INTEGRATION VERSUS ASSIMILATION WITHIN MINORITY GROUPS IN NORTH AMERICA: MULTIDIMENSIONAL ACCULTURATION MEASUREMENT FOR FRANCOPHONE COMMUNITIES IN THE CANADIAN PRAIRIES

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ABSTRACT
The Francophone communities within the Canadian provinces of Alberta, Manitoba and Saskatchewan constitute the target group of the present study focused on acculturation processes. A survey aiming at measuring acculturation has been conducted, including a total of 223 participants.
The data hereby displayed are the result of the statistical treatment of the responses extracted from a 24-question questionnaire, an adapted version of the Vancouver Index of Acculturation model.
A multidimensional scale which includes behavioral and psychological domains has been designed to measure the Acculturation Index of the target group in relation to both the Canadian mainstream and Francophone heritage culture.
The conclusions here presented support our hypothesis that the Francophones living in the Canadian Prairies generally opt for integration, whereas assimilation and separation are not often regarded as the preferred mode of acculturation.

RESUMEN
Las comunidades francófonas de las provincias canadienses de Alberta, Manitoba y Saskatchewan constituyen el grupo de población objeto de nuestro estudio centrado en los procesos de aculturación. Se ha llevado a cabo un sondeo con el objetivo de medir la aculturación, que ha incluido un total de 223 participantes.
Los datos aquí presentados son el resultado del tratamiento estadístico de las respuestas obtenidas a partir de un cuestionario de 24 preguntas, adaptado a partir del modelo denominado Índice de Aculturación de Vancouver.
Se ha diseñado una escala multidimensional con el objetivo específico de medir el índice de aculturación en referencia a los dominios psicológico y sociocultural, que ha sido utilizada con nuestro grupo de estudio en relación a la cultura canadiense mayoritaria y la herencia cultural francófona.
Las conclusiones que aquí se presentan corroboran nuestra hipótesis según la cual la población francófona que habita en las praderas canadienses opta generalmente por la integración, en tanto que la asimilación y la separación no son contempladas como modos de aculturación preferentes.

INTRODUCTION

The Francophone communities spread over the three Prairie provinces have been selected as the specific target group for our research. The French-speaking communities in Canada have undergone significant changes throughout the last centuries. Although the present study is not focused on the knowledge and use of French and English languages, we must remark that the Canadian Census shows a very low rate of monolingual Francophones in the provinces included in our survey.According to the last Canadian census published in year 2012, only one out of three Francophone citizens living in the Canadian Prairies reported the single use of French as the language most frequently spoken at home (Statistics Canada). Nevertheless, the Canadian census has never proposed a statistical definition for terms such as "assimilation" or "rate of assimilation".

Assimilation has been regarded in different ways by North American institutions. The cultural and racial model adopted by the United States has forced American citizens, to some extent, to search for new ways of controlling the situation and achieving a certain degree of harmony within the different communities. Whereas

the idea of creating a new ethnic group by combining the diverse elements which are present within each ethnic group was conceived as the objective for public institutions in the United States,[1] Canada's efforts headed towards the preservation of the distinctive features of the different cultures present in this country. We can assume that Canada is multiethnic and multilingual due to the historical co-existence of different ethnic and linguistic communities –population of French origin and British descendants– within the borders of this country. The Canadian social model, commonly denominated Canadian Mosaic, is described as a global mixture of groups, languages and cultures that co-exist within Canadian society and could be considered as the precursor of the idea of multiculturalism

The current degree of cultural pluralism reflects the potential for interethnic and inter-linguistic contacts among the different Francophone minorities and also among Francophones and the larger society. The debate about the need for reflection on the identity of the Francophone minorities has been suggested by some authors (Denis). In order to analyze the role of the Francophone communities within the Canadian mosaic it becomes essential to project Francophone identity including other aspects different from the linguistic ones, especially in reference to values, beliefs and traditions.

Alberta, Manitoba and Saskatchewan, with a majority of English-speaking population, are the Canadian provinces chosen to conduct a survey aimed at measuring the Acculturation Index referred to the Francophone minority groups who are present in this western region of the country. The bi-dimensional model proposed by Berry in 1980 has served as a reference to measure the Acculturation Index within the Francophone population using two different subscales (Berry 9). The first one has been referred to the Canadian mainstream culture and the second to the Francophone heritage culture. The Acculturation Index here obtained was designed to analyze the four possible modes of acculturation –assimilation, integration, separation and marginalization– according to the attitudes towards the heritage culture and the host society.

The concept of assimilation appears in literature making reference to the members of ethnic minorities who live in a host society without showing any noticeable cultural, social or personal differences from the citizens of the majority group. Assimilation must be differentiated from the term integration, since the latter implies the assumption of some elements of the host society while maintaining some aspects of their own heritage culture. The attitude shown towards the host society would lead to separation when individuals maintain their cultural heritage and identity without showing a strong will to embrace the host culture. Marginalization seems to be the rarest mode of acculturation, in which immigrants and newcomers reject the host culture as well as their own cultural heritage.

After a thorough review of different tests used in acculturation studies during the two last decades, the author has decided to employ the Vancouver Index of Acculturation (VIA) test model proposed by Ryder, Alden and Paulus (65) in order to construct a valid questionnaire that could be used in the present study. It has been proven that VIA successfully met the independence assumption when used for both subscales –heritage and mainstream culture (Kang 686).

The second part of this study introduces a multidimensional model of acculturation in which a specific scale has been designed to make a distinction between the two different domains of acculturation: the first, defined as socio-cultural (also labelled behavioural) and the second, known as psychological. Multidimensional acculturation scales have been developed to assess different dimensions or factors that may be a function of acculturation (Zea, Asner-Self and Birman 108). Diverse acculturation studies carried out with Asian American citizens used the Multidimensional Acculturation Scale (AAMAS) providing strong evidence of its reliability and validity (Chung and Abreu 66).

Previous studies on acculturation processes carried out among Canadian citizens state that they do not often regard assimilation as a positive value (Rudmin). Furthermore, integration appears to be the most desirable mode of acculturation (Hart and Sobre-Denton). The results extracted from this survey carried out with Francophone participants will allow us to hypothesize the proportion of individuals that opt for integration as their preferred mode of acculturation according to the multidimensional model proposed for our study.

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[1] In *Key Terms in Latino Cultural and Literary Studies*, Paul Allatson points to the popular play *The Melting Pot* written by Israel Zangwill as the origin of this term to refer to the multicultural society of the United States. The play was first staged in 1908.

METHOD

The present study is based on the quantitative analysis of statistical data extracted from a questionnaire which included 12 questions related to the Francophone heritage accompanied by the same number of items concerning Canadian mainstream culture. Individual responses have been used to calculate the mean Acculturation Index related to each subscale -Francophone and Canadian- in order to associate each respondent to one of the four modes of acculturation –integration, assimilation, separation and marginalization– according to the bi-dimensional model which has been considered as a reference.

A multidimensional scale, MMAFCP,[2] has been designed with the objective of including two different domains of acculturation –behavioral and psychological (Ward and Rana-Deuba 422). This multidimensional scale contains two separate set of items –socio-cultural and psychological– within each of the two subscales previously established. The acculturation indices related to both domains have been also calculated. The internal consistency of the items introduced within each subscale has been evaluated in order to test the reliability of the questionnaire used in the present study. Inter-item correlation has also been calculated with the purpose of testing orthogonality.

Acculturation indices are calculated as the average score of the individual responses given by each participant to all the items that belong to the same subscale. When using our multidimensional scale (MMAFCP), two different values are obtained for each respondent (behavioral and psychological acculturation indices). In order to test the independence assumption between the acculturation indices obtained through each subscale, statistical parameter z has been obtained to show that the values corresponding to both subscales (Canadian mainstream and Francophone heritage culture) are significantly different. A two sample z-Test has also been conducted in order to prove the independence between values obtained for the two different domains (behavioral and psychological) within the same subscale.

PARTICIPANTS

The potential candidates to participate in this research were citizens over eighteen who self-identified as Francophones and resided within one of the three Canadian Prairies –Alberta, Manitoba and Saskatchewan– at the time when the survey was carried out. A questionnaire containing 24 questions and 4 Likert-type response options was completed online between April and June 2014 by individuals willing to participate in the study. Candidates were provided with French and English language versions of the questionnaire. Responses were registered automatically and remained anonymous.

A total number of 144 female (65%) and 79 male (35%) Francophone citizens participated in this survey. The French version of the questionnaire was chosen by 219 participants (98%) whereas only four respondents completed the English version of the questionnaire (1.8%). Alberta, the most populated province, contributed 100 responses. Saskatchewan registered 65 responses and 58 candidates resided within the province of Manitoba when the survey was carried out. Citizens older than 50 constitute the age group with the highest percentage of respondents (35%). Those whose age ranged between 18 and 30 contributed 18% of the total. Amongst the participants in the present survey, 30 reported being born outside Canada (13.5%). When considering the length of residence within the province, 81% of the total number of responses was included within the "10 years or more" category.

PROCEDURE

In order to offer potential candidates to participate in our survey, a French and English bilingual version of a cover letter was edited. This incorporated hyperlinks to either English or French language versions of the online questionnaire. The process followed to administer the questionnaire intended to reach the most representative Francophone institutions within the provinces where the study was conducted. Francophone universities and Francophone school districts together with French Immersion schools were the first entities to be contacted via email. Francophone parents' associations, university and Francophone school staff constituted the first potential candidates who were requested to complete the questionnaire. These served as a link to distribute the questionnaire among other potential candidates wishing to participate in the survey.

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[2] MMAFCP stand for Multidimensional Measurement of Acculturation for Francophones within the Canadian Prairies, western region of Canada that comprises the provinces of Alberta, Saskatchewan and Manitoba.

With the aim of including other collectives of Francophones from a diverse range of academic levels, the second phase of the distribution process included a wider spectrum of Francophone associations. The French Canadian Association in Alberta (ACFA) also published the link which remained available to all the citizens who wished to fill in the online questionnaire.

The cooperation of Francophone media such as Radio Canada was essential to make the questionnaire accessible to other Francophone communities. Radio Canada stations in Manitoba and Saskatchewan inserted the hyperlink to the French version of the online questionnaire on their official webpage.[3] Google Drive Form provided tools to edit and save respondents' answers automatically on a spread sheet. Although responses remained anonymous, four preliminary items were added to our questionnaire and aimed at registering sex, age group, place of birth and length of residence within the province. These were included to facilitate the statistical treatment of the data reported.

The problems associated to the scale and format of the questionnaires used in previous acculturation research have been exposed by Kang (685). Some tests show a lack of independence between ethnic and mainstream cultural orientation when used to measure acculturation. The Vancouver Index of Acculturation (Ryder, Alden and Paulus 65) has been previously tested with Asian ethnic groups residing in North America and successfully met the independence assumption (Kang 687). The Vancouver Index of Acculturation (VIA) test comprises 20 paired questions that refer to both American culture and the citizen's heritage culture. The original design of this test includes 9 Likert-type response options ranging from disagree (1) to agree (9).

The items included within the VIA test were adapted to our target group, the questions being phrased in English and French. The term "American" was replaced by "Canadian" and two additional questions were edited for each subscale in order to measure the level of acceptance of the individual by other members of the mainstream culture community and by individuals from his/her own heritage culture. These have been integrated within the psychological domain acculturation measurement for Canadian and Francophone subscales.

A total of 12 items within the questionnaire were introduced within each subscale. Six of them were related to language use, lifestyle, leisure and customs and were aimed at measuring behavioral acculturation. The other six questions introduced within each subscale concerned personal values, attitudes, personal preferences and self-identification and served to measure the psychological domain of acculturation. With the objective of measuring the socio-cultural domain of acculturation for each subscale, the following six paired-questions were used:

1a. I would be willing to have a personal relation with a non Francophone.
1b. I would be willing to have a personal relation with a Francophone.
2a. I enjoy social activities with Canadian people who are not Francophones.
2b. I enjoy social activities with people from the Francophone heritage culture.
3a. I am comfortable interacting with people from the non Francophone Canadian culture.
3b. I am comfortable interacting with people from the Francophone heritage culture
4a. I enjoy entertainment (restaurants, music and movies) typical of Canadian culture.
4b. I enjoy entertainment (restaurants, movies, music) from the Francophone heritage culture.
5a. I enjoy the jokes and humor of Canadian culture.
5b. I enjoy the jokes and humor of Francophones.
6a. I behave in ways that are typical of Canadian culture.
6b. I behave in ways that are typical of Francophones.

With the purpose of measuring the psychological domain of acculturation, the six remaining paired-questions of the questionnaire used in our survey were introduced:

1a. I belong to Canadian culture.
1b. I belong to the French heritage culture.
2a. I believe in the values of Canadian culture.
2b. I believe in the values of the Francophone heritage culture.
3a. It is important for me to maintain or develop the practices of the Canadian culture.
3b. It is important for me to maintain or develop practices typical of the Francophone heritage culture.
4a. I feel that I can trust my non Francophone Canadian friends.

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[3] ACFA published the link to the questionnaire used in this survey within the section *À vous d'agir* on April, 15 2014. Available at: www.acfa.ab.ca/agir.html. Radio Canada station published the links to the French version of the questionnaire on the official webpage: www.ici.canada.ca in Manitoba on April 28 and Saskatchewan on May 6, 2014.

4b. I feel that I can trust my Francophone friends.
5a. People from other ethnic groups do not make me feel rejected.
5b. Francophone people do not make me feel rejected.
6a. I feel accepted by non Francophone Canadian people.
6b. I feel accepted by Francophone people.

The number of Likert-type response options has been reduced to four. Responses 1 and 2 are henceforth associated to a weak degree of identification with the statement formulated within the referred question whereas 3 and 4 would correspond to a high level of agreement. This 4-point scale helps to avoid mid-point values within the scale which are difficult to associate either to weak or strong degree of accordance with the statement.

MEASURES

The internal consistency of the responses provided for the questions referred to both subscales was tested by means of the calculation of Cronbach alpha coefficients (α). The twelve items chosen to validate the Canadian mainstream subscale provided alpha of 0.82. The other items aimed at calculating Cronbach alpha for the Francophone heritage subscale provided a slightly superior value ($\alpha=0.84$).

To test orthogonality, the inter-item correlation matrix resulting when crossing Canadian and Francophone subscales was obtained. The mean value of the figures contained within this inter-item correlation matrix was 0.15, which showed that both subscales are largely independent in our study.

Data processing continued with the purpose of calculating the average value of the scores given by individual respondents to both Canadian and Francophone culture items. This value is henceforth referred as Acculturation Index in this paper.

For the purposes of the present study, a 95% confidence level was considered. The descriptive statistical parameters obtained for each subscale showed a higher mean value for the items referred to Francophone heritage culture (3.68 versus 3.58 when processing responses in relation to Canadian culture items).

The Kolmogorov-Smirnov test was carried out to verify whether the distribution of responses given by individuals to each subscale fitted a normal distribution.[4] The cumulative frequencies associated to the responses extracted from the total sample led us to determine that the scores obtained through individual responses were not normally distributed.

Since we collected a sufficiently high number of responses (n=223), an arbitrary distribution of responses was assumed for both subscales in order to test their statistical independence. A aired two-sample z-test was chosen as the suitable procedure in order to confirm or refute the null hypothesis that the values of the acculturation indices obtained when using both subscales are not significantly different.

When performing the test of this hypothesis, the z score obtained allows us to assume the independence of both subscales, since the p value obtained is significantly inferior to the significance level established for our study (0.05):

	Canadian Acculturation Index	Francophone Acculturation Index
Mean value	3.58221226	3.68307515
Variance (known)	0.14398648	0.12007151
Number of responses	223	223
Hypothetical difference between averages.	0	
z	-2.93112391	
P(Z<=z)	**0.00168869**	

Table 1. Statistical parameters associated to mean acculturation values obtained for Canadian and Francophone subscales.

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[4] When considering the total number of observations (n=223), the maximum difference obtained between theoretical cumulative frequencies and the ones obtained within our sample was superior to the critical value ($D_{critical}=0.09$). Therefore, we can state that the responses collected in our sample for both scales cannot fit a normal distribution (the maximum value for this difference was 0.24 for the Canadian subscale and 0.18 when using the Francophone subscale).

The assumption of independence was finally confirmed by means of the correlation coefficient between the pair of values corresponding to individual responses given for each subscale. Statistical tools provided us with an extremely low value of the correlation coefficient between Canadian and Francophone heritage culture (*rs*=0.006).

A statistical two sample z-test was also conducted to determine whether the sex of the respondent was a parameter to be taken into consideration when measuring acculturation within our target group. Significant differences were observed with respect to the average scores given to the Francophone subscale when filtering data according to the sex of the participant. The mean acculturation index calculated for male respondents (3.91) was significantly higher than the average value calculated with female responses (3.56). Independence for male and female samples was also confirmed (z=-10.79; p<0.001). No significant differences were remarked when comparing responses filtered according to sex when dealing within the Canadian mainstream culture subscale.

To move one step further in our research, a distinction between the two different domains of acculturation – socio-cultural and psychological– was made. The socio-cultural, also denominated functional or behavioral, domain of acculturation is related to cultural learning and the adoption of the most external and observable aspects. This includes social skills and the ability to fit in the socio-cultural context (Ward and Kennedy 335).This domain of acculturation would be related to the use of language, the attitudes towards social interactions and recreational activities, and the use of media or participation in social networks.

The psychological domain of acculturation is depicted as a more complex process which reflects the degree of adjustment to the majority group taking into consideration aspects such as values, ideology, beliefs, personal attitudes and preferences. Ward and Rana-Deuba (430) refer to the psychological domain of acculturation which would be connected to personal orientations toward values and attitudes that could be linked to a sense of loyalty to their heritage culture. As stated by these authors, a strong identification with the same ethnic, cultural and language background would be associated with fewer psychological adjustment problems. Strong identification with members of the dominant culture would be related to fewer social and cultural adaptation problems (Ward and Rana-Deuba 432).

Multidimensional acculturation scales have been developed to assess different dimensions or factors that may be a function of acculturation (Zea, Asner-Self and Birman 110). Acculturation studies carried out with Asian American citizens used the Multidimensional Acculturation Scale (AAMAS) providing strong evidence of reliability and validity. The Asian American multidimensional acculturation study included four acculturation domains of cultural identity, language, cultural knowledge, and food consumption (Chung and Abreu 67).

We have based our multidimensional approach to acculturation on the conceptual distinction between the two domains which have been previously described –behavioural and psychological. With the purpose of using a multidimensional scale to measure acculturation that could be valid for our target group, we have designed our own scale (MMAFCP) which incorporates two set of questions –one set for each domain of acculturation– within the two subscales (Canadian mainstream and Francophone heritage culture) used for measuring acculturation.

Hence, our multidimensional model of acculturation of the Francophone population in the Canadian Prairies, MMAFCP, adds a third dimension to our previous study conducted according to the bi-dimensial model of acculturation taken as reference:
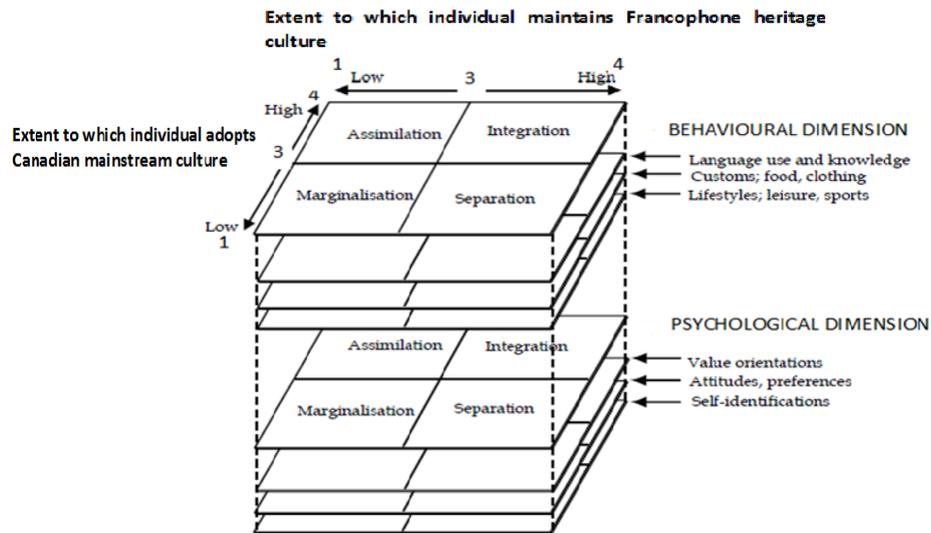
Chart 1.Three-dimensional representation of acculturation modes and layers resulting from adding behavioral and psychological dimensions. Based on Keefe and Padilla (1987).

The multiple layers displayed in Chart 1 represent the two domains that are measured through the responses reported for the set of items related to either behavioral or psychological acculturation. In order to split the subscales –Canadian and Francophone– into low and high values of acculturation, the same criteria that we used for our bi-dimensional study will serve our purposes.[5]

Individuals may show acculturation in the behavioral domain, whereas their personal preferences, values and self-identification still remain close to those of their heritage culture. We assume that some difficulties may arise when using this multidimensional model. Previous studies show that the two domains of acculturation may not provide congruent results (Ward 413). Although we can obtain a more complete picture of the whole process of acculturation for the Francophone citizens living in Anglophone areas of Canada, it is not possible to know in advance whether the two domains of acculturation for the subscales used in our study are interrelated.

To confirm the validity of the multidimensional questionnaire when used within our target group, the first step taken was to evaluate the internal consistency of the responses provided for the questions labeled under the same domain of acculturation. In order to measure the reliability of the six items chosen for measuring the behavioral and psychological domains of acculturation, Cronbach alpha coefficients were obtained within each subscale. Alphas obtained a range between 0.70 and 0.78 when we split items in order to measure both domains of acculturation within each subscale. Thus, a good grade of reliability can be assumed:

	Canadian Mainstream Acculturation			Francophone Heritage Acculturation		
	Mean	Variance	α	Mean	Variance	α
Behavioural	3.58	0.21	0.77	3.72	0.20	0.78
Psychological	3.59	0.16	0.70	3.64	0.17	0.72
Total	3.58	0.14	0.82	3.68	0.13	0.84

Table 2.Values of Cronbach alphas obtained for each domain of acculturation within Canadian and Francophone heritage subscales
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Orthogonality was tested for the individual responses given to each separate domain of acculturation. Correlation matrixes were obtained in order to determine the mean value of the coefficients obtained when crossing data from behavioral and psychological domain within the same subscale. Low values for inter-item correlations were found when comparing questions referred to the behavioral domain for both subscales (*rs*=0.12). For the psychological dimension, the average of the values contained within the inter-item correlation matrix obtained

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[5]   Value 3 in our 4-point scale was chosen as the score that separates a weak and strong degree of identification with either subscale.

was 0.15. Hence, independence for individual responses to both domains of acculturation can be assumed independent in our study.

The mean value of the scores given by each participant to all the items related to each domain of acculturation were calculated in order to provide acculturation indices associated to both behavioral and psychological acculturation. Acculturation index values were processed with the objective of testing the independence between each domain of acculturation when the two subscales are compared for each individual. The independence assumption was tested by using a paired two-sample z-test.

As regards the psychological domain, it cannot be stated that respondents granted scores which are significantly different when crossing data obtained for the Canadian and Francophone heritage culture subscales. Z-test results offer p-value slightly superior to confidence level. Hence, we could assume in this case that psychological domain results for both subscales are marginally independent (p=0.06). Nevertheless, the correlation coefficient obtained when we compared acculturation indices obtained within the psychological domain when crossing the Canadian and the Francophone heritage subscales are extremely low (*rs*=-0.076). Consequently, independence regarding the psychological domain of acculturation may be assumed for our purposes of classifying individual respondents within one of the four possible modes of acculturation.

The independence assumption for the behavioral domain can be confirmed when the z-Test is carried out, showing extremely low values of p (p<0.001). We can therefore affirm that behavioral acculturation indices are largely independent when crossing the Canadian and Francophone subscales, as the data displayed on table 3 indicate:

	PSYCHOLOGICAL		BEHAVIORAL	
	Francophone	Canadian	Francophone	Canadian
Mean value	3.6464872	3.5874439	3.72032885	3.57698057
Variance	0.16795432	0.1586104	0.12503032	0.20838664
Number of responses	223	223	223	223
Hypothetical difference between averages.	0		0	
z	1.54290		3.70724	
P(Z<=z)	**0.06142***		0.00010	

*p>0.05, significance level established for our study (95% confidence level).

Table 3. Acculturation index and z-test statistic parameters referred to psychological and behavioral domains of acculturation.

The behavioral domain shows a similar correlation coefficient when crossing the data for both subscales (*rs*=0.12). This fact supports our statement of independence for the acculturation indices obtained within this domain when crossing both subscales.

RESULTS

Further treatment of the responses was aimed at deepening the four different modes of acculturation proposed in Berry's bi-dimensional model. With the objective of assessing the acculturation mode for each participant, a dividing point for both subscales was necessary to differentiate two different degrees of identification with each culture. The scalar mid-point (2.5) of the 4-point scales was discarded as split point. It was considered that this value cannot be associated to a strong degree of identification with either culture. Among the Likert-type response options presented to the participants in our survey, those lying on the upper range (3- 4) are identified with a high level of cultural identification in the present acculturation study. Hence, values inferior to these (<3) will be identified with a weak level of agreement with the statement formulated.

To achieve the main goal of this part of the research, we proceeded to filter the responses according to four different value ranges in order to determine the number of participants in our research that fall under each of the four modes of acculturation. The Marginalization mode of acculturation includes those respondents who granted scores lower than 3 to both Canadian and Francophone culture items, whereas Separation would be associated to scores higher than 3 for items related to Francophone heritage culture but lower than 3 for questions that refer to the Canadian host society. Assimilation would comprise those respondents who registered average scores higher than 3 for items related to Canadian culture but lower than 3 for Francophone heritage

questions. According to our classification criteria, Integration encompasses individuals who granted values higher than 3 for both subscales.

Individual values of acculturation indices obtained for the respondents to our questionnaire are plotted on the following two-dimensional dispersion graph:
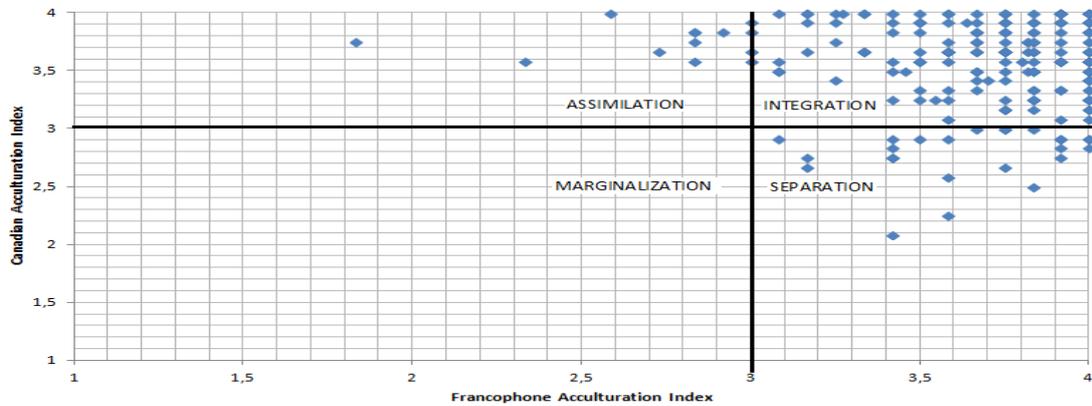

Chart 2. Respondents' mode of acculturation representation according to Francophone heritage and Canadian mainstream bi-dimensional model.

According to the classification parameters here established, no individual responses within our sample were bound to Marginalization. Twelve participants would lie within the Assimilation quadrant of the graph (5.38%). A total of 24 individuals would be associated to Separation (10.76%).The rest of the participants fall under the model of Integration according to the method used for differentiating weak and strong cultural identification attitudes (83.86%).

The two-dimensional graph shows that the majority of the candidates participating in our study reported a positive attitude towards both Canadian mainstream culture and their heritage culture. The correlation between the responses given for each subscale within each of the four resulting modes of acculturation was also measured.

The correlation coefficients for acculturation indices calculated with respondents lying within each mode of acculturation were very low. In fact, correlation for individual values of acculturation for both subscales reported rs=0.08 value for responses associated to Integration. Similar correlation coefficients were obtained when considering individuals lying within Assimilation and Separation (rs=0.07). This fact supports our assumption of independence for responses given by individuals in relation to both subscales.

Following the criteria adopted for the interpretation of our results, according to which scores higher than 3 in our 4-point scale are associated to a strong degree of identification with either culture, we count a total number of 190 Francophone citizens who opted for Integration and 12 who opted for Assimilation to the mainstream host society. Our attempt to formulate a valid hypothesis that could be tested in order to extract general conclusions is based on the results shown above.

Taking into account the proportions observed in our sample, we conducted a test of hypothesis for the proportion of integrated and assimilated citizens within the Francophone ethnic group in the provinces of Alberta, Saskatchewan and Manitoba. The null hypothesis (Ho) that the proportion of Francophones living in the Canadian Prairies who opt for Integration is inferior to 0.75 (75% of the total) was stated. The alternative hypothesis (H₁) proposed is that the proportion of Francophones who opt for Integration is equal or superior to 0.75.

We chose 0.05 as significance level to be consistent with the confidence level that we elected for previous treatment of statistical data (95%). We labelled P as the hypothesized value of the population proportion in the null hypothesis (P=0.75) and n-value represents the sample size (n=223). We computed the standard deviation (σ) of the sampling distribution using the following mathematical expression:

$$\sigma = \underline{\hspace{4cm}}$$

We obtained the z-score (z) as a test statistic using p as the proportion of responses linked to Integration within our total sample (p=0.852):

$$z = (p - P) / \sigma$$

When using these formulae, $\sigma=0.029$ and $z=3.52$ values were obtained. The z-score obtained is superior to the critical value needed to reject the null hypothesis ($z=1.96$). Consequently, we can reject the hypothesis that the proportion of integrated population is inferior to 75% of the total population who were subject to our research.[6]

We proceeded in the same manner in order to formulate the hypothesis for the proportion of assimilated Francophones. Given the low percentage of individuals that lay under the mode of Assimilation in our sample (5.38%), we initiated our Assimilation hypothesis testing the proportion of 0.1 (10% of total Francophone citizens assimilated). The Z parameter resulting from our calculation ($z=2.40$) exceeded critical value when calculated using the formulae previously shown. Thus, the null hypothesis (Ho) that the proportion of assimilated Francophones is superior to 0.1 (10% of total Francophone population) can be rejected. Hence, we argue that the proportion of assimilated Francophones living in the Canadian Prairies is not superior to 10%, according to our study.

The second part of the statistical treatment was devoted to extracting the most relevant facts derived from the use of MMAFCP designed for our purposes of differentiating the psychological and behavioral domains of acculturation. Considering individual responses given to questions in the psychological domain, a total of 19 respondents (8.52%) could be included within the Assimilation quadrant whereas 15 citizens (6.72%) would lie within the Separation area of the graph. The proportion of integrated individuals regarding the psychological domain of acculturation (84.75%) is very similar to the one obtained using the bi-dimensional model in which no distinction between the psychological and behavioral domains was contemplated (85.20%).

The null hypothesis (H_o) that more than 15% of the Francophones living in the Canadian Prairies are assimilated from a psychological point of view was formulated. The value obtained for the z parameter (2.71) was higher than the critical value ($z=1.96$ at 95% confidence level). Consequently, we may formulate the alternative hypothesis that a rate inferior to 0.15 of the total Francophone population is assimilated when focusing on the psychological domain of acculturation.

In relation to the behavioral domain of acculturation, a considerably inferior number of individual responses are located within the Assimilation area of the acculturation graph. A total of 22 responses (9.86%) are associated to Separation when we only take into account the items labeled under the behavioral domain of acculturation. A significantly low percentage of individual responses lie within the Assimilation quadrant of the graph (2.69% of the sample). Only one participant in the survey provided answers associated to the Marginalization mode of acculturation according to the criteria established in our study to split the results into the four different modes of acculturation.

Our hypothesis on the rate of assimilation from a socio-cultural point of view led us to state that the proportion of assimilated Francophones in the Canadian Prairies is not superior to 0.15. We reject the null hypothesis that the rate of assimilation is superior to 0.15 since the z parameter (2.14) turned out to be superior to the critical value needed ($z=1.96$, 95% confidence level).

A proportion hypothesis test was also applied to the rate of assimilated Francophones from a socio-cultural point of view. The null hypothesis that more than 10% of the target group are associated to Assimilation was rejected, due to the fact that the z value (3.65) was superior to the critical z-value (1.96), working at 95% confidence level. Therefore, the statement that a proportion inferior to 10% of the Francophones in the Canadian Prairies are assimilated from a socio-cultural point of view can be formulated.

GENERAL DISCUSSIONS

Integration appears to be the mode of acculturation which is associated to a better psychological adaptation. By engaging in the two cultures (mainstream and heritage culture), individuals acquire dual competencies and dual social networks that support the citizen during the process of acculturation (Benet-Martinez). Previous multidimensional studies of acculturation conducted with citizens of different ethnic groups migrating to Canada have showed that integration was the preferred mode of acculturation for individuals (Zagefka, Tip and Gonzalez 658). The social policies implemented in Canada have influenced the promotion of cultural diversity as a national goal. Those policies and practices that promote the maintenance of heritage

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[6] When trying to reject the null hypothesis (Ho) that the proportion of integrated Francophones was inferior to 0.8, calculations give us $z=1.73$, which is inferior to z critical value $=1.96$. Consequently, the hypothesis that a percentage superior to 80% of the Francophones living in the Canadian Prairies opt for integration could not be stated.

cultures, such as that of the French descendants in Canada, facilitate contacts among different ethno-cultural groups in society and it is considered that they support cultural pluralism. We can point at these policies to justify the high rate of integrated respondents that we obtained when conducting our survey.

Language assimilation has been regarded as a continuum process involving either a loss or a lack of transmission of French language in Canada. The high number of exogamous families and the continuous contact of French speaking communities and English speaking population is evidenced with the currently numerous English loanwords which appear in informal conversations held among the Francophones. Nevertheless, when other factors other than language are taken into consideration, the proportion of Francophone citizens which is associated to the assimilation mode of acculturation is significantly low. In fact, the data obtained in our study led us to hypothesize that the proportion of assimilated Francophones within the Canadian Prairies is not superior to 15% when the psychological domain of acculturation is considered and not higher than 10% when only the behavioral aspects of acculturation are taken into account.

Marginalization has been related to globalization, which implies an accelerated introduction into a global world economy, not only at the regional level. Some authors have stated that globalization would lead into marginalization since it provokes the polarization between affluent and low-income regions (Murshed 2). Marginalization, in which immigrants reject their own and also the host cultures, appears as the rarest mode of acculturation within the Francophone minority groups included in our study. As a matter of fact, no cases of marginalization have been counted within the respondents in our survey when the whole set of questions are included for each subscale. A poor enforcement of citizens' rights by public institutions, or the inability of individuals, social groups or organizations to defend their rights frequently leads to marginalization. The Canadian policies of social integration seem to encourage the enforcement of citizens' rights, which may be interpreted as the cause for the extremely low rate of marginalization found within the Francophone minority groups studied.

The conclusions drawn from the present study confirm the hypothesis that integration is the preferred mode of acculturation for Francophone minority groups living in areas of Canada where the vast majority of the population is Anglophone. We could not state that assimilation occurs simply because a person becomes fluent in the host culture language. Consequently, a dividing line must be drawn between linguistic assimilation and the process of acculturation. Although language is necessary to acculturate and interact with other groups of the population, communication is a very complex issue and it is considered to go beyond language. Even though language is an important component of acculturation, we have considered language as only one factor in the process of behavioral acculturation from which no conclusions about the psychological dimension could be drawn.

Further research in this field of acculturation should be oriented to new modes of acculturation which are not contemplated within the bi-dimensional models proposed in previous research on acculturation. As a matter of fact, studies in which Berry has taken part include "coexistence" as a mode of acculturation that would occupy intermediate places in the two-dimensional acculturation model here proposed (Mishra, Sinha and Berry). The finding of this fifth orientation shows that there are other modes of acculturation that could be conceptualized. The extent to which younger generations are oriented not only to host national and their own heritage cultures but also to a "global culture" may lead into another field of research on acculturation. The fact that these two specific cultures do not constitute the essential focus of their lives would lead us to adopt new attitudes which could successfully include new modes of acculturation different from those contemplated in the present investigation.

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