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A Portrait of New Brunswick's Regions

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Article abstract

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The Combined Effect of Ethnic Identity Strength and Profiles on the Mental Health of Acadian University Students:
A Portrait of New Brunswick's Regions

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Abstract

This two-part study aims to examine the moderating effect of ethnic identity strength on the relationship between ethnic identity profiles and mental health among Acadian university students who occupy a relative minority or majority status in the province of New Brunswick. Study 1 tested the factorial structure of an ethnic identity profile measure for Acadian students. Exploratory and confirmatory factor analyses supported a three-factor model, resulting in Affirmation, Detachment and Insecurity profiles. In Study 2, results of the moderation analysis revealed that the combination of a strong ethnic identity and an Affirmation profile provides protection against mental health issues for minority-status Acadian students, but not for majority-status Acadian students. Conversely, the combinations of a strong ethnic identity with the Detachment and Insecurity profiles increased the vulnerability of minority-status Acadian students to mental health issues, but not that of majority-status students.

Résumé

Cette étude à deux parties vise à établir l'effet modérateur de la force de l'identité ethnique sur la relation entre les profils identitaires et la santé mentale des étudiants universitaires acadiens qui occupent un statut numérique minoritaire ou un statut numérique majoritaire au Nouveau-Brunswick. L'étude 1 tente d'établir la structure factorielle d'une mesure des profils identitaires chez les étudiants acadiens. Des analyses factorielles exploratoires et confirmatoires soutiennent un modèle factoriel à trois facteurs, notamment les profils identitaires Affirmation, Détachement et Insécurité. Les résultats d'une analyse de covariance à l'étude 2 révèlent que la combinaison d'une identité ethnique forte et du profil Affirmation protège la santé mentale des étudiants acadiens minoritaires, mais non celle de ceux qui sont majoritaires. À l'opposé, les combinaisons d'une identité ethnique forte et des profils Détachement et Insécurité rendent les étudiants acadiens minoritaires vulnérables à des problèmes de santé mentale, mais non les étudiants acadiens majoritaires.

Research has provided evidence that ethnic identity is an important predictor of mental health (Rhea & Thatcher, 2013; Umaña-Taylor, Updegraff, & Gonzales-Backen, 2011). However, it is unclear whether ethnic identity contributes to positive or negative mental health. This relationship depends upon the ethnic identity component that is under investigation (Noël & Beaton, 2010; Phinney, 1991). In this two-part study, a distinction is made between ethnic identity strength (Phinney) and ethnic identity profiles (Pilote), to understand how both components influence mental health among members of an ethnic group. This research will help clarify the ways in which ethnic identity components combine to protect or harm the mental health of members of marginal groups. To reach this objective, we draw upon work on ethnic identity profiles (Pilote, 2006) and ethnic identity strength (Phinney & Ong, 2007), to understand how both mechanisms influence mental health among Acadian university students throughout the province of New Brunswick. We begin by turning to the work on ethnic identity strength and mental health.

Ethnic identity strength is the result of cultural exploration (e.g. *I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.*) and cultural commitment (e.g. *I feel a strong attachment to my own ethnic group.*) directed toward one's ethnic ingroup (Phinney, 1991; Phinney & Ong, 2007). Research with American minority high school students has found that minority group members with ethnic identity strength report a more positive self-evaluation, a sense of mastery, positive peer and ethnic interactions, and favourable family relations (Phinney, 1989). Other studies have also supported the benefits of ethnic identity strength on mental health. For example, Usborne and Taylor (2010) demonstrated that for many different ethnic samples of undergraduate students, ethnic identity was the cornerstone of a well-defined personal identity that, in turn, led to more positive self-esteem and well-being. In sum, there is strong evidence that points toward the positive relationship between ethnic identity strength and mental health.

The role of ethnic identity profiles on mental health has received less attention, although it is clearly more nuanced. An ethnic identity profile is defined as "types of belonging that refer to the way an individual negotiates his or her place into particular or general political collectivities. They are the result of individual choices and social interactions that characterize the identity process" (Pilote, 2006, p. 44)[1]. Pilote compiled eight different ethnic identity profiles from the description of the ethnic ingroup and life story of Acadian youth from southern New Brunswick (Pilote, 2004, 2006). Similarly, Noël and Beaton (2010) carried out semi-structured interviews with Acadian youth in southeastern New Brunswick and uncovered six different ethnic identity profiles. More importantly, certain ethnic identity profiles protected while others harmed mental health. To illustrate, due to their unique minority status, certain Acadian adolescents from southern New Brunswick who adopt an

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1. Translation from French.

ethnic identity profile that devalues their cultural heritage experience mental health problems (Noël & Beaton, 2010). Romero and Roberts (2003) have found that marginalized ethnic youth who report high levels of the ethnic profile, Affirmation, experience high self-esteem.

Although there is evidence of the relationship between an ethnic identity profile and mental health, we believe that this link deserves a closer look. Our research is based on the premise that the link between ethnic identity profiles and mental health will depend upon the strength of ethnic identity, in other words, the extent to which an individual devotes time, effort and resources to explore and commit to their culture. Indeed, some combinations between ethnic identity strength (e.g. cultural exploration and commitment) and ethnic identity profiles will affect one's mental health differently. For instance, affirmation of one's ethnic identity may have protective effects on mental health problems among Acadian students with high ethnic identity strength. Other combinations may be more noxious. For instance, among Acadian students who explore and commit to their cultural heritage, an ethnic identity profile that devalues the ingroup, or casts doubts about its viability (see collective angst, Wohl, Giguère, Branscombe, & McVicar, 2011), may be negatively associated with the mental health of Acadians. While this situation may seem counterintuitive, it is not unusual in New Brunswick for Acadians to experience pressure to take pride in their cultural heritage (Boudreau, 2016; Fournier, 2013). In fact, this study comes in the wake of a policy implemented by the Government of New Brunswick in all Francophone schools across the province designed to encourage Acadian youth to explore and commit to their cultural heritage (Department of Education and Early Childhood Development, 2014).

This research is conducted among Acadian students who live throughout the province of New Brunswick. Acadians are a minority group within the province of New Brunswick, making up 32% of its citizens (Statistics Canada, 2011). However, there are notable regional differences. In northern parts of New Brunswick, like in Edmundston and Shippagan, Acadians occupy a majority status, accounting for 93% and 96% of the population, respectively. However, in southern New Brunswick, like in the city of Moncton, Acadians are a minority, representing 34% of the population (Statistics Canada, 2011). Thus, Acadians from southern, rather than northern, New Brunswick are more likely to face pressures of assimilation from the majority Anglophone community (Boudreau & Dubois, 1991, 1992, 2001, 2005; Corbeil, Grenier, & Lafrenière, 2006; Landry & Allard, 1994) and may be more inclined to reap the mental health benefits of identifying with their minority ingroup (Branscombe, Schmitt, & Harvey, 1999; Cronin, Levin, Branscombe, van Laar, & Tropp, 2012; Schmitt, Branscombe, Postmes & Garcia, 2014). According to statistics conducted among Francophone emerging adults from New Brunswick (20 to 24 years of age), in the past year, 5.9% have reported a major depressive episode, and 2.6% have experienced a generalized anxiety disorder (Statistics Canada, 2013).

By examining the relationship between ethnic identity profiles and mental health, this research will consider the strength of one's ethnic identity among Acadians who, due to their numerical status, are faced with different ways to "negotiate" their place (Pilote, 2006) alongside the Anglophone community. This study will shed light on whether cultural exploration and commitment impacts the relationship between ethnic identity profiles and mental health among minority- and majority-status Acadian students. As such, our work aims to increase the understanding of the variety of ways ethnic identity components affect members of an ethnic minority group within the context of their numerical status.

This research contains two parts. The first study is designed to develop and test a measure of ethnic identity profiles among Acadian university students. Previous studies conducted among Acadians (Noël & Beaton, 2010; Pilote, 2006) have been qualitative in nature and thus unable to provide an instrument that can be used with a representative sample of the Acadian population. The second study will investigate the effect of the combination of the strength of the ethnic identity and ethnic identity profiles on mental health among Acadian students who are in the northern (majority status) and southern (minority status) regions of New Brunswick. A few studies have focused on the ethnic identity of minority Francophone emerging adults (Lamoureux, 2005; Pilote & Joncas, 2016; Pilote, Magnan, & Vieux-Fort, 2012) and Acadian emerging adults (Garneau, Bouchard, & Pilote, 2013), but they have neither combined ethnic identity profiles with ethnic identity strength, nor studied its effects on the mental health of ethnic group members. Therefore, this research represents the first comprehensive test of the moderating effect of ethnic identity strength on the relationship between ethnic identity profiles and mental health among members of an ethnic group who occupy a relative minority or majority status.

Study 1

Study 1 aims to test a measure of ethnic identity profiles among Acadian university students. Among Acadian youth, Pilote (2006) uncovered a variety of profiles ranging from *Critically engaged* – someone who describes themselves as a member of the minority group, but refuses to identify with the traditional values held by the group as it does not reflect their day-to-day reality – to *Chameleon* – a person who describes themselves as a member of the minority or majority group, depending on the context (Pilote, 2006). Noël and Beaton (2010) detected profiles among southeastern Acadian youth that include *Bilingual with Anglophone Identity*, which refers to Acadians who believe that their Acadian heritage is irrelevant and describe themselves as proficient Anglophones, and *Indifferent*, which refers to youth who choose to describe themselves as unique individuals, rather than a member of the Acadian ethnic group. This first study will test a measure of ethnic identity profiles with a representative group of Acadian university students.

Method

Participants

In total, 630 university students were recruited between 2011 and 2014 by email and face to face across the three campuses of Université de Moncton: Moncton, a campus situated in southern New Brunswick; and Edmundston and Shippagan, two campuses located in northern New Brunswick. Among these 630 participants, 148 students did not identify themselves as Acadian and were therefore removed from the study. Additionally, 12 participants were removed because of their high rate of missing responses, resulting in a total sample of 470 Acadians for Study 1. This final sample consisted of 79.7% females and 21.3% males with a mean age of 20 years. Participants were from different regions across the province of New Brunswick: 204 were from southern New Brunswick, 219 were from northern New Brunswick, and 47 were Acadians from outside of New Brunswick. It is important to note that Acadians do not live exclusively in New Brunswick. Many Francophones from the provinces of Nova Scotia, Prince Edward Island and Quebec identify themselves as Acadian. Students from outside of New Brunswick who identified themselves as Acadian were therefore included in Study 1.

Measures and Procedure

Sociodemographic information was gathered with specific questions inserted at the start of the questionnaire. Most notably, group identification was measured by asking participants to check the group with which they identified the most, from a list of possible groups (e.g., Acadian, Brayon, etc.). Participant region was determined by a question asking their place of birth.

The qualitative data collected by Noël and Beaton (2010) was used to create 34 items to reflect the six profiles. For example, a student characterized in the Bilingual with an Anglophone Identity profile explained "*I often speak in English, and I just prefer it over French.*" This inspired the elaboration of the item "*When I have a choice, I prefer speaking English.*" A free translation of French items into English are presented in Table 1. In this study, participants were invited to react to each of these 34 items using a 7-point Likert-type scale, with responses ranging from 1 (*completely disagree*) to 7 (*completely agree*). The first part of the questionnaire consisted of questions designed to collect demographic data, such as the gender, age and place of origin of the participants, while the second part of the questionnaire consisted of items meant to tap into the ethnic identity profile items.

Data analysis

The sample of 470 participants was randomly divided into two groups to conduct a cross-validation of the ethnic identity profile measure using an exploratory (EFA, *n* = 246) and confirmatory (CFA, *n* = 224) factor analysis approach. Simply put, "an EFA is associated with theory development, while a CFA is associated with theory testing" (Tabachnick & Fidell, 2012, p. 614). The EFA was conducted to uncover a subset of ethnic identity profiles, while the CFA was performed to validate this latent factorial model. Prior to conducting the EFA and CFA, some basic assumptions were tested, such as appropriate sample size, the rate of missing cases, normal distribution, presence of outliers, and multicollinearity and singularity for variables (Tabachnick & Fidell, 2012).

The EFA technique was conducted with SPSS (version 22) while the CFA was executed with the EQS 6.3 for Windows structural equation modeling program (Bentler & Wu, 2015). To test the postulated factorial model, the EQS 6.3 program allows for the CFA to be performed with the robust maximum likelihood extraction method (Bentler, 2006). The EQS 6.3 program also provides different indices that evaluate model fit. First, the Satorra-Bentler scaled chi-square (S-$B\chi^2$) was used to measure the error between the hypothesized model and observed model. A non-significant chi-square is indicative of a model that fits the data well. Next, the Comparative Fit Index (CFI) measures the discrepancy between the data and hypothesized model. With values ranging from 0 to 1, if the goodness-of-fit value of the CFI is above .90, this generally means that there is a good fit (Kline, 2011). The Bentler-Bonnet Nonnormed Fit Index (NNFI) represents the discrepancy between the postulated model and a null model. Jöreskog and Sörbom's (1986) Goodness of Fit Index (GFI) measures the proportion of covariance between the data and postulated model. The NNFI and GFI are also considered acceptable if they are above .90 (Kline, 2011). The Root Mean-Square Error of Approximation (RMSEA; Steigner, 1990) is an indicator of the degree of discrepancy between the data and hypothesized model. A RMSEA score below .05 is considered an excellent fit, a score between .05 and .08 is considered acceptable, and a score above .10 considered unacceptable (McDonald & Ho, 2002). If the above-mentioned indices do not meet their well-fitting values, model modifications suggested by the Lagrange Multiplier (LM) test are performed, provided they are justified.

Results

Sample 1 (*n* = 246) was used for the EFA and had a mean age of 20.1 years and was composed of 79.3% females. Participants were either born in southern New Brunswick (*n* = 112), northern New Brunswick (*n* = 111) or in locations outside of the province of New Brunswick (*n* = 23).

Exploratory factor analyses (EFA)

Different EFA analyses were conducted with the 34 items to test models that ranged from two to eight factors. Models were evaluated with maximum likelihood and varimax extraction methods. The oblique rotation method was not warranted because factors did not show a significant correlation (Tabachnick & Fidell, 2012). A simple and interpretable three-factor model was reached by retaining items that loaded with a coefficient of .40 or above onto a factor. In all, 25 of the 34 ethnic identity profile items were retained. One item was found to cross-load between two factors[2] (see Table 1).

The first factor represents the Affirmation profile and is assessed with 11 items. The Affirmation profile refers to a sense of pride in the Acadian minority group and a propensity to "display a culture's colours," both literally (e.g., flag) and figuratively (e.g., it's dialect, Chiac). An example of an item found in this profile is: "*Being Acadian is a great source of pride for me.*" The second factor, entitled Detachment profile, consists of six items that assess the tendency to perceive Acadian heritage and culture as irrelevant and a preference to display features of the Anglophone community, such as choosing the English language over the French language. An example of an item found in this profile is: "*After my post-secondary studies, I would like to live in an Anglophone community.*" And lastly, the third factor, entitled Insecurity profile, consists of eight items that tap into uncertainty about the viability of Acadian culture and belief that the ingroup is threatened by the Anglophone community. An example of an item for this profile is: "*I get the impression that Anglophones are trying to assimilate Acadians.*"

Table 1
Factor Loadings, Percentage of Variance, and Communalities of the Exploratory Factor Analysis (n = 246)

Items	P_1	P_2	P_3	h^2
29. Being Acadian is a great source of pride for me.	**.84**	−.27	.05	.78
16. It fills me with joy to participate in events that celebrate Acadian culture.	**.80**	−.33	.05	.75
28. In my opinion, it's important to encourage my friends to promote Acadian culture.	**.79**	−.20	.18	.69
21. I am proud to be Acadian.	**.78**	−.27	−.07	.69
5. I think I share the same values and beliefs as Acadians.	**.69**	−.24	.11	.54
30. In my opinion, gestures like displaying the Acadian flag help preserve and protect Acadian culture.	**.63**	−.09	−.03	.41
8. I present myself as purely Acadian.	**.55**	−.18	.15	.36

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2. It was decided that, since item 4 "I am indifferent toward Acadian culture" cross-loaded equally between the Affirmation profile and the Detachment profile, it would be placed with the Detachment profile.

Table 1 (cont'd)

Factor Loadings, Percentage of Variance, and Communalities of the Exploratory Factor Analysis (n = 246)

Items	P_1	P_2	P_3	h^2
4. I am indifferent toward Acadian culture.	**−.54**	**.54**	−.10	.56
6. My friends and I make up a new generation of Acadians because of the way we express ourselves.	**.50**	.18	.19	.32
22. I think Acadians can ensure the viability of their culture.	**.46**	−.18	−.38	.38
2. I have confidence in the continuity of my Acadian culture.	**.42**	−.34	−.39	.44
20. It's important for me to keep my regional dialect (e.g., Chiac).	**.42**	−.10	−.10	.19
19. After my post-secondary studies, I would like to live in an Anglophone community.	−.22	**.69**	−.14	.54
17. When I have a choice, I prefer speaking in English.	−.13	**.66**	−.11	.47
7. I prefer Anglophone culture to Acadian culture.	−.36	**.64**	−.01	.54
31. I believe Acadians push too hard to take their place.	−.23	**.50**	−.14	.32
9. I think that Acadian social demands threaten Anglophone rights.	−.16	**.48**	−.04	.26
23. I think the relationship between Acadians and Anglophones has improved with time.	.12	.05	**−.68**	.48
13. I get the impression Anglophones are trying to assimilate Acadians.	.09	−.09	**.63**	.41
10. I think the relationship between Acadians and Anglophones is harmonious.	−.06	.17	**−.59**	.38
1. I worry about the future of Acadian culture.	.27	−.27	**.55**	.45
26. In my opinion, Acadian culture is disappearing.	−.06	.29	**.54**	.37
33. Acadian culture is vulnerable to assimilation pressure from Anglophones.	.18	.09	**.53**	.32
12. Anglophones would be happier if Acadians disappeared.	.05	.18	**.52**	.29
3. I believe that Anglophones don't understand Acadian culture.	.20	−.34	**.43**	.34
Alpha	**.88**	**.81**	**.77**	—
Items that did not load onto factors				
14. I believe Acadian identity stems solely from where you were born.	−.32	.38	−.10	.26
11. In my opinion, the English language brings forth more success than the French language.	−.24	.38	.26	.27
27. Acadians and Anglophones are two similar groups.	−.01	.37	−.35	.26
34. It's important for me to preserve the French language.	.29	−.37	.01	.22
32. I don't think that belonging to a cultural group changes or influences me.	−.10	.36	.00	.14
18. My generation of Acadians is different than my grandparents' generation.	.18	.32	.16	.16
15. I portray myself as Acadian simply for the fun of it.	−.05	.24	−.10	.07
24. Bilingualism has become an important part of Acadian culture.	.08	.10	−.39	.17
25. I am as proud of my French as my English.	.03	.21	−.37	.18
Percentage of variance	**22.4**	**10.2**	**5.7**	—

Note: Factor loadings > .40 are in boldface. P_1 = Affirmation profile; P_2 = Detachment profile; P_3 = Insecurity profile.

Confirmatory factor analyses (CFA)

The CFA was performed with sample 2 (n = 224). The average age of the participants was 19.9 years and 78.1% were female. Participants were from southern New Brunswick (n = 92), northern New Brunswick (n = 108) or located outside of the province (n = 24).

The three-factor model that emerged from the EFA was tested with the CFA technique. Results of the CFA yielded non-acceptable fit indices (see Table 2). Consequently, the results of the Lagrange Multiplier (LM) test were used to add modifications to the postulated model. A summary of the modifications is provided in Table 2. The results of the confirmatory factor analysis are presented in Table 3. All coefficients are significant ($p < .05$).

Table 2
Fit Indices for each Model

Model	χ^2	df	S-B χ^2	CFI	GFI	NNFI	RMSEA	χ^2_{dif}	df$_{diff}$
Initial model	648.88	274	—	.782	.750	.761	.096	—	—
P_1-P_2	592.24	273	—	.814	.774	.796	.089	56.64	1
P_2-Item1	550.44	272	—	.838	.787	.821	.083	41.80	1
P_1-Item3	522.97	271	—	.854	.795	.838	.079	27.54	1
P_3-Item2	497.59	270	—	.868	.802	.853	.075	25.38	1
P_3-Item22	478.70	269	—	.878	.805	.864	.072	18.89	1
Err22-Err26	464.67	268	—	.886	.809	.872	.070	14.03	1
Err26-Err33	448.03	267	—	.895	.815	.882	.067	16.64	1
Err23-Err31	437.88	266	—	.900	.820	.887	.066	10.15	1
Final model	437.88	266	398.72	.900	.820	.887	.058*	0.0	0

Note: S-B χ^2 = Satorra-Bentler chi-square; CFI = Comparative fit index; GFI = Goodness of Fit Index; NNFI = Nonnormed Fit Index; RMSEA = Root Mean-Square Error of Approximation; P_1 = Affirmation profile, P_2 = Detachment profile, P_3 = Insecurity profile.

*RMSEA value of robust model.

Results of the cross-validation technique support a three-factor structure to the ethnic identity profile measure. However, a few modifications were added to the initial model to achieve an adequate fit. A correlation was addition between the Affirmation profile (P_1) and the Detachment profile (P_2), because both profiles suggest opposing ways to relate to the ingroup. The links between the Insecurity profile (P_3), and items 2 "*I have confidence in the continuity of my Acadian culture*" and 22 "*I think Acadians are able to ensure the viability of their culture*" were added to the model. Both items refer to the stability and security of Acadian culture. Correlations were added to specific error terms. The correlated error terms (Model Err22-Err26, see Table 2) for item 22, "*I think Acadians are able to ensure the*

viability of their culture," and item 26, *"In my opinion, Acadian culture is disappearing,"* have been added to the model since they reflect the viability of Acadian culture. The additional correlated error terms (Model Err26-Err33, see Table 2) for item 26, and item 33, *"Acadian culture is vulnerable to assimilation pressure from Anglophones,"* also attest to the disappearance of Acadian culture. Lastly, the last correlated errors (Model Err23-Err31, see Table 2) for item 23, *"I think the relationship between Acadians and Anglophones has improved with time,"* and item 31, *"I believe Acadians push too hard to take their place,"* as two error terms refer to the relationship between the Francophone and Anglophone communities in New Brunswick.

Table 3
Standardized Coefficients, Error for the Measurement Model, Correlations Between Error Measurements, and Correlations Between Profiles

Items	P₁	P₂	P₃	Error
29. Being Acadian is a great source of pride for me.	.89			.45
16. It fills me with joy to participate in events that celebrate Acadian culture.	.87			.50
28. In my opinion, it's important to encourage my friends to promote Acadian culture.	.84			.55
21. I am proud to be Acadian.	.86			.52
5. I think I share the same values and beliefs as Acadians.	.76			.65
30. In my opinion, gestures like displaying the Acadian flag help preserve and protect Acadian culture.	.72			.70
8. I present myself as purely Acadian.	.70			.73
6. My friends and I make up a new generation of Acadians because of the way we express ourselves.	.39			.92
20. It's important for me to keep my regional dialect (e.g., Chiac).	.37			.93
2. I have confidence in the continuity of my Acadian culture.	.37		−.42	.83
22. I think Acadians can ensure the viability of their culture.	.58		−.28	.77
19. After my post-secondary studies, I would like to live in an Anglophone community.		.71		.71
17. When I have a choice, I prefer speaking in English.		.57		.83
7. I prefer Anglophone culture to Acadian culture.		.84		.55
9. I think that Acadian social demands threaten Anglophone rights.		.26		.97
31. I believe Acadians push too hard to take their place.		.65		.76
4. I am indifferent toward Acadian culture.	−.45	.34		.69
1. I worry about the future of Acadian culture.		−.53	.38	.76
3. I believe that Anglophones don't understand Acadian culture.	.39		.48	.79
23. I think the relationship between Acadians and Anglophones has improved with time.			−.59	.81

Table 3 (cont'd)

Standardized Coefficients, Error for the Measurement Model, Correlations Between Error Measurements, and Correlations Between Profiles

Items	P$_1$	P$_2$	P$_3$	Error
13. I get the impression that Anglophones are trying to assimilate Acadians.			.61	.80
26. In my opinion, Acadian culture is disappearing.			.50	.87
33. Acadian culture is vulnerable to assimilation pressure from Anglophones.			.49	.87
12. Anglophones would be happier if Acadians disappeared.			.60	.80
10. I think the relationship between Acadians and Anglophones is harmonious.			−.64	.77
Correlations between error measurements				
Error Item 22; Error Item 26 = −.35				
Error Item 23; Error Item 31 = .29				
Error Item 26; Error Item 33 = .33				
Correlations between profiles				
Affirmation profile; Detachment profile = −.67				

Note: P$_1$ = Affirmation profile; P$_2$ = Detachment profile; P$_3$ = Insecurity profile.

Discussion

This study was designed to test a measure of ethnic identity profiles among Acadian university students. An EFA with the 34 items created by Noël & Beaton (2010) resulted in the three distinct factors containing a total of 25 items. Nine items were eliminated due to lack of fit with the model. A CFA with a second sample of Acadians later confirmed the three-factor structure. An analysis of the items in each factor uncovered three main ethnic identity profiles: Affirmation, Detachment and Insecurity. The Affirmation profile is defined as a sense of pride in the Acadian minority group and a propensity to "display a culture's colours," both literally (e.g., flag) and figuratively (e.g., it's dialect, Chiac). Previous research suggests that this form of identity profile is conducive to mental health benefits, like well-being (Branscombe *et al.*, 1999; Haslam, Jetten, Postmes, & Haslam, 2009) and self-esteem (Outten, Schmitt, Garcia, & Branscombe, 2009; Romero & Roberts, 2003). The second ethnic identity profile detected is entitled Detachment. It is defined as the tendency to perceive Acadian heritage and culture as irrelevant and express a preference for the Anglophone community, such as preferring the English language over the French language. This particular profile involves a preference for the majority group. This profile is akin to what researchers refer to as an assimilationist approach, whereby individuals will distance themselves from their ethnic group and develop relationships with members of the majority group (Berry, Kim, Power, Young, & Bujaki, 1989). Studies have found

that this latter profile is more likely to be maladaptive and lead to psychological distress among Acadians who occupy a minority status (Noël & Beaton, 2010). The final profile, named Insecurity, reveals concern for the viability of Acadian culture and perception of the Anglophone majority group as a threat to Acadian culture. These forms of insecurities have been documented by researchers. For example, Wohl, Branscombe, and Reysen (2010), found that French Canadians who feel that their group's existence is being threatened by English Canada display group-based anxiety, referred to as collective angst.

Study 2

The purpose of Study 2 is to examine whether the relationship between ethnic identity profiles that were uncovered in Study 1 and mental health is moderated by the strength of the ethnic identity (i.e., cultural exploration and commitment). This study was conducted among Acadian university students who occupy either a numerical majority (Acadians from northern New Brunswick) or a numerical minority (Acadians southern of New Brunswick) status, relative to Anglophone New Brunswickers. We expect that the numerical status of Acadians will play a role in the significance between the combined effect of ethnic minority profile and strength on mental health. Researchers have proposed that minority group members who find themselves occupying a numerical majority (or high status), like the Acadian students in northern New Brunswick, are often sheltered from experiences of marginalization (Umaña-Taylor, 2004), and therefore more secure in their ethnic identities (Sachdev & Bourhis, 1991), meaning that high status members are often more comfortable, satisfied and happy with their identity. For low status members, the rejection-identification model posits that the negative effects on well-being from perceived discrimination are allevi-ated by ingroup identification (Branscombe *et al.*, 1999; Garstka, Schmitt, Branscombe, & Hummert, 2004; Giamo, Schmitt, & Outten, 2012; Schmitt *et al.*, 2014). The purpose of Study 2 is therefore to look at the combined effect of ethnic identity profiles and ethnic identity strength on mental health of Acadian university students and to investigate if the relationship varies according to the numerical status of southern and northern Acadians.

Hypotheses

It is hypothesized that, compared to northern New Brunswick Acadian students, the combination of the Affirmation profile with high ethnic identity strength will protect southern New Brunswick Acadian students from mental health issues (hypothesis 1), while the combination of the Detachment profile with high ethnic identity strength will make these students vulnerable to mental health problems (hypothesis 2). Lastly, compared to Acadian students from northern New Brunswick, for those participants from southern New Brunswick who report high ethic identity strength, an Insecurity profile will be associated with poor mental health (hypothesis 3).

Method

Procedure and participants

A total 173 Acadian university students were recruited by email and by face to face recruitment from the three Université de Moncton campuses, in 2014. This sample was independent from the two samples used in Study 1. Participants who did not live in their southern or northern birthplace in the province of New Brunswick at the time were eliminated from the study, resulting in 154 valid participants. Of these, eighty-one ($n = 81$) participants were from cities located in southern New Brunswick (e.g., Moncton), while the remaining seventy-three ($n = 73$) were located in northern regions of New Brunswick (e.g., Edmundston). The sample consisted of 84.4% females. The average age of this sample was 20.1 years. The questionnaire was written in French and includes two parts. The first part of the questionnaire consisted of questions designed to collect demographic data, such as the gender, age and place of origin of the participants, while the second part of the questionnaire consisted of items meant to tap into theoretical concepts.

Ethnic Identity Profiles

The 25 items that assessed the three ethnic profiles: Affirmation (11 items, "Being Acadian is a great source of pride for me," alpha = .88), Detachment (6 items, "I think that Acadian social demands threaten Anglophone rights," alpha = .78) and Insecurity (8 items, "In my opinion, Acadian culture is disappearing," alpha = .77) were presented to participants. Reactions to these items were assessed with a 7-point Likert-type scale, whereby 1 meant *completely disagree* and 7 *completely agree*. Scores were added to form a composite score for each of the three ethnic identity profiles. The means and standard deviations for the three ethnic identity profiles are presented in Table 4 for participants located in southern and northern New Brunswick.

Table 4
Means and Standard Deviations by Region

	Ethnic Identity Profile	*M*	*SD*
Southern Acadians	Affirmation	4.94	1.17
	Detachment	2.52	1.03
	Insecurity	3.39	0.97
Northern Acadians	Affirmation	4.83	1.10
	Detachment	2.13	1.08
	Insecurity	3.81	0.90

Note: Scores vary between 1 *completely disagree* to 7 *completely agree*.

Ethnic Identity Strength

The ethnic identity strength of the participants was measured with the *Multigroup Ethnic Identity Measure – Revised* (MEIM-R) (Phinney & Ong, 2007; Yoon, 2011). This is a 6-item scale, where three questions measure exploration (i.e., *I have spent time trying to find out more about my ethnic group, such as history, traditions, and customs*) and three measure commitment (i.e., *I feel a strong attachment toward my ethnic group*). Participants were invited to respond to each item on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). A composite score was calculated, whereby high scores referred to elevated levels of ethnic identity strength (alpha = .92).

Mental health measures

The Hopkins Symptom Checklist (HSCL) developed by Derogatis, Lipman, Rickels, Uhlenhuth, and Covi (1974) was used to assess the mental health of the participants. The HSCL is a 58-item self-reported symptom inventory where participants answer on a 4-point Likert scale ranging from 0 (*no discomfort*) to 4 (*extreme discomfort*) if they've experienced the presented symptoms in the previous week. Anxiety and depression were measured with the subscales found in the HSCL. Six symptoms account for anxiety, which include an incapacity to get rid of negative thoughts or ideas, trembling, feeling suddenly scared, feeling fearful, heart pounding or racing, and avoiding certain places or activities because of fear. For depression, eleven symptoms are found in the scale, including a loss of sexual interest or pleasure, thoughts of ending your life, poor appetite, crying easily, feeling trapped, blaming yourself for things, feeling alone, feeling blue, worrying or stewing about things, feeling no interest in things, and feeling hopeless about the future. A composite score for each underlying symptom dimension was calculated whereby high scores represent a greater risk for mental health. The anxiety and depression symptomology measures revealed acceptable levels of internal consistency (alpha = .80 and .81, respectively).

Results

Moderation analyses were conducted with the macro PROCESS v2.15 for IBM SPSS Statistics 22 (Hayes, 2013). This technique is used "to address, *when*, or under *what circumstances*, or for what *types of people* that effect exists or does not and in what magnitude" (Hayes & Rockwood, 2016, p. 47). Analyses were performed with the ethnic identity profiles as the independent variable (IV), mental health measures as the dependant variable (DV) and ethnic identity strength as the moderator (M variable). The effect of the interactions (ethnic identity profiles X ethnic identity strength) on mental health is expected to vary according to the participant's numerical status. Therefore, analyses were conducted separately for

northern Acadians (numerical majority status) and southern Acadians (numerical minority status) attending Université de Moncton.

Affirmation profile

Anxiety

The effect of the Affirmation ethnic identity profile on anxiety was tested with the strength of the ethnic identity as a moderator. Findings revealed no significant interaction effect for southern (b = .08, standard error = .07, p = .25) and northern (b = −.04, standard error = .07, p = .60) Acadians attending Université de Moncton.

Depression

Findings from the moderation analysis did not uncover a significant interaction effect between ethnic identity strength and the Affirmation profile on level of depression among northern Acadians (b = −.08, standard error = .07, p = .27). However, among Acadian university students from southern New Brunswick, analyses revealed a marginal effect of the interaction between the Affirmation profile and ethnic identity strength on the level of depression (b = −.12, standard error = .06, p =.06). Among southern Acadian students with a strong ethnic identity (score higher than 4.24), which represents 42% of this group (n = 14), greater adherence to an Affirmation profile is associated with reduced depression (see Table 5). This result is in accordance with hypothesis 1 that states that the combination of the Affirmation profile with high ethnic identity strength will protect southern New Brunswick Acadian students from poor mental health.

Detachment profile

Anxiety

The interaction effect between ethnic identity strength and the Detachment ethnic identity profile on anxiety did not reach significance for southern (b = -.01, standard error = .04, p = .72) or northern (b = .10, standard error = .07, p = .15) Acadian university students.

Depression

The moderation analysis uncovered a significant interaction effect between the Detachment profile and ethnic identity strength on the level of depression (b = .09, standard error = .03, p = .02) among Acadian students located in southern New Brunswick. Among southern Acadians attending Université de Moncton with a strong ethnic identity (score higher than 3.12), which represents 76% of this group (n = 25), greater adherence to the Detachment profile is associated with more depression symptomology (see Table 5). Specifically, and in line with hypothesis 2, the Detachment profile is associated with

depressive symptomology among southern New Brunswick Acadian students who report high ethnic identity strength.

Interestingly, analyses also uncovered a marginal interaction between the Detachment profile and ethnic identity strength on depression symptomology among northern Acadian students (b = .12, standard error = .06, p = .06). Specifically, among these participants who have a strong ethnic identity (score higher than 3.00), which represents 54% of this group (n = 28), greater adherence to the Detachment profile is associated with less depression symptomology (see Table 5). This result was unexpected and was not part of a planned hypothesis.

Insecurity profile

Anxiety

Findings from the moderation analysis did not uncover a significant interaction effect between ethnic identity strength and the Insecurity profile on level of anxiety among northern Acadians attending Université de Moncton (b = .04, standard error = .09, p = .70). However, among Acadian students from southern New Brunswick, analyses revealed a marginal interaction effect between the Insecurity profile and ethnic identity strength on the level of anxiety (b = .19, standard error = .09, p =.05). Among southern Acadians with a strong ethnic identity (score higher than 5.66), which represents 12% of this group (n = 4), greater adherence to an Insecurity profile is associated with greater anxiety (see Table 5). This result is in accordance with hypothesis 3 that states that the combination of the Insecurity profile with high ethnic identity strength will make southern New Brunswick Acadian students vulnerable to mental health issues. However, due to the small sample size, this finding should be interpreted with caution.

Depression

The effect of the Insecurity profile on depression was tested with the strength of the ethnic identity as a moderator. Findings revealed no significant effect for southern (b = .08, standard error = .09, p = .37) or northern (b = −.06, standard error = .08, p = .48) Acadian students.

Table 5

Significant Conditional Effects of Ethnic Identity Profiles on Mental Health at Values of the Moderator for Southern and Northern Acadian Students

Southern Acadian Students						
Conditional Effect of the Affirmation profile on Depression at Values of the moderator:						
Level of ethnic identity strength	*b*	*SE*	*t*	*p*	LLCI (b)	ULCI (b)
2.17	−.01	.13	− 0.09	.929	−.28	.26
3.00	−.11	.11	−1.00	.323	−.35	.12
3.83	−.22	.12	−1.81	.080	−.46	.03
4.67	−.32	.15	−2.18	.038	−.62	−.02
5.67	−.44	.19	−2.27	.031	−.84	−.04
Conditional Effect of the Detachment profile on Depression at Values of the Moderator:						
Level of ethnic identity strength	*b*	*SE*	*t*	*p*	LLCI (b)	ULCI (b)
2.17	.06	.08	0.71	.480	−.10	.21
3.00	.14	.07	1.89	.069	−.01	.28
3.83	.22	.08	2.67	.012	.05	.38
4.67	.30	.10	2.95	.006	.09	.50
5.67	.40	.13	3.00	.006	.13	.67
Conditional Effect of the Insecurity profile on Anxiety at Values of the Moderator:						
Level of ethnic identity strength	*b*	*SE*	*t*	*p*	LLCI (b)	ULCI (b)
2.17	−.24	.21	−1.15	.261	−.68	.19
3.00	−.08	.15	− 0.51	.611	−.39	.24
3.83	.09	.13	0.68	.504	−.17	.34
4.67	.25	.15	1.68	.104	−.05	.55
5.67	.45	.22	2.05	.050	−.00	.89
Northern Acadian Students						
Conditional Effect of the Detachment profile on Depression at Values of the Moderator:						
Level of ethnic identity strength	*b*	*SE*	*t*	*p*	LLCI (b)	ULCI (b)
1.50	−.03	.09	− 0.29	.771	−.22	.16
2.83	.14	.07	1.84	.072	−.01	.29
3.33	.20	.09	2.20	.032	.02	.38
4.00	.28	.12	2.31	.025	.04	.53
4.83	.39	.17	2.28	.027	.05	.73

Note: Levels for the quantitative moderator, ethnic identity strength, are at the 10th, 25th, 50th, 75th, and 90th percentiles of respective region. *b* = path coefficient; *SE* = standard error; LLCI (b) = lower level confidence interval of path coefficient; ULCI (b) = upper level confidence interval of path coefficient.

Discussion

The purpose of the second study was to observe the combined effect of ethnic identity profiles and ethnic identity strength on the mental health of Acadian students who occupy a relative minority or majority status. The results clearly show that the combined effect of ethnic identity profiles and ethnic identity strength does not have the same effect on mental health among all Acadian students throughout the province. The first hypothesis, which states that, compared to northern New Brunswick Acadian students, the combination of the Affirmation profile with high ethnic identity strength will protect southern New Brunswick Acadian students from poor mental health is supported. Albeit marginal, results show that southern Acadian students with the Affirmation profile who have a strong ethnic identity are less likely to report depression symptoms. There is also evidence to support the second hypothesis, whereby the combined effect of a Detachment profile with high ethnic identity strength renders emerging adults vulnerable to poor mental health. Results show that southern Acadian students with the Detachment profile who have a strong ethnic identity are more likely to report symptoms of depression. However, unexpectedly, results for northern Acadians attending university reveal a different reality: the combination of the Detachment profile with a strong ethnic identity reveals itself to make northern Acadian students marginally less likely to report depression symptoms. And lastly, the third hypothesis stating that the effect of the interaction between the Insecurity profile and ethnic identity strength will be associated with poor mental health among southern – rather than northern – New Brunswick Acadian students is supported. Although marginal, results show that southern Acadian students with the Insecurity profile who have a strong level of ethnic identity are more vulnerable to anxiety symptoms.

Taking a closer look at the unexpected effect on the Detachment profile on depression for northern Acadians attending university, it is possible that a greater affinity toward the Anglophone group has a different meaning for Acadians in a relative majority setting than for Acadians in a relative minority setting. Perhaps, for a relative majority group, aspiring to join the advantaged outgroup offers more opportunities for social mobility (González & Brown, 2005; Taylor & McKirnan, 1984). More research is needed to better understand the meaning that relative minority- and majority-status ethnic groups attribute to a Detachment ethnic identity profile.

Everything considered, not all ethnic identity profiles have the same effect on mental health among Acadian students with strong ethnic identity. Consequently, policies, such as the Policy for Linguistic and Cultural Development (Department of Education and Early Childhood Development, 2014), created to improve cultural and linguistic pride, might have different consequences in terms of mental health, most notably for Acadian students who have a relative minority status.

General Discussion

This research was designed to evaluate a measure of ethnic identity profiles among Acadian university students. In Study 1, three different ethnic identity profiles were uncovered: firstly, the Affirmation profile, where there is a sense of pride with the Acadian minority group and a propensity to "display a culture's colours," both literally (e.g., flag) and figuratively (e.g., it's dialect, Chiac); secondly, the Detachment profile, where there is a tendency to perceive Acadian heritage and culture as irrelevant and a preference to display features of the Anglophone community; and lastly, the Insecurity profile, where participants report uncertainty about the viability of Acadian culture and perceive the Anglophone majority group as a threat to Acadian culture. Previous studies (Noël & Beaton, 2010; Pilote, 2006), though qualitative in nature, had found more than three ethnic identity profiles with localized samples of Acadians. Therefore, the three profiles found quantitatively in Study 1 with large samples may better reflect the different ways Acadian students identify to their ethnic group.

With the three ethnic identity profiles having been established in Study 1, the second study is aimed at observing the combined effect of these profiles and ethnic identity strength on the mental health of Acadian students. In this study, participants were recruited from southern or northern New Brunswick. This was a unique opportunity to investigate the relationship between the ethnic identity process and mental health among Acadian students who occupied a minority (southern New Brunswick) or majority (northern New Brunswick) status. Results suggest that for southern Acadian students, those who have a strong ethnic identity, greater levels of the Affirmation profile are associated with less symptoms of depression. These findings support previous research and confirm the protective role of an Affirmation toward the minority ingroup (Romero & Roberts, 2003). For southern Acadian students, among respondents with a Detachment profile, a strong ethnic identity is associated with greater levels of symptoms of depression. A possible explanation for this result would be that southern Acadians are often encouraged, and expected, to explore and commit to their Acadian heritage (Boudreau, 2016; Fournier, 2013), but in the case of Acadian students who espouse a Detachment profile, their ethnic identity profile clashes with these social pressures and demands, thus having a negative effect on mental health. And lastly, southern Acadian students who report a strong ethnic identity, greater adherence to an Insecurity profile is associated with anxiety symptoms. In short, a strong ethnic identity does not always contribute to better mental health, as some combinations with ethnic identity profiles can have unintended consequences on psychological wellbeing.

For northern Acadian students, the combination of ethnic identity profiles and ethnic identity strength did not influence mental health for those who express preference for an Affirmation and an Insecurity profile. In other words, the ethnic identity process did not

play a role in their mental health. However, among participants who reported a strong ethnic identity, greater adherence to the Detachment profile was associated with less depression symptoms. These results support studies that suggest that minority group members who are in a numerical majority situation are often sheltered from the effects of social disadvantage (Umaña-Taylor, 2004) and have more secure ethnic identities than minority group members who occupy a numerical minority (Sachdev & Bourhis, 1991). However, as this result was unexpected, more research is needed to examine this effect more closely.

As for the limitations of this study, first, it is uncertain whether these findings are generalizable to other ethnic groups. The measure of the ethnic identity profiles was constructed according to the reality of the Acadian context and may not be appropriate in other cultures or with a non-academic population, as all our participants attended Université de Moncton. Further research is needed to explore whether comparable ethnic identity profiles emerge with other ethnic groups. Second, the results of Study 2 cannot infer causality, as all findings are correlational. Future research in this line of inquiry should monitor the mental health of Acadians over time as they explore and commit themselves to their culture and espouse different ethnic identity profiles. Longitudinal research could monitor the effects of emerging identity profiles on mental health, as ethnic group members explore and commit to their culture. Further research should also examine factors that lead emerging adults to espouse one particular type of ethnic identity profile rather than another. It would be invaluable to identify the conditions that encourage Acadians to elect for an Affirmation ethnic identity profile. Third, sample sizes for the moderation analyses were small and may have reduced statistical power. Lastly, considerable variability in regional representations can be found across the province. Future research should have a question relating to participant's perception of their local numerical representation. This kind of measure has been used in the past (Beaton & Tougas, 1997).

In sum, the purpose of the present research was to determine the combined effect of ethnic identity profiles and ethnic identity strength on the mental health of Acadian university students. Findings suggest that the effect of the ethnic identity profiles on mental health depends upon the nature of the profile, the strength of the ethnic identity and numerical status of the ethnic group. As results revealed, among southern Acadian students who occupied a minority status, Detachment and Insecurity profiles were associated with poor mental health when their ethnic identity strength was elevated. Further research is required to understand why ethnic identity strength in this context is a particularly detrimental for these individuals. Are these young Acadians experiencing social pressures to explore and commit to their cultural heritage? Further research is needed to answer this question. If policymakers wish to create programs aimed at strengthening the ethnic identity of Acadian youth, like the previously-mentioned policy created in 2014 by the Department of Education and Early Childhood Development, our results highlight the importance of

remaining sensitive to the intragroup differences and to its possible effects on mental health for those who espouse particular ethnic identity profiles. In other words, we must "not assume homogeneity in ethnic identity experiences and outcomes within or among ethnic minority groups" (Umaña-Taylor, 2011, p. 791).

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Keywords

Mots clés

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