other group while relinquishing membership in the first culture. Separation refers to a preference for the first culture and a rejection of the other cultural identity. Integration results from an interest in adopting both identities whereas marginalisation consists in a rejection of both cultures.

Research bearing on modes of acculturation has included scales assessing the desirability of attitude towards each mode. The results suggest that, in most cases, minority group members will show a preference for integration over other modes (Berry, Kim, Power, Young & Bujaki, 1987), and that this preference for integration is associated with less acculturative stress than separation (Berry, Kim, Minde & Mok, 1989; Kurtness, 1989). These results underline the importance of attitudes in determining the outcome of cross-cultural contact. As well, the results reported by Berry and his associates support the proposition that acculturation attitudes are best conceptualised as resulting from two rather independent decisions related respectively to one’s own group and to the other group. Whether such attitudes correspond to patterns of actual identification as a member of one group, or, indeed, whether individuals will actually claim simultaneous membership in two groups remain open questions.

Patterns of actual identification may vary as a function of the particular characteristic chosen as a marker of group membership. Skin colour and sex are instances of such characteristics. Ethnic membership has often been associated with linguistic characteristics. Indeed, it has been argued that language and ethnicity are inextricably linked because language plays important symbolic and instrumental functions in the evolution of human societies in general and ethnic collectivities in particular (cf. Fishman 1972, 1977, 1989; Puig-Moreno, 1989; but see Edwards, 1985). Thus, contact between two ethnic groups can be construed as contact between two symbolic systems, each encompassing a language, values and privileged cultural referents. Furthermore, the acculturation of members of different ethnic groups should follow patterns of identification moulded after linguistic changes accruing from such contact (see Dion, Dion & Pak, 1990; Pak, Dion & Dion, 1985). Returning to Berry’s (1990) paradigm, acculturation should eventually result in patterns of joint or exclusive identification to first and/or second language groups.

The determinants of the particular pattern of linguistic identification evidenced by the individual are not represented in Berry’s approach. They are, however, subsumed under ethnomelinguistic identity theory (Beebe & Giles, 1984; Giles, Garrett & Coupland, 1989; Giles & Johnson, 1981, 1987). Accordingly, individuals are
said to be motivated to maintain a positive social identity derived from membership in a particular ethnolinguistic group. When given the choice, they should identify with that group which is most likely to provide the most positive social identity, viz. the group evidencing the greatest ethnolinguistic vitality (cf. Giles, Bourhis & Taylor, 1977). Thus, there would be a tendency for a minority group member who is in contact with a powerful majority group to identify with the latter, i.e. assimilate (cf. Landry & Allard, 1990). On the other hand, for majority group members, inter-ethnic contact should result in the acquisition of an additional identity, i.e. integration (cf. Clément, 1980; Lambert, 1978). In spite of these expectations echoed in numerous theoretical formulations, little research has been conducted on the relationship between identity and vitality. Hence, this is the first goal of this research.

The link between vitality and identification is, however, co-determined by a number of additional factors. Among others, it is entirely possible that situational factors may override the effects of societal factors (see Giles & Johnson, 1987; Punetha, Giles & Young, 1987) and promote, if only momentarily, membership in groups defined along dimensions other than language. Several researchers (e.g. Argyle, Furham & Graham, 1981; Frederiksen, 1972; Magnussen, 1971) have emphasised the importance of situational analysis in psychological investigation. Research to this end has included the development of taxonomies (King & Sorrentino, 1983), the examination of scripts (e.g. Schank & Abelson, 1977), and the elaboration of cognitive representations of interaction episodes (e.g. Forgas, 1979, 1982). Within the realm of studies of ethnicity and ethnic identity, Okamura (1981) has stressed the relevance of a situational analysis. Ethnolinguistic identity may thus best be conceived as situationally bound, such that individuals slip in and out of particular group memberships as required by immediate contextual demands (Collier & Thomas, 1988; Liebkind, 1989; Okamura, 1981).

The role played by contextual demands is central to situated identity theory (Alexander & Beggs, 1986; Alexander & Rudd, 1984; Alexander & Wiley, 1981) which shares with ethnolinguistic identity theory the assumption that individuals seek to view themselves positively and that a positive image is determined socially. Situated identity theory posits further that when confronted with alternative courses of action, individuals will choose the one that will enhance his/her self-presentation, given the context. This goal is achieved to the extent that social acts are accepted by interactants and referent others as being appropriate. When this is the case, the individual feels no pressure to alter his/her actions and situated identity is validated.

The above theorising has two consequences for ethnolinguistic identity in general and for this study in particular. First, the proposition that situated identity is maintained because of social approval for an act implies the existence of well-defined and shared situational norms regarding appropriate behaviours. There should, therefore, exist consensual group tendencies regarding the relevance of various patterns of identification and its investigation constitutes the second goal of this study.

Second, it would seem that ethnolinguistic identity should be viewed and assessed so as to reveal situational variations (see Forgas & Bond, 1985; Waddell
& Cairns, 1986). Edwards (1977, 1985), for one, has suggested that ethnic markers such as language may have both symbolic and communicative functions which reflect private and public facets of ethnicity, respectively. For example, public facets may include the use of language in interaction with others in the community. Private facets may encompass language use in religious or family rituals. Others, such as Gans (1979), have suggested potential arenas for the symbolic expression of ethnicity, including food and politics. In order to ascertain the value of these speculations, a third goal of the present study is to delineate situational domains of ethnolinguistic identity and compare the type of domains that emerge in groups varying with respect to their ethnolinguistic status.

A fourth and final goal of this study relates the latter considerations pertaining to the existence of domains of identity to our earlier discussion of the effects of status. It was noted that socio-structural status may affect in predictable ways one’s identification to various ethnolinguistic groups. It may be, however, that this effect varies depending upon the situation under consideration. For example, Waddell & Cairns (1986) found that the Catholic Irish rated themselves as Irish more consistently across situations than did Protestant Irish. They attributed this finding to the Catholic Irish group’s status as a minority. In the same vein, Edwards (1977, 1985) has suggested that visible and public markers of ethnicity, such as language in its communicative sense, will tend to become assimilated faster and more completely than those, such as language in its symbolic sense, that are intangible or restricted to private domains. Thus, the more private an ethnic marker is, the more likely it is to be exempt from acculturative pressures. One might therefore expect that, in public situations, minority group members would show greater identification to the target-group than majority group members.

In summary, the present study is meant to assess the effects of ethnolinguistic status on the modes of acculturation endorsed by minority and majority group members, to delineate situational domains of identity, to compare these domains across groups, and to evaluate the differential effects of status on situational identification.

The setting chosen for this study is that of the University of Ottawa, an institution situated within the province of Ontario, Canada, close to the border of the province of Québec. The province of Ontario is officially unilingual English; although active as a minority group, the Francophones constitute only 4.7% of the total population. The province of Québec is officially unilingual French; the Anglophone minority represents 8.8% of the population (Statistics Canada, 1987a, b). The City of Ottawa is the capital of Canada and houses the bilingual services of the federal government. The region of Ottawa is mostly Anglophone (72%), although there is a relatively large Francophone minority (18%; Statistics Canada, 1987b).

As Francophones and Anglophones, the students attending the University of Ottawa may therefore originate from milieux where they are members of majority or minority groups: respectively Québec and Ontario for Francophones and the converse for Anglophones. Previous research (Clément, 1986) has clearly shown that students thus classified as majority and minority group members will respond accordingly on the three subscales (institutional, demographic and socio-economic status) of the Subjective Vitality Questionnaire (Bourhis, Giles & Rosenthal, 1981).
Although courses are given in French or English, university life promotes contact between the two language groups. Furthermore, the charter defining the institution, regulations and services afford both groups equal institutional status. Finally, as an academic incentive, all students must pass second language requirements to obtain their degree.

**Method**

**Subjects**

A total of 491 subjects participated in this study. All were registered in an introductory psychology course at the University of Ottawa. All subjects who did not reside in Québec or Ontario were eliminated from the sample. Similarly, only respondents who had either French or English as a mother tongue and the language used most often were kept for further analysis. The resulting sample consisted of 217 Anglophones (23 from Québec; 194 from Ontario) and 155 Francophones (64 from Québec; 91 from Ontario). Even though Ontario Anglophones and Québec Francophones are both considered to be ‘majorities’, it should be noted that the North American status of English affords the Anglophones greater ethnolinguistic status than Francophones. The same considerations apply, as well to the comparison between the minority groups. Thus, crossing experimentally minority and majority provincial status with Francophone and Anglophone groups permits the evaluation of the effects of (1) the more local, provincial status, (2) status considered from the continental point of view and (3) the eventual interaction between these two operational levels.

**Materials**

Participating students were required to answer an identity questionnaire. In line with the notion of situated identity, the identity scale consisted of a series of short descriptions of situations. These situations were selected on the basis of the results of a preliminary investigation aimed at generating a complete list of the situations in which students usually find themselves. This preliminary study was conducted with approximately 100 introductory psychology students who were asked to list in one sentence format the activities they engaged in on a day-to-day basis. After eliminating improbable and redundant situations, 22 descriptions were retained (see Table 1).

In order to permit simultaneous identification and/or non-identification to both groups, it is important not to create a response set defining the two identities as opposite ends of a continuum. Accordingly, each description of a situation was followed with two five-point scales. The first scale was defined, at one end by ‘not at all Francophone’ and at the other end by ‘very Francophone’. The second scale was anchored at one end by ‘not at all Anglophone’ and at the other end by ‘very Anglophone’.2
Table 1  Items from the situated identity questionnaire

1. When I have contacts with other students . . .
2. When I read the newspaper . . .
3. When I chose the University of Ottawa . . .
4. When I listen to music . . .
5. When dealing with university personnel . . .
6. When dealing with merchants . . .
7. When thinking about relations between Anglophones and Francophones . . .
8. When I think about where I would want to settle down . . .
9. When I am with my friends . . .
10. When I write for myself (not counting school work) . . .
11. When I read for pleasure . . .
12. When I think about my life’s goals . . .
13. When I participate in cultural activities . . .
14. When I listen to the radio . . .
15. When I prepare food . . .
16. When I think about my future or present spouse . . .
17. When I write my assignments . . .
18. When I think about politics . . .
19. When I watch the news on television . . .
20. In my social contacts . . .
21. When I am at home . . .
22. When I travel . . .

The 22 situations were preceded by instructions inviting the respondent to represent his/her identity as being subject to situational variations. Furthermore, it was explicitly suggested that in some cases, one might identify to both groups simultaneously and that in some other cases, one may choose to identify to none.

In order to ensure comparability of the data gathered from the two language groups, the questionnaire originally elaborated in French was translated into English and then, back-translated into French. Minor differences were then reconciled.

By adding the responses to the 22 items, two indices were obtained for every respondent: one reflecting the level of identification with Francophones and one reflecting the level of identification with Anglophones. Cronbach alpha indices of internal consistency for Francophone respondents’ identification with Francophones and Anglophones were, respectively 0.92 and 0.87. For Anglophone respondents, the result for the identification with Francophones and Anglophones scales were, respectively, 0.95 and 0.93.

The identity scales were followed by questions pertaining to personal characteristics of the respondent.

Procedure

Data were gathered during regular class time. The investigator informed the students that their participation in the study was elective and that their answers would not affect their mark. Instructions appearing on the cover page of the ques-
Results and Discussion

In order to accomplish the goals set for this research, the results will be reported and discussed in two separate sections. The first section will report on the relationship between status and the total scores obtained on the identity scales. The second section will concern specifically inter-situation variations in the observed effects. A final conclusion will draw implications from the results obtained in both sections.

Analysis of global identity scores

Three different computational procedures were applied to the total identity scores. They are reported separately hereafter.

Means analyses

For each respondent, two scores were calculated by adding the answers to the 22 items: (1) an identification with Francophones score and (2) an identification with Anglophones score. In principle, these scores may vary between 22 and 110, a high score showing a pronounced identification with the group under consideration. The mid-point of the scale, 66, corresponds to a lack of identification with and a lack of refusal to identify with the group concerned.

The mean identification scores were compared via a three-way analysis of variance using as factors Membership group\(^3\) (Francophone vs. Anglophone), Status (minority vs. majority) and Target group (Francophone vs. Anglophone). The eight means compared via this procedure are depicted in Figure 1. It should first be noted that in all cases, mean identification to the membership group falls above the mid-point line whereas mean identification to the target group falls below the mid-point line. The results of the analysis of variance shows two significant two-way interactions to which tests of simple main effects were applied. One of these, between Status and Target group \((F(1,342) = 9.92, p < 0.01)\) is due to the fact that the distinction between membership-group and target group identity is less pronounced for minority group members than for majority group members. The second interaction effect takes place between Target group and Membership group \((F(1,342) = 39.15, p < 0.001)\). Generally Francophones distinguish less between their level of identification to the two language groups than do Anglophones.

The extent to which there is an opposition between two identities seems, in large part, determined by language status in one’s home town. This effect, which supports ethnolinguistic identity theory, appears to be potent, since it influences the identity choices of students now ‘transplanted’ in a milieu affording both languages institutional equality. As shown by the results, a minority status operates on both first and second language identities by reducing the first and enhancing the second. Furthermore, more immediate (i.e. provincial) and remote (i.e. North American) contexts appear to have a compounding effect on the distinction
Figure 1  Mean identity score as a function of status group
between identities resulting in a ‘double minority’ effect evidenced by the Franco-Ontarians.

**Group analyses**

According to situated identity theory, individual identity is validated through the normative reactions of valued others. The existence of norms implies a consensus among members of a group regarding the identity which is appropriate to a given situation. In order to assess this aspect, t-scores were calculated for each situation, for each target-group and for each of the four groups of respondents. That score is calculated so as to contrast the mean of a given item with the midpoint of the five-point rating scale — that is ‘3’, given the standard deviation of the scores for that item. Algebraically:

\[ t = \frac{(M-3)}{(\sigma/\sqrt{n})} \]

where \( M \) corresponds to the group mean, \( \sigma \) to the standard deviation and \( n \) to the number of respondents in that group. In the present context, a positive score corresponds to a tendency to identify to the group under consideration, whereas a negative score corresponds to a refusal to identify with that group. The absolute value of the score represents the extent to which there is consensus in the group. Considering both direction and consensus together this score represents a measure of group polarisation. Most of the scores thus computed (91%) exceed the tabled critical t-ratio \( t_{0.05} (120) = 1.98 \), showing a definite polarisation in each group concerning the identity pertaining to different situations. There is, moreover, an almost uniform consensus for groups to identify with the first language group and not to identify with the second language group. These results support the introduction within this paradigm of notions borrowed from situated identity theory. At least from a consensual standpoint, there does appear to be definitive norms regarding what would be proper ethno-linguistic identities in different situations.

Considerable inter-situational variation is, however, present in the results of the t-score analyses. In order to assess the effects of status, membership group and target group which may underlie this variation, a three-way repeated-measures analysis of variance was computed using the corresponding factors and the 22 situations as a replication factor (or ‘subjects’). A significant three-way interaction \( F(1,21) = 229.59, p < 0.001 \), depicted in Figure 2, resulted from this analysis. As can be seen, the Anglophone majority group (Figure 2b) shows a strong polarisation in favour of the first language group and against the second language group. The same pattern is present, but less accentuated, with the Francophone majority group (Figure 2a). The third dimension of this interaction is due to the particular reaction of the minority groups. Whereas minority Francophones show a polarisation in favour of their own group almost as strong as that of majority Francophones, minority Anglophones show a reduced polarisation in favour of their own group. In spite of the North American status of English, these Québec Anglophones show less consensus about their own situated ethno-linguistic identity than do Franco-Ontarians, the ‘double minority’ group.
Figure 2  Mean t-scores as a function of membership group, status and target group
An explanation for these results may not be found so much in the objective status of both groups, but in the inter-group consequences of the evolution of that status. In spite of their minority status, Anglophones have long enjoyed better ethnolinguistic vitality in Québec than Francophones in Ontario. As a result of recent legislations (e.g. Bourhis, 1984), however, they have seen their linguistic rights limited whereas the reverse trend has characterised the institutional representation of Franco-Ontarians. In terms of the five-stage model of inter-group relations (Taylor & McKinnan, 1984; Taylor & Moghaddam, 1987), the two groups may be at different stages of their evolution. The Québec Anglophones constitute a ‘new minority’, in that legislation promoting the French majority language is relatively recent. As such, they may be at a rather early stage where one’s membership in a minority group is de-emphasised in favour of more individualistic inter-group strategies. In the present context, this individualistic orientation results in rather limited and a-consensual identification to the first language group.

By contrast, for a number of years, Franco-Ontarians have actively promoted their rights and have slowly achieved some measure of institutional representation through the concerted effort of lobbying groups. This collective action may be characteristic of the later stages of group consciousness and collective action which would be paired with normative identification to the first language group, as is the case here. In addition to current status, norms may therefore be sensitive to the dynamic interaction of groups in a changing cultural context.

Modes of acculturation

From the above analysis, it seems apparent that the individual and group tendencies would favour identification to the first language group and non-identification to the second language group. In order to ascertain this tendency, mid-point splits were effected on the identification scales for each of the four groups of respondents. This allowed the classification of each individual as falling either above or below the mid-point (i.e. 66) of identification to the membership group and either above or below the mid-point for identification to the target group. Thus, scores above the mid-point on both scales would correspond to an ‘integration’ profile whereas scores below the mid-point on both scales would correspond to a ‘marginalisation’ profile. A ‘separation’ profile would correspond to a score above the mid-point on the identification with membership group and below the mid-point on identification with the target group. The reverse defines an ‘assimilation’ profile. The results of this operation are reported in Table 2 as proportions of each group falling in each of the profile categories. As can be seen in Table 2, the vast majority of respondents are classified as belonging in the ‘separation’ category. In fact, two separate cross tabulations of the frequencies involving, respectively modes of acculturation by membership group (Anglophone vs. Francophone) and modes of acculturation by status (majority vs. minority) produced non-significant chi-squared statistics ($\text{Chi}^2_{\text{df}=258,3} = 2.08; p = 0.56$ and $\text{Chi}^2_{\text{df}=114,3} = 4.11, p = 0.25$). The ‘integration’ profile which was the modal response in Berry et al. (1989) receives few adherents, and then mainly from the Franco-Ontarians, the group which is otherwise a provincial and North American minority.
These results suggest that the majority of respondents show a 'separation' profile — exclusive identification with the first language group. They are surprising given the official bilingualism policy of the institution attended by the subjects and may be explained in part by a methodological difference with the procedure used by Berry and his associates (1989). In the latter case, the researchers were concerned with attitudes towards modes of acculturation. In the present research, respondents were asked about their actual identification. It is possible that while stating a preference for one mode of acculturation, individuals may actually perceive another mode as corresponding to the one they are presently experiencing.

Thus, while not directly opposing the interpretation proposed by Berry et al. (1989), these results fail to support an implication of the writings bearing on the social effects of second language acquisition (e.g. Gardner & Lambert, 1972; Genesee, 1987; Hamers & Blanc, 1988) to the effect that simultaneous membership in more than one culture is a plausible goal. When cultural membership is identified with ethnolinguistic group membership, it would appear that identification must be exclusive. That this is the case is further supported by the results of the supplemental analysis of 38 cases, not included in this sample. These individuals identified French as their mother tongue but English as the language used most often. Their mean identification to the Francophone group was 61.4 (< 66) while their mean identification to the Anglophone group was 83.95 (> 66). This is a complete reversal of the results obtained for minority or majority Francophones using French. It does, however, provide continued support for the conclusion that ethnolinguistic identity may be an exclusive state.

Coupled with the results supporting the exclusivity of language identity, the results concerning situational variability of polarisation have implications for our conceptualisation of the bilingual individual. Some types of situations may be more sensitive to ethnolinguistic identity salience. The second part of the statistical analyses addresses that question.
Analysis of Situational Variations

The goal of the following analyses are to delineate the dimensions of situated ethnolinguistic identity of Francophones and Anglophones, including identification with their respective target groups, and to assess their level of identification to the target group as a function of membership group and socio-structural status. In order to achieve these purposes, two sets of analyses were performed on the data. Firstly, SPSSx was employed to compute exploratory factor analyses (EFA) of each of the identity scales for each of the ethnolinguistic groups. Following these calculations, for those solutions which suggested similar factorial structure, covariance structure analyses using LISREL were computed, including confirmatory factor analyses (CFA) and tests of factorial invariance between the two groups. Secondly, a repeated measures analysis of variance was computed to examine differences in the mean identification to the target group. The results of these analyses follow under separate headings.

Dimensions of situated identity

In order to delineate the dimensions of identity for each subsample, an EFA was performed on the correlation matrix of the identity items of each of the two identification scales for each of the two groups. These four analyses used a maximum likelihood extraction procedure followed by Varimax rotation. The factor solutions were interpreted using exclusively variables with loadings that were greater than \[|0.30|\] (see Gorsuch, 1983). The factor identification resulting from the operation appears in Table 3 whereas the factor matrices pertaining to membership and target group language appear in Appendices I and II, respectively.

As can be seen (Table 3a), among the Anglophones, two components which reflect different social contexts comprise the identification to their membership ethnolinguistic group. While intermediate community-level and broader social variables are common to both factors, the dimensions are distinguishable, on one hand, by a focus on the personal uses of language, particularly for literary uses, and, on the other, through reference to situations involving intercultural contact. The private and public domains which can be distinguished in this group are similar to Edwards’ description of ethnic markers as having private and public facets. This distinction, however, must be qualified: in the more private domain, language is used for literary purposes, and, in the more public domain, as a tool for intergroup communication.

Among the Francophone group members, however, the results of the factor analysis demonstrate a more diversified pattern of situations than the Public–Private obtained for Anglophones. The dimensions reflect not only different social contexts but also a more abstract aspect of ethnolinguistic identity. Three dimensions represent situational domains which reflect fairly well-defined social environments, such as the media and intergroup situations, more intimate settings where language may be put to reflective uses, and the university environment. The fourth factor, however, is related to concerns about the future. This concern
Table 3  Factor identification as a function of membership and target group

3(a) Dimensions of identification to membership language group

<table>
<thead>
<tr>
<th>Membership group</th>
<th>Anglophones</th>
<th>Francophones</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Private/community</td>
<td>I. Media/intergroup</td>
<td></td>
</tr>
<tr>
<td>II. Public/intergroup</td>
<td>II. Private/literary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>III. University environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IV. Future goals</td>
<td></td>
</tr>
</tbody>
</table>

3(b) Dimensions of identification to target language group

<table>
<thead>
<tr>
<th>Membership group</th>
<th>Anglophones</th>
<th>Francophones</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Community</td>
<td>I. Community</td>
<td></td>
</tr>
<tr>
<td>II. Symbolic</td>
<td>II. Media</td>
<td></td>
</tr>
<tr>
<td>III. University environment</td>
<td>III. University environment</td>
<td></td>
</tr>
<tr>
<td>IV. Media</td>
<td>IV. Private/literary</td>
<td></td>
</tr>
<tr>
<td>V. Private/literary</td>
<td>V. Symbolic</td>
<td></td>
</tr>
</tbody>
</table>

... with how one perceives oneself as a member of the native language group in the future is not implausible, considering the current high level of interest in issues relating to language maintenance in Francophone areas of Canada.

With regard to membership-group identity, it is possible that the structural differences in identity between Anglophones and Francophones are due to differences in socio-structural status between the two groups. As a majority group, Anglophones may seldom be required to alter their linguistic behavior, and thus they may have little reason to examine the nature of their ethnolinguistic identity across situations. On the contrary, Francophones may be placed in a position whereby issues concerning identity are more salient because identity must be negotiated linguistically more often and along more varied norms. Thus, group status may play a fundamental role in the manifestation of situational domains.

The results of the factor analyses of the target group identity items (Table 3b) reveal the existence, in the present context, of similar factorial compositions for both Francophone and Anglophone identification. While three of these dimensions, including private situations, the university environment and bilingual community domains, reflect specific social settings, the fourth and fifth domains pertain to more abstract situations. The fourth dimension seems to reflect symbolic aspects of ethnicity, such as food and politics. The appearance of this independent factor suggests that these variables are not linked to private situations, but instead are independent of any particular social context. Rather, it provides empirical sup-
port for Gans’ (1979) construct of symbolic ethnicity, whereby salient attributes of one’s culture may be contrasted with comparable features of another group in order to serve as visible markers of ethnicity with a minimum interference in daily life.

The separate mass media dimensions may represent another facet of symbolic ethnic identity. Gans (1979) noted that the mass media have recognised the importance of symbolic ethnicity, and have responded to it in various ways. For example, in television shows, Gans claims that there is an increasing number of characters from various ethnic backgrounds. Another possibility is that the mass communication context may reflect a broader situational domain, in which national and international issues are brought to a focus, emphasising group differences. Hence, whether subtly implied in programming, or explicitly stated in the news, the media may provide a particular forum for issues of ethnicity.

In summary, then, the results of the four factor analyses reveal that ethnolinguistic identity may be more complex than the 2-domain, public–private distinction proposed by Edwards (1977). Not only does the composition of domains of membership–group identity differ across ethnolinguistic groups, but also within groups, identification with one’s own group may be situated differently than identification with another relevant group.

**Analyses of covariance matrices**

As noted above, the results of the factor analyses of the target-group identification items indicate similar factorial structures across Anglophone and Francophone groups. In order to confirm this apparent similarity, covariance structure analyses (see Byrne, 1989) were conducted using LISREL VI (Joreskog & Sorbom, 1986). These analyses, described in greater detail below, were initiated with confirmatory factor analyses (CFA) of the target language group identity items for both Anglophone and Francophone groups. Their goal was to maximise the goodness of fit of the factor patterns to the data. These procedures were followed with tests of factorial invariance between groups.

The 5-factor EFA structures of target group identity described above served as the bases of the CFA models for each group. Thus, the models’ patterns were established by taking as indices those items which loaded on each factor most highly. Cross-loading obtained in the EFA solutions were not incorporated in the CFA models in order to distinguish maximally the composition of each factor.

The hypothesised 5-factor model for the Francophones yielded a respectable fit to the data ($\chi^2 = 349.87$, $df = 199$, $p = 0.000$, $\chi^2/df = 1.76$). This fit was significantly improved by allowing correlation between error terms ($\chi^2 = 269.87$, $df = 192$, $p = 0.000$, $\chi^2/df = 1.40$), a modification justified given the common method of measurement. Correlations between standardised factor loadings for this solution and the initial solution were high ($r > 0.99$ in all cases). Investigation of the modification indices indicated that if the restrictions were lifted on two variables, allowing them to load on more than one factor (i.e. if variable 17 were allowed to crossload onto factors 1 (Community), 3 (University Environment) and 4 (Symbol), and if variable 2 were free to crossload onto factors 2 (Media); and
4 (Private)), the result would yield a significantly improved fit ($\chi^2 = 220.03$, $df = 189, p = 0.06, \chi^2/df = 1.16$). Correlations between standardised factor loadings for this and the previous correlated error solution were high ($r > 0.99$) for factors 1 and 5, and somewhat lower for factors 2, 3 and 4 ($r = 0.84, 0.80$ and $0.87$, respectively). These results suggest that there is a difference between the originally proposed model and the final model, such that two variables may contribute to the definition of more than one factor. The model chosen to represent the Francophone responses was the one which allowed for correlated error and cross-loadings.

Using an upper-bound $\chi^2/df$ goodness of fit index of 2.0, the initially hypothesised 5-factor model for the Anglophone group was not a good fit to the data ($\chi^2 = 468.25, df = 199, p = 0.000, \chi^2/df = 2.35$). To investigate the misfit, restrictions were relaxed on the error covariance, following the modification indices provided by LISREL, until all significant changes were made to the error terms. This procedure yielded an acceptable fit of the hypothesised model to the data ($\chi^2 = 273.08, df = 183, p < 0.000, \chi^2/df = 1.49$). Correlations between the initial and correlated error loadings were high ($r > 0.99$ in all cases), suggesting that the allowance for correlated error raises the goodness of fit of the model to the data to an acceptable level with little impact on the hypothesised pattern. While the goodness of fit could be further improved by allowing cross-loadings, the improved fit obtained by altering the original pattern was shown to have little actual effect on the pattern of the proposed model. Following these considerations, the final model for the Anglophone sample was determined to be that with the originally hypothesised pattern and the correlated error terms.

In order to test the similarity between the groups’ domains of target identity, LISREL was employed to test factorial invariance of the two final 5-factor CFA solutions described above. In order to establish a baseline, 5-factor solutions for each group were computed simultaneously, and these indicated a good fit to the data ($\chi^2 = 493.11, df = 372, p = 0.000, \chi^2/df = 1.33$). Thus, these results suggested that for both groups the data were adequately described by the five factors.

This finding, however, does not imply that the actual factor loadings are the same across groups. Hence, the hypothesis of an invariant pattern of loadings was tested. This procedure was accomplished by constraining to be equal those items which loaded on the corresponding factor in both groups. The difference between this solution ($\chi^2 = 528.51, df = 384, \chi^2/df = 1.34$) and the previous, unconstrained solution was significant ($\chi^2_{\text{change}} = 35.40, df_{\text{change}} = 12, p < 0.05$), suggesting that the two groups differed with regard to the loadings of one or more of the factors.

In order to pinpoint the source of variance in the factor loadings, follow-up analyses of partial measurement invariance were conducted (cf. Byrne, 1989; Byrne, Shavelson & Muthén, 1989). The invariance of each factor was individually-tested by constraining its loadings to be invariant across groups. For example, in examining the measurement of Community factor across groups, the variables common to each group were held constant. Upon finding invariance for this factor, the loadings for the Symbol factor were also held constant.
This procedure continued for all the five factors, the results of which indicated that the two groups had similar factorial structure except for the Media factor, which differed due to the item, ‘When I read the newspaper . . .’ A similar procedure was used to test the invariance of the variance/covariance matrix of the factors. The results of these analyses showed differences between groups in the variance of the Private/Literary domain and the Media domain. As well, the groups differed with regards to the covariance between the Media domain and the Community, Symbol and Personal domains.

In summary, the results of these analyses suggest that the factors are, for the most part, structurally invariant across groups. The major exception to this invariance is the Media factor, largely due to one item. As well, the relations between factors are invariant, except for the relations between the Media dimension and most other domains. The resemblance between the target identity structures contrasts with the differences observed with respect to the membership group structures. The latter results were explained with reference to the differential status of Anglophones and Francophones. In the present case, the observed similarities may still be related to status, but at the institutional level. Within this particular university environment affording equal status to both language groups, identity dimensions may be determined by characteristics of contact between the two groups. Because the conditions of contact are guided by the same terms of reference for the two groups, it would follow that the structure of target group identities would be similar. Whereas the structure of membership group identity may be more responsive to the social characteristics of the home context, target group identity structure may be linked to features of the contact situation. In the present case these are defined by the bilingual institution.

Identification and Domains: Comparison of Means

In order to assess differences between groups on dimensions of membership-group identification and of target-group identification, three repeated-measures analyses of variance were computed using BMDP (Dixon, 1981). Analyses were computed separately for the Anglophone and Francophone membership-group identity domains comparing the majority and minority groups. Because of the similar factorial structure, the third analysis was computed on the pooled data from both membership groups. For the two membership group analyses, the data were compiled by averaging the scores on the items which loaded most highly on each factor. Thus, each item contributed to only one index: that of the domain to which it was most related. For the target-identity domains, the analysis was computed on those items which defined each factor and were established as invariant across groups in the analyses of factorial invariance. In this way, for each of the four ethnolinguistic groups, the target group domain score was calculated with the same items (refer to Appendices I and II for these items).
Membership group identity

In order to assess the effects of Anglophone group status on the various membership group identity domains, a $2 \times 2$ repeated-measures ANOVA, with Status (Majority or Minority) as the between subjects factor, and the Domains (Private and Public) as the within-subjects factor, was computed on the data. The results of this analysis indicated that there was a significant effect only for Domain ($F(1,215) = 27.57; p = 0.000$). An examination of the means indicated that Anglophones identify more highly with their own group in private situations ($M = 97.17$) than in public situations ($M = 92.05$). These results lend support to Edwards' (1977, 1985) suggestion that membership group identity is less susceptible to acculturative pressure in more private circumstances.

In order to assess the effects of ethnolinguistic group status on the Francophone membership-group domains, a $2 \times 4$ repeated-measures ANOVA with Status (Majority or Minority) as the between-subjects factor, and the four Domains (Media/Intergroup, Private/Literary, University Environment, and Future Goals) as within-subject factors, was computed. The results of this analysis indicated that all main effects and interactions were significant. As the highest order significant effect, the two-way interaction ($F(3,459) = 11.36; p = 0.000$) will be interpreted (see Figure 3).

In order to assess the source of the differences, tests of simple main effects were conducted for each independent variable by holding the other factor constant. For the majority group, there were significant differences between domains, such that identification to own group in the Private/Literary domain was greater than in the University Environment which was equal to the Future Goals domain, both of which were greater than the Media/Intergroup domain. In line with Edwards' (1985) suppositions, there is evidence that membership-group identity is strongest in private situations and is weakest in more public settings. Moreover, the equality of the means obtained for the University Environment and Future Goals domains may be due to their common relationship with an institutional context promoting equality between the two groups. For these majority Francophones, then, the level of identification during their studies may be closely related to how they see themselves in the future. Finally, the attenuated identity in the Media/Intergroup domain may be due to two related factors. Firstly, as an intergroup factor, it may refer to a particularly broad public arena which, in line with Edwards' (1985) hypothesis concerning the vulnerability of different domains to acculturation, may be very susceptible to acculturative influences. Secondly, as a mass communication factor identity may be particularly low in this area because of the relatively small concentration of Francophone media publications in North America.

The difference between the French majority and minority groups, is that in the latter case, the relative placement of the Private/Literary domain and the University Environment domain are inverted. For minority group members the university setting is now the locus of greatest own-group identification. While detracting from Edwards' (1985) proposition, these results could be explained by the particular characteristics of the University of Ottawa. As a bilingual institution holding French and English groups to be equal, it may indeed create a context which is a
Figure 3  Francophone groups: Mean membership groups identity as a function of status and domain
shelter of ethnic security and promotion for minority group members. Thus, linguis-
tic planning in institutions does appear to moderate minority identity erosion
related to inter-ethnic contact.

Further results of the post-hoc analyses on the interaction also indicated that
there was a significant difference between minority and majority Francophone
groups in the Media/Intergroup and in the Private/Literary domains. In both of
these domains, minority group members identify less with their own group than
do majority group members. These results suggest that the effect of minority
status on situated identity in the Private/Literary domain is to dampen member-
ship-group identity in intimate settings. For the Media/Intergroup dimension, it is
possible that the lower level of identity is due to probable scarcity of French media
publications in minority settings relative to majority settings.

In summary, these results lend support to Edward’s notion that own-group
identity in more private areas are likely to be greater than in more public situa-
tions. The conclusion is qualified, however, to the extent that ethnolinguistic
status may influence identity and that specific settings may moderate this influ-
ence.

Target group identity. In order to assess the effects of ethnolinguistic group and
language group status on the various target-group identity domains, a $2 \times 2 \times 5$
repeated measures ANOVA, with Membership Group (Anglophone or Franc-
ophone) and Status (Majority or Minority) as the between-subjects factors and the
five Domains as within-subject factor, was computed. The results of this analysis
indicated that all main effects and interactions were significant, except for the
Status by Membership Group interaction. As the highest order significant effect,
the three-way interaction ($F(4,1328) = 5.61; p = 0.000$) will be interpreted (see
Figure 4).

In order to assess the source of the differences, tests of simple main effects were
conducted. The results of these analyses indicated that overall, Francophones
showed greater target-group identification than Anglophones, particularly with
regards to Media and Private/Literary dimensions. Status had no influence on
Anglophones’ identification, but its impact was significant on Francophones’
identification, such that minority Francophones reported greater target-group
identification in Symbol, Private/Literary, and Media domains than did majority
Francophones. Within the Community domain, majority Francophones scored
higher than majority Anglophones, but there were no differences between minor-
ity groups.

Significant differences were also found with regard to the relative importance of
each situational domain for each ethnolinguistic group. Anglophones reported
the lowest target-group identification in Private/Literary and Media domains rela-
tive to other domains. In the Francophone groups a different pattern emerged in
relation to these two variables. With regards to the Private/Literary domain, while
majority Francophones’ response was similar to that of the Anglophones’, minor-
ity Francophones reported higher levels of identification in this domain than most
other domains. For the Media domain, both groups of Francophones reported the
highest levels of identification relative to other domains, although the minority
Francophone group reported significantly higher identification than did the
Figure 4  Mean target group identity as a function of status, group and domain
majority Francophone group. There were no group differences in the University Environment domain.

From the results of these and the LISREL analyses, it is evident that the media may play a pertinent role in acculturation. This domain is not conceptualised similarly across groups, nor are its relations to other constructs the same. The results of the ANOVA indicate that, for majority, and particularly minority Francophone groups, identification to the membership group is lowest in this domain. Contrarily, for Anglophone groups, this domain represents situations in which Anglophones are least likely to identify with the Francophone group. These results may be related to the preponderance of English broadcasting and journalism in Canada, relative to French media. Given such a circumstance, Francophones may have little recourse but to be involved with Anglophones through the media. Concurrently, Anglophones may have less access to French media and thus, this issue may not be as relevant for identity. These results are similar to those found in other studies (e.g. Barnett & McPhail, 1980), and underline the importance of the media as a factor in acculturation and ethnic identification.

Another domain which yields similar results is the Private/Literary domain. Again it would appear that in these more intimate settings, minority Francophones identify more highly with Anglophones than in other situations. On the other hand, Anglophones and majority Francophones report relatively low target-group identification in these situations. These results suggest qualifications to Edwards’ (1985) claim that public aspects of ethnic markers (e.g. in Community situations) would be assimilated more quickly than more private facets. Rather, it would appear that for the minority Francophone group, acculturation, in terms of heightened target-group identity and lowered own-group identity, is most intensely felt in intimate situations.

The only situational domain in which there is no difference in the degree of identification to the target group is in the university environment. One explanation for these results may lie in the bilingual character of the university itself. Through institutional bilingualism and biculturalism both groups are promoted, but neither takes precedence over the other. Simultaneous support of French and English language and culture may serve to moderate identification to the target group for both Anglophone and Francophone groups.

Conclusion

The purpose of this article was to examine implications of the proposition that a situational analysis may be useful to understand the process of acculturation and the structure of ethnolinguistic identity. The results of these analyses applied to the global French and English identity scores show that both individual and group tendencies are linked to the ethnolinguistic vitality of the corresponding groups. The particular results obtained for the polarisation analysis also suggest that group tendencies may be susceptible to evolutive aspects of the status of the groups in addition to their present state. Furthermore these global results challenge the well entrenched notion (see Gardner & Lambert, 1972; Hamers &
Blanc, 1988) of culturally-integrated bilingual individuals. Integration as a stated mode of acculturation is evidenced mostly by those individuals who otherwise occupy the lowest status position: the ‘double minority’ Franco-Ontarians. Given the particularly high rate of assimilation of that group, it may be that integration is indeed, but a stage precluding the eventual loss of the first language and culture. Alternatively, given the strong consensus in favour of French observed for that group in the polarisation analysis, the minority status may be counterbalanced by strong group norms. These, together with greater opportunity for contact would foster the development of the integrated individuals. This hypothetical mechanism is, however, appreciably more complex than the simple ethnolinguistic status-to-mode-of-acculturation relationship proposed previously (e.g. Clément, 1984; Lambert, 1978).

For the vast majority of respondents, however, when defined in ethnolinguistic terms, identity would seem to be exclusive. That is not to say that linguistic identity seclusion should be a pervasive matter; rather, the truly bicultural individual may be the one who has the capacity to perform identity-switching: shifting in and out of group membership, as required by the situation and the appropriate norms.

The situational analysis performed on the data was meant precisely to identify situations which may be amenable to such fluctuation or, contrariwise, may foster opposition between the two identities. While the high internal consistency scores obtained for the two global identity scales would suggest the existence of a unifactorial structure, the results of the exploratory factor analyses show that there does exist, nevertheless, rather well-defined clusters of distinct situations underpinning ethnolinguistic identity. Furthermore, although distinct domains of identity may be delineated, they do not offer unequivocal support for the contrast of public–private domains suggested by Edwards (1985). Rather, while such a distinction may be true for the membership group identity of a clearly dominant group, additional membership group identity domains may be found in less dominant groups that are confronted more often with the definition of their identity in situations of contact.

This heightened complexity can also be found in the results from the comparison of means of the membership-group identity domains. For Anglophones, the relation between intimacy and membership-group identification is such that one identifies less with one’s own group in more public settings compared to more intimate settings. Such a contrast between public and private settings is also evident for Francophones, although it is manifested through more varied dimensions. Further, for minority groups, institutional bilingualism may encourage membership-group identity despite identity erosion in other domains. Thus, while the results of the membership-group analyses lend some support to Edwards’ (1977; 1985) hypothesis concerning the domains’ relative susceptibility to acculturation, the support must be qualified by the potential role that specific contexts may play for groups of different status.

As with the global scores, contextual and status variations were found to relate to target-group identity. While the results suggest that the identification of the two ethnic groups have similar underlying dimensions, two types of situations, those involving the mass media and those involving the private, reflective aspects of lan-
guage use, follow distinct patterns. The media effect is likely related to the extensiveness of English publications in North America.

The reasons underlying this effect for the Private/Literary domain, however, are less evident. It should first be noted that the results obtained for the Private/Literary domain show that both groups identify most with their own group and least with the other group in that domain. An explanation common to both groups may relate to situational variations in the extent to which second language use is perceived to be dictated by social conventions. In public settings, such as those represented by the Community or University Environment domains, social rules and norms may largely determine language use. Target-group identity in these situations may be attenuated since second language use may be perceived to be dictated by external agencies; however, in more intimate settings, such as the Private/Literary domain, an individual may feel that the choice of language is largely self-governed. If the second language continues to be used in these situations, then he or she may be more inclined to incorporate the language into his/her personal identity (cf. Nisbett & Valins, 1972). In the predominantly English environment of North America, the question of control over the choice of language in these situations may not be pertinent for Anglophones. Since members of this group may rarely be required to make use of their second language in these situations, the question of locus of control may never arise, and identification with the target group may be infrequent and largely irrelevant. For Francophones, however, the issue may be much more critical. Since English may be used fairly often in intimate situations, there may be a corresponding increase in the extent to which one identifies with Anglophones coupled with a decrease in one’s identification with Francophones. Thus, the influence of language use on the less normatively-controlled aspects of ethnolinguistic identity may be mediated by attributions concerning why one uses the second language, and these attributions may differ depending upon the social context under consideration.

In closing, the results obtained here and their interpretation should be recast in their original social context. This research was conducted in a country in which successive governments have promoted for 20 years an ideology favouring bilingualism (French and English) and multiculturalism. It is in this cultural context that the bilingual milieu of the University of Ottawa has evolved and been made viable. The particular reactions of the present French and English respondents are, therefore, that of individuals whose ethnolinguistic status has been enshrined in the constitution of the country and who have decided to attend a post secondary bilingual institution. Thus, exclusivity of ethnolinguistic identity and, for that matter, the very salience of linguistic matters may be due to the status afforded both groups and the particular mandate of the institution. It would, therefore, certainly be appropriate to extend this research to other ideological and institutional contexts.

With this in mind, the results of this research support and extend recent developments in the literature on ethnolinguistic identity which suggest that a multidimensional approach may be an appropriate manner by which to examine ethnolinguistic identity. Several researchers have noted that the measurement of ethnic identity is multifaceted (e.g. Edwards & Chisholm, 1987; Gardner,
Przedzielewski & Lysynchuk, 1990) and indeed such is the case with the situated approach taken in the present research. The particular perspective taken here reveals the important and complex mechanisms linking identity and acculturation to social and institutional aspects of intergroup contact. Furthermore, the results support the emerging perspective which views identity as situationally fluctuating, and considers identity-switching to be a socially-sanctioned phenomenon.

Acknowledgement

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Notes

1. Although the present conjecture borrows conceptually from situated identity theory, the latter incorporates mechanisms which are not represented here. This research is, therefore, not a test of situated identity theory.
2. In a separate study, all situations were presented twice, in random order: once with the Francophone identification scale and once with the Anglophone identification scale. This change of format had no effect on the pattern of responses.
3. The expression membership group refers hereinafter to the group to which the respondent belongs: Francophone for French-speaking respondents and Anglophone for English-speaking respondents; target group always refers to the other group: Anglophone for French-speaking respondents and Francophone for English-speaking respondents.
### Appendix I  Varimax rotated factor matrices: Identification to membership group

<table>
<thead>
<tr>
<th>Items</th>
<th>Anglophones I</th>
<th>Anglophones II</th>
<th>Francophones I</th>
<th>Francophones II</th>
<th>Francophones III</th>
<th>Francophones IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. have contacts with other students</td>
<td>0.43</td>
<td>0.59*</td>
<td>0.17</td>
<td>0.25</td>
<td>0.73*</td>
<td>−0.05</td>
</tr>
<tr>
<td>2. read the newspaper</td>
<td>0.61*</td>
<td>0.33</td>
<td>0.43</td>
<td>0.46*</td>
<td>0.23</td>
<td>−0.03</td>
</tr>
<tr>
<td>3. chose the University of Ottawa</td>
<td>0.18</td>
<td>0.66*</td>
<td>0.12</td>
<td>−0.04</td>
<td>0.35*</td>
<td>0.15</td>
</tr>
<tr>
<td>4. listen to music</td>
<td>0.77*</td>
<td>0.18</td>
<td>0.65*</td>
<td>0.06</td>
<td>0.06</td>
<td>0.14</td>
</tr>
<tr>
<td>5. deal with university personnel</td>
<td>−0.01</td>
<td>0.38*</td>
<td>0.15</td>
<td>0.14</td>
<td>0.35*</td>
<td>0.05</td>
</tr>
<tr>
<td>6. deal with merchants</td>
<td>0.33</td>
<td>0.55*</td>
<td>0.66*</td>
<td>0.02</td>
<td>0.19</td>
<td>0.06</td>
</tr>
<tr>
<td>7. think about relations between Anglophones and Francophones</td>
<td>0.21</td>
<td>0.64*</td>
<td>0.41*</td>
<td>−0.03</td>
<td>0.30</td>
<td>0.12</td>
</tr>
<tr>
<td>8. think about where I would want to settle down</td>
<td>0.57*</td>
<td>0.50</td>
<td>0.26</td>
<td>0.13</td>
<td>−0.01</td>
<td>0.68*</td>
</tr>
<tr>
<td>9. am with friends</td>
<td>0.59*</td>
<td>0.53</td>
<td>0.08</td>
<td>0.43*</td>
<td>0.38</td>
<td>0.29</td>
</tr>
<tr>
<td>10. write for myself</td>
<td>0.82*</td>
<td>0.11</td>
<td>0.15</td>
<td>0.59*</td>
<td>−0.02</td>
<td>0.23</td>
</tr>
<tr>
<td>11. read for pleasure</td>
<td>0.84*</td>
<td>0.18</td>
<td>0.44</td>
<td>0.78*</td>
<td>−0.24</td>
<td>−0.02</td>
</tr>
<tr>
<td>12. think about my life’s goals</td>
<td>0.60*</td>
<td>0.35</td>
<td>0.08</td>
<td>0.27</td>
<td>0.28</td>
<td>0.33*</td>
</tr>
<tr>
<td>13. participate in cultural activities</td>
<td>0.27</td>
<td>0.70*</td>
<td>0.39*</td>
<td>0.16</td>
<td>0.13</td>
<td>0.26</td>
</tr>
<tr>
<td>14. listen to the radio</td>
<td>0.56*</td>
<td>0.44</td>
<td>0.65*</td>
<td>0.14</td>
<td>0.07</td>
<td>0.15</td>
</tr>
<tr>
<td>15. prepare food</td>
<td>0.62*</td>
<td>0.31</td>
<td>0.20</td>
<td>0.44*</td>
<td>0.16</td>
<td>0.06</td>
</tr>
<tr>
<td>16. think about future or present spouse</td>
<td>0.50*</td>
<td>0.47</td>
<td>0.20</td>
<td>0.12</td>
<td>0.18</td>
<td>0.51*</td>
</tr>
<tr>
<td>17. write my assignments</td>
<td>0.76*</td>
<td>0.26</td>
<td>−0.07</td>
<td>0.56*</td>
<td>0.35</td>
<td>0.10</td>
</tr>
<tr>
<td>18. think about politics</td>
<td>0.36</td>
<td>0.61*</td>
<td>0.38*</td>
<td>0.23</td>
<td>0.13</td>
<td>0.10</td>
</tr>
<tr>
<td>19. watch the news on television</td>
<td>0.59*</td>
<td>0.47</td>
<td>0.76*</td>
<td>0.26</td>
<td>0.07</td>
<td>0.04</td>
</tr>
<tr>
<td>20. in my social contacts</td>
<td>0.42</td>
<td>0.67*</td>
<td>0.33</td>
<td>0.30</td>
<td>0.52*</td>
<td>0.35</td>
</tr>
<tr>
<td>21. am at home</td>
<td>0.73*</td>
<td>0.30</td>
<td>−0.04</td>
<td>0.34*</td>
<td>0.13</td>
<td>0.26</td>
</tr>
<tr>
<td>22. travel</td>
<td>0.38</td>
<td>0.58*</td>
<td>0.46*</td>
<td>0.06</td>
<td>0.16</td>
<td>0.15</td>
</tr>
</tbody>
</table>

*This item was used in the computation of the identity index.*
Appendix II  Varimax rotated factor matrices: Identification to target group

<table>
<thead>
<tr>
<th>Items</th>
<th>Angophones</th>
<th>Francophones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>When I . . .</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. have contacts with other students</td>
<td>0.51*</td>
<td>0.17</td>
</tr>
<tr>
<td>2. read the newspaper</td>
<td>0.35</td>
<td>0.26</td>
</tr>
<tr>
<td>3. chose the University of Ottawa</td>
<td>0.42</td>
<td>0.08</td>
</tr>
<tr>
<td>4. listen to music</td>
<td>0.24</td>
<td>0.13</td>
</tr>
<tr>
<td>5. deal with university personnel</td>
<td>0.24</td>
<td>0.20</td>
</tr>
<tr>
<td>6. deal with merchants</td>
<td>0.51</td>
<td>0.25</td>
</tr>
<tr>
<td>7. think about relations between Anglophones &amp; Francophones</td>
<td>0.55</td>
<td>0.32</td>
</tr>
<tr>
<td>8. think about where I would want to settle down</td>
<td>0.68*</td>
<td>0.11</td>
</tr>
<tr>
<td>9. am with friends</td>
<td>0.65*</td>
<td>0.03</td>
</tr>
<tr>
<td>10. write for myself</td>
<td>0.17</td>
<td>0.04</td>
</tr>
<tr>
<td>11. read for pleasure</td>
<td>0.11</td>
<td>0.27</td>
</tr>
<tr>
<td>12. think about my life's goals</td>
<td>0.54*</td>
<td>0.22</td>
</tr>
<tr>
<td>13. participate in cultural activities</td>
<td>0.48*</td>
<td>0.48</td>
</tr>
<tr>
<td>14. listen to the radio</td>
<td>0.22</td>
<td>0.24</td>
</tr>
<tr>
<td>15. prepare food</td>
<td>0.22</td>
<td>0.49*</td>
</tr>
<tr>
<td>16. think about future or present spouse</td>
<td>0.67*</td>
<td>0.23</td>
</tr>
<tr>
<td>17. write my assignments</td>
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<td>0.11</td>
</tr>
<tr>
<td>18. think about politics</td>
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</tr>
<tr>
<td>19. watch the news on television</td>
<td>0.20</td>
<td>0.65</td>
</tr>
<tr>
<td>20. in my social contacts</td>
<td>0.69*</td>
<td>0.25</td>
</tr>
<tr>
<td>21. am at home</td>
<td>0.35</td>
<td>0.22</td>
</tr>
<tr>
<td>22. travel</td>
<td>0.39</td>
<td>0.48</td>
</tr>
</tbody>
</table>

* This item was used in the computation of the identity index.
References


