CULTURE, LANGUAGE AND SELF-ASSESMENTS OF FUTURE HEALTH: ANGLOPHONES AND FRANCOPHONES IN QUEBEC'S EASTERN TOWNSHIPS¹

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ABSTRACT

This study examines subjective ratings of health (SRH) by Francophones and Anglophones living in the Eastern Townships. Global self-ratings of health are regarded as sensitive predictors of future health states, mortality, functional decline and disability, and utilization of the health-care system. Yet despite their pragmatic value, SRH are poorly understood. Along with a spontaneous monitoring of present health states, culture and language are listed as determinants of SRH. Few studies exist, however, that clearly delineate the direction and degree of effect that culture and language have on SRH. Adopting a temporal assessment of SRH, we asked 358 Anglophones (N=176) and Francophones (N=171) from the Eastern Townships, aged 18 to 95, to rate their health in the past, present, and future. To isolate culture and language effects we also asked participants to rate their future health if they "remained in Quebec". Results revealed a significant interaction between age and temporal ratings of health (SRH). Turning to the effects of location (unspecified or "in Quebec") on future health ratings, there was a significant interaction with language. Post hoc tests revealed no significant differences in Francophones' future health ratings (unspecified or "in Quebec") but a significant ratings drop was noted for Anglophones if they "remained in Quebec". After controlling for bilingualism, this interaction remained statistically significant.

RÉSUMÉ

La présente recherche porte sur les estimations subjectives du bien-être physique des francophones et anglophones de la région des Cantons-de-l'Est. Globalement, de telles estimations sont considérées des indicateurs prévisionnels particulièrement justes en ce qui concerne l'état de santé futur, le taux de mortalité, la perte d'autonomie, l'invalidité et les recours aux services du système de santé. Pourtant, malgré leur valeur pragmatique, ces estimations sont encore mal comprises. En plus d'un contrôle spontané de l'état de santé actuel de la population, la culture et la langue sont également des facteurs déterminants de ces estimations. Il existe cependant peu d'études qui illustrent qualitativement et quantitativement les effets de la culture et de la langue sur les estimations subjectives de bien-être physique. En adoptant une forme d'évaluation diachronique des estimations de bien-être physique, nous avons demandé à 358 anglophones (N=176) et francophones (N=171) des Cantons-de-l'Est, âgés de 18 à 95 ans, d'évaluer leur état de santé dans le passé, au présent et à l'avenir. Afin d'isoler les effets de langue et de culture, nous avons également demandé aux participants d'évaluer leur état de santé futur s'ils « demeuraient au Québec ». Les résultats démontrent une corrélation importante entre l'âge et les évaluations diachroniques du bien-être physique. En ce qui concerne l'influence du lieu (nonspécifié ou « au Québec ») sur les évaluations de l'état de santé futur, la langue s'est avérée un facteur déterminant. Des évaluations post-hoc n'ont révélé aucune différence significative chez les évaluations de l'état de santé futur des francophones, mais les anglophones, quant à eux, évaluaient leur état de santé futur à la baisse lorsque l'on spécifiait qu'il s'agirait d'un avenir « au Québec ». Même après un contrôle du bilinguisme, cette interaction des facteurs est demeurée significative.

"The harmony which is hidden is always stronger than that which is revealed."

—Heraclitus Fragment 54 (translated by Gadamer, 1996)

Our experiences of good health linger below the surface of consciousness. We draw attention to this thankful forgetfulness whenever we toast it among friends: "Santé!" Health is not as easily objectified as illness is. Symptoms of illness are catalogued and measured from the outside by medical professionals, who, in turn, project these symptoms away from our particular body onto the fictitious body of everyone who has ever suffered from that malady. Though we suffer, our illness constitutes a shared state of knowledge. Health, on the other hand, has no symptomatology. Just as our experience of silence is not simply a matter of the absence of sound, so too is our experience of health not simply an absence of illness. Its objectification rests with the statistical patterns gathered from people's subjective assessments of their own health.

As Ryff & Singer (1998) put it, health is a state of well-being, not the absence of a state of ill-being. Their affirmation draws from a definition used by the World Health Organization claiming that "health is a state of complete positive physical, mental, and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1948). A cursory review of the literature demonstrates easily enough that the adopted criteria for evaluating health have changed (even for Government Agencies²). The focus has been redirected to take account of its social and environmental determinants (Frankish, Green, Ratner, Chomik, & Larsen, 1996). But here is the rub: we do not have an objective measure of health, a "gold standard" as Jylha (2009) calls it, which would set the criteria of comparison with other measures of health.

What we have as an indicator of health, and one that has been relied on ever since medicine has been practiced, is the simple selfreport. The research literature refers to this as a "subjective rating of health" (SRH). These self-assessments are oddly practical and fairly accurate predictors of future health (Hasson, Bengt, Tores, & Anderberg, 2006; Sun, Watanabe, Tanimoto, Shibutani, Kono, Saito, Usuda & Kono, 2007; Benvamini, Blumstein, Lusky & Modan, 2003). The problem with SRH stems from a lack of clarity as to what underlies their make-up. For example, Kaplan & Baron-Epel (2003) found that across all age groups and health ratings, "general feeling" was the most frequently stated influence on SRH. The idea that "general feeling" might be akin to a "general sense of well-being" lends support to Seligman's (2008) claim that positive psychology³ can help us better understand health. Health itself, however, might be a significant contributor to subjective well-being (SWB), as suggested by Diener, Kesebir, & Lucas (2008). An earlier claim by Okun & Stock (1987) had stated that the two best predictors of well-being among older people are health and religiousness.

There is little question that SRH are multi-dimensional measures. These assessments are drawn from different sources at different times in our lives, and they vary as a function of sex, age, and ethnicity (Deeg & Bath, 2003; Benyamini, et al., 2003; Idler, 2003; Kaplan & Baron-Epel 2003; Newbold, 2005; Abdulrahim & Baker, 2009). In one of the few studies examining age differences and SRH, Kaplan & Baron-Epel (2003) found that people's age as well as their state of perceived health influenced their choice of a health comparison group. Younger participants with high SRH compared themselves to other young people, while those with lower SRH did not make age group comparisons. Old people with low SRH, however, tended to compare themselves to their own age group, while those with high SRH did not. Kaplan & Baron-Epel (2003) concluded that people try to cast their health in a positive light.

The context within which we make our SRH is not inert. Fleury (1998) makes this point, arguing that social and cultural contexts are not passive backdrops against which to understand self-assessments of health. Background conditions shape our conversations about health and inform our expectations (Staudinger, Fleeson, and Baltes, 1999). In their study of SRH by French and Italian subjects, Desesquelles, Egidi & Salvatore (2009) found that health assessments varied according to differences in social representations of physical disorders. They noted cultural differences in the experiencing of the same physical disorders. Their findings echo those of Zola (1966) whose early study underscored the role played by culture in shaping people's experiences and reports of symptoms.

Other studies involving the SRH of immigrants highlight the relevance of context and culture for understanding SRH (Abraido-Lanza, Dohrenwend, Ng-Mak, and Turner, 1999; Frisbie, Cho, and Hummer, 2001). Immigrants leaving their country of origin to live in another are the embodiment of contextual change, that is, in a very short transition time they leave the cultural context of their home country to take up residence in an entirely new culture. These investigations often show what has been called the "healthy immigrant effect". This phenomenon is marked by immigrant's high selfassessments of health upon arrival in a new country only to be followed by a decline after several years. The reasons for this are not well understood. Some researchers propose that access to the medical system has been compromised because its service providers lack cultural sensitivity. Newbold (2005) suggests that, over time, immigrants realize that their social and cultural position in the host society is lower than initially anticipated, leading to increased feelings of despondency. Abdulrahim & Baker (2009) stress the importance of including a measure of language preference in SRH studies for non-English immigrant groups. They found that Arab-Americans who had a preference for Arabic had lower SRH than English-speaking immigrants and US born Arab-Americans, suggesting that a poor command of the English language limited their access to health care. They also thought that less acculturated Arab-Americans experienced more acculturative stress which in turn affected their health ratings. The lesson to be taken from these studies is that the living context and language of minority groups impact SRH.

The Present Study

We are interested in determining the effects culture has on subjective ratings of health among the French and English-speakers in the Estrie region of Quebec. Of course, settling on what constitutes a culture is complex. The anthropologist Wade Davis (2009) remarked that, "Perhaps the closest we can come to a meaningful definition of *culture* is the acknowledgement that each is a unique and everchanging constellation we recognize through the observation and study of its language, religion, social and economic organization, decorative arts, stories, myths, ritual practices and beliefs, and a host of other adaptive traits and characteristics." Although undertaking such a qualitative analysis of French and English culture in Quebec would be valuable for future research, we adopted a simplified approach to cultural identification. We selected participants by mother tongue.

We opted for mother tongue as a form of cultural identification over "first official language spoken" because our first language issues from a depth of trust that is wholly unconscious⁴. It is the language of family stories, whispered secrets, and myths. It is the language of the supper table, of "good nights" and "good mornings", all of which are woven into the fabric of our imagination. Given this, we thought that mother tongue identity provides a marker as to how different cultures occupy the same geographical spaces. The fact that culture affects SRH is not in dispute. Empirically showing these effects is the challenge.

Culture, Language and Subjective Rating of Health

Culture and language are integral to our self-concept. How we go about our daily life reflects where we live. The way we occupy Sherbrooke – its institutions, public bureaucracies, universities, schools, shops, restaurants, and grocery stores – is different from the way we would occupy some other city, e.g. Calgary. This is true, not just in what we see, but in what we are reminded of, and in what we can expect to receive from or give back to the community. For example, if you are French-speaking and live in Calgary, you are immersed in an English-speaking public and therefore constantly reminded of your minority status. This will in turn bear on how you think about yourself. If you are French-speaking and live in Sherbrooke, however, the situation is quite different. If you are English-speaking and live in Sherbrooke, on the other hand, you will be mindful of your minority status as regards language and culture, and this will affect self-identity.

Within this context of ideas, we looked at Quebec as affording the possibility of elucidating the relationship between location, language, and health ratings. Occupying the same geographical space are French and English-speaking Quebecers who yet stand in different relations to the greater North American English culture and the salient Quebec French culture.

"Enduring" Self-concept and SRH

Bailis et al. (2003) tested two models of SRH. Using longitudinal data from 7505 Canadian residents who participated in a National Population Health survey (1994–95 & 1996–97), they wanted to know if SRH are influenced more by a "spontaneous assessment of one's health status" or by an "enduring self-concept". The "spontaneous assessment" model construes SRH as being responsive to physical, social, and functional components of health – like body mass index, cigarettes smoked, alcohol consumption, exercise, social support, and mobility. The "enduring self-concept" model suggests that SRH are less influenced by physical indicators but more responsive to beliefs about one's health. This view suggests, then, that there is a possible disjunction between SRH and actual physical indicators of health status. Through a series of precise predictions derived from each model, Bailis et al. (2003) found more support for the "enduring self-concept" model. Over a two year period, for example, they found that even though some participants experienced changes in their physical health status (through disease, heart failure, social support), their SRH remained stable. This kind of temporal stability in SRH, despite changes in health indicators, was thought to reflect the influence of an enduring self-concept on SRH.

In keeping with Balis's suggestion that an "enduring self-concept" affects SRH, it follows that the physical consequences of aging would have little influence on self assessments of health. Although self-concept adjusts to the experiences of aging, personality structures are typically resistant to change. We expect then that SRH by each age category (young, middle-aged, and elderly)⁵ would produce similar ratings of present health even though common sense dictates that a more aged body would be less physically healthy.

Other temporal ratings (past and future) would also be expected to follow the patterns typical of age-group identity as shown in other self-referential measures like subjective well-being (Lachman, Rocke, Rosnick, & Ryff, 2008; Stout, Filion, Chiasson, de Man, Charpentier, & Pope, 2008; Staudinger, Bluck, & Herzberg, 2003). Self-schemas, according to Markus & Nurius (1986), are selective and constructed so as to reflect personal concerns of enduring salience, protecting us from worrisome and stressful "possible futures". If young people tend to engage in positive future selfenhancement, then their choice of a "possible future self" would reflect a healthier self than the present one. Ascertaining this empirically should provide support for Bailis, et al.'s "enduring self-concept" model of subjective ratings of health.

Further, consistent with research on ratings of subjective wellbeing (SWB), we expect the older-aged group's ratings of past SRH to be higher, and their future SRH lower, than present health ratings. As we age, we expect to suffer more from ill health and in looking back to earlier times, we see ourselves as being in better health. Finally, consistent with the findings on SWB, we expected that middle-aged participants would reflect a stable pattern of temporal SRH, paralleling their SWB ratings.

We summarize our expectations with the following hypothesis:

Hypothesis **1**: We expect temporal SRH to follow similar patterns to those found in subjective well-being studies: a) SRH for the present will not be significantly different across age categories; b) SRH for the future will be higher for the young age group and lowest for the elderly group; c) SRH by the middle-aged group will be fairly constant across temporal categories.

Future-Oriented Thinking: Isolating the Effect of Culture on SRH.

Because culture is so pervasive, it is difficult to isolate its effect on such a simple measure as subjective ratings of health. We surmised, however, that French and English-speakers have different experiences with Quebec's health care system. They share things like delays in medical delivery, but not those delays that come with trying to understand the words of a medical consultation. These experiences might affect how each linguistic group envisions their future in this province. Inasmuch as one's self-concept influences SRH, Anglophones and Francophones might provide different future health ratings when framed within the Quebec context.

The psychology of "future-oriented thinking" has gained more attention since Markus & Nurius (1986) addressed the relationship between "possible selves" and the influence of future expectations on daily living. According to Aspinwall (2005), current actions are shaped in accordance with future expectation. Worrisome thoughts about the future are defended against through selective attention to those things that can boost our self-concepts. These self-schemas in turn are projected onto the future accompanied by concerns of the present. It might be this interplay of taking the present to the future, the future being imagined in the present, which provides the "enduring" quality of our self-concept that Bailis et al. (2003) alluded to.

It would seem that where we envision our home in the future ties in with the complexity of our current lives. Where we plan to live may indeed affect how we rate our future health. Since we tend to optimize our future health, we accordingly imagine our physical location to be one that minimizes stress and uncertainty. In the present study, rather than leaving future location unspecified, we asked our participants to think about their future health if they were to "stay in Quebec". By specifying a future location, we thought that this would make salient the different health experiences encountered by Anglophones and Francophones. By making these experiences more salient, we thought this might in turn influence their SRH. This would lend support to those studies suggesting that cultural context and language are important considerations as determinants of SRH. Several hypotheses follow from this simple manipulation.

Hypothesis 2: As SRH are sensitive to culture and language, we expect *no* difference in Francophones' and Anglophones' ratings of future health unspecified as to location. When each linguistic group is primed to consider where they might be living in the future (i.e. Quebec), we expect to find differences in Francophones' and Anglophones' projected SRH. While Francophones' ratings would be unaffected by the different statements relating to the future, we expect Anglophones' health ratings to drop when asked to think about a future in Quebec.

Hypothesis 3: If Anglophones' experiences with Quebec's health care system reflect only those concerns associated with language issues (and not cultural ones), then Anglophones who are fluently bilingual should have similar experiences as Francophones. If this is the case, then we would expect that suggesting a future location (Quebec) would have a similar effect on SRH for bilingual Anglophones and Francophones. In other words, if the difficulties experienced by Anglophones living in the Townships (i.e. limited access to English health services) reflect language and not culture, then these should be attenuated as a function of bilingualism. We predict that when cued to consider a future in Quebec, the drop in Anglophones' SRH would be generally proportional to their level of bilingualism.

Method

Participants

Research participants were drawn from across the Eastern Townships. Our aim was to have a diverse sample in terms of education, age, and type of employment. All contacts were initiated through face-to-face meetings. No phone interviews were conducted, nor were responses solicited through electronic means (email or other Web-based survey approaches). We approached people at shopping malls, country fairs, and senior citizens' homes. We canvassed neighborhoods. We met people in their homes, at their workplaces, and through university classes. Though not a random sample in any technical sense, nothing was systematic in our selection of participants. People were simply asked if they would like to take part in a survey. If they agreed, we asked them to read and sign a consent form. This form outlined the purpose of the study and their rights as participants, while providing them with contact information should they have any questions or demonstrate interest in our research findings. Following this, all participants were asked to answer a series of questions on a Life Satisfaction Scale.

Our sample included 358 subjects, of which 171 were Francophones and 176 were Anglophones. Eleven participants specified their mother tongue as "other". Ages ranged from 18 to 95 years old. Genders were balanced (163 females and 172 males), while the remaining people did not specify their gender.

We categorized our participants into three age groups. The young group consisted of 103 subjects aged 18 to 38 with a mean age of 26.5 years. The middle-aged group (N=168) ranged in age from 39 to 64 years old, with a mean age of 49 years. Our last category, the older-aged group (N=82) ranged in age from 67 to 95 years, with a mean age of 79. Five participants who did not include their age were excluded from the study. The age ranges within our categories were chosen so as to facilitate comparisons with age ranges used in previous studies, in particular with Staudinger et al. (2003).

As we did not want differences in SRH to reflect economic differences among groups, we compared their ratings on financial satisfaction. We found that while the elderly were the most satisfied, they did not differ significantly from the middle-aged group. Both the elderly and middle-aged subjects, however, were more satisfied with their finances than were the younger adults (F $_{(2, 350)} = 7.44$, p. = .001).

Finally, the distribution of Francophones and Anglophones within each age category was as follows: in the young group there were 55 Francophones and 45 Anglophones; in the middle-aged group there were 74 Francophones and 91 Anglophones; lastly, the olderaged group was made up of 42 Francophones and 40 Anglophones.

Measures and Design

Self-ratings of Health

Drawing from Lachman et al. (2008), but with some slight variation in wording so as to manipulate future location, we asked participants the following health assessment question (with three temporal variations):

In comparison with others, on a scale from 0 to 10 where 0 means *"the worst possible you can imagine"* and 10 means *"the best possible,"* how would you rate (or expect to rate) your physical health: these days, 10 years ago, 10 years into the future, and in 10 years if you stay in Quebec?

Covariates

We used only one covariate for this study. We asked participants to rate their degree of bilingualism (French & English) on a scale from 1 to 7 where '1' means "*not at all*" and '7' means "*very*".

Results

As expected in our first hypothesis, we found no significant difference in subjects' present health ratings across age categories, $F_{(2,351)} = 1.8$, p.>.05 (for means and standard deviations, see Table 1). While we might think that the elderly would provide lower health ratings given the increased incidence of illness, this is not supported by the present data.

Age Category	Mean	Std. Deviation	N
Young (18–38)	7.38	1.73	103
Middle-aged (39–64)	7.12	1.74	169
Old-aged (65–95)	6.88	1.95	82

Table 1: Means, Standard Deviations, and Sample Size for SRH in the Temporal Present

We conducted a 3 (age category) by 3 (temporal category: past, present, future) by 2 (mother tongue: French/English) analysis of variance with repeated measures across temporal categories using SRH as our dependent measure. As expected, no significant main

16

effect was found for mother tongue, $F_{(1,330)} = .993$, p.>.05. This means that in each age category, Anglophones and Francophones behaved similarly with respect to SRH. So as to simplify our analysis, we removed mother tongue as a variable since it had no effects that might differentiate groups. We conducted a 3 (age) by 3 (temporal category) analysis of variance with repeated measures across temporal categories. SRH remained our dependent measure. As expected we found a significant main effect of Time, $F_{(2,680)} = 32.34$, p. = .000, suggesting that SRH varied according to the temporal period of assessment (past, present or future). In a follow-up analysis we found that ratings of past health were higher than both present and future SRH (p. < .000), and that present and future SRH were not significantly different from each other.⁶ This suggests that when we are younger, we think of ourselves as healthier. As expected, the analysis revealed a Time by Age interaction, $F_{(2,680)} = 18.99$, p.< .000. This pattern suggests that age matters when we rate our health temporally, as shown in the graph depicted below (Figure 1). Note that the young subjects rated their future health highest, while those belonging to the other two age groups gave lower ratings for future health.

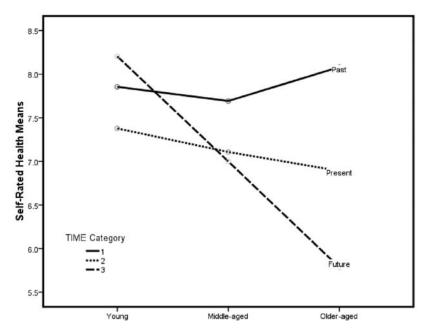


Figure 1: Mean Subjective-Ratings of Health showing the interaction of Age by Time (past, present & future).

In order to assist our interpretation of Figure 1, we conducted a series of one way analyses of variance for each age category with repeated measures across time (past, present, & future) using SRH as the dependent variable. A significant main effect for time was found for each age category (Table 2). This tells us that within each age category, SRH are different depending on the temporal context of the rating.

Age Category	Past	Present	Future	F-Value	Overall Means
Young	7.85	7.38	8.2	10.36**	7.81
(18–38)	(1.83)	(1.73)	(1.39)	(2,204)	
Middle-aged	7.69	7.11	7.00	10.67**	7.21
(39–64)	(1.95)	(1.76)	(1.77)	(2,330)	
Old-aged	8.08	6.89	5.78	35.71**	6.90
(65–95)	(1.93)	(1.80)	(2.53)	(2,146)	
Note: Bold highlighted Means indicate that they are significantly different (p.<.01) from the other means within that age category (as determined by post hoc contrasts). The double asterisks ** indicate significance at p.<.01.					

Table 2: Means and Standard Deviations (in brackets) of SRH across Time Categories.

For the young group, the only difference found was between future and present health ratings. This suggests that the younger participants rated their health "10 years from now" as better than their present health. For the middle-aged group, only the past SRH were significantly different from the present and future ratings. Finally, for the older-aged category, each temporal rating was significantly different from every other. All of these contrasts are represented above in Table 2.

In order to test the final two hypotheses, a 3 (age category: young, middle-aged, old) by 2 (future unspecified/future in Quebec) by 2 (mother tongue: French/English) analysis of variance with repeated measures on the future condition was conducted using SRH as the dependent variable. There was no significant main effect due to future (unspecified/Quebec), $F_{(1,332)} = 2.52$, p. > .05. This indicates that the average of the two future means within the Francophone group was not different from the average of the future means within the Anglophone group. There was no significant

interaction between future health ratings and age, $F_{(2,332)} = .267$, p. > .05. This simply shows that age affected SRH in the same way for both language groups. There was, however, a significant effect for age ($F_{(2,332)} = 31.33$, p. < .000) suggesting that age groups differed in their average SRH across temporal conditions. In this case, the young participants rated their health higher than did both middle-aged and older-aged subjects. As expected, there was a significant interaction between future health ratings and mother tongue, $F_{(1,332)} = 6.44$, p. = .012. In other words, although Anglophones' and Francophones' mean health ratings did not differ for an "unspecified future", these means were significantly different when contemplating a future "in Quebec".

Since the effects of age category were the same for both language groups (that is, they did not interact with future ratings of health), and knowing the pattern of these effects, we removed them from the analysis. This allowed us to both simplify the analysis and to highlight the interaction between linguistic groups and their future ratings of health. This left us with a 2 (mother tongue) by 2 (future: unspecified or in Quebec) analysis of variance with repeated measures on future. Our dependent measure was SRH. As expected, there was a significant interaction between future/future Quebec and mother tongue, $F_{(1,340)} = 7.14$, p. = .008. This suggests that when asked to consider a future unspecified or "in Quebec", being an Anglophone or a Francophone affects ratings of future health. Figure 2 below makes clear the drop in average SRH when Anglophones are asked to rate their future health "if they stay in Quebec".

In the attempt to determine whether the drop in SRH was statistically significant, we tested it with a Paired-Samples t-test. While we found no significant difference between SRH means (for future unspecified/ "in Quebec") for Francophones ($t_{(166)}$ = -.417, p.>.05), the Anglophones' means were significantly different ($t_{(174)}$ = 3.32, p. < .01). This shows that Anglophones' SRH, though not Francophones', were affected by the consideration of a future in Quebec (see Table 3 below).

Finally, a 2 (future: unspecified/Quebec) by 2 (mother tongue) analysis of covariance was carried out using bilingualism as a covariate. The interaction between future and mother tongue remained significant, $F_{(1,326)} = 6.96$, p. = .009. A follow-up examination of the level of bilingualism among Francophones and Anglophones showed no mean differences ($t_{(335)} = -.598$, p > .05). We also determined that level of bilingualism was significantly correlated with

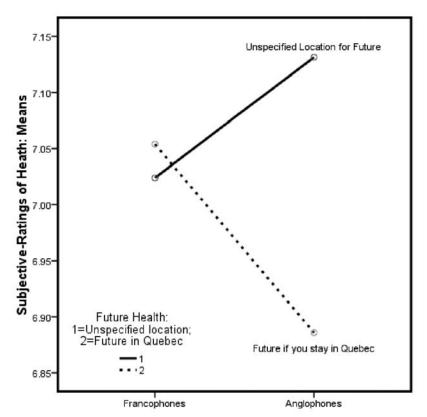


Figure 2: Interaction between future location (unspecified or if you stay in Quebec) and mother tongue (French/English) on SRH.

Mother Tongue	Future (Unspecified Location)	Future "if you stay in Quebec"	Sample Size	Paired-Sample t-test
French	7.02 (2.27)	7.05 (2.32)	167	t ₍₁₆₆₎ =42 p. > .05
English	7.13 (1.79)	6.88 ** (2.07)	175	t ₍₁₇₄₎ =3.32 p. < .01
Note: The bold lettering indicates a significant mean difference within the language category, the superscript ** reflects significance at p.<.01.				

Table 3: Means and Standard Deviations (in brackets) of Subjective-Ratings of Future Health – Unspecified as to location and "if you stay in Quebec". (The bold lettering indicates a significant mean difference within the language category, the superscript ** reflects significance at p.<.01).

future SRH for both unspecified location (r $_{(335)}$ = .209 p. < .01) and "if you stay in Quebec" (r $_{(335)}$ = .194, p. < .01). In sum, as bilingualism increases so do SRH. This relationship holds for both Anglophones and Francophones (see Table 4).

Level of Bilingualism	Future (location unspecified)	Future ("if you stay in Quebec")		
Overall	.209** N=337	.194** N=337		
Among Francophones	.200* N=163	.158* N=162		
Among Anglophones	.235** N=167	.261** N=167		
Note: Correlations with the superscript ** are significant at p.<.01 and correlations with superscript * are significant at p.<.05.				

Table 4: Correlations between Level of Bilingualism and Future SRH as a function of the overall sample (combining Anglophones & Francophones), and separately for the Anglophone and Francophone samples.

What we derive from this final analysis is that although Anglophones may be bilingual, they still rate their future health lower "if they stay in Quebec" than they do for an unspecified future.

Discussion

Measurement, in the simplest sense, deals with the outside of things. We take in hand the measuring instrument and apply it to the object to be measured. We take a measuring tape to gauge the size of a room. We stand on a scale to quantify weight. Measuring something that doesn't occupy space (in any formal sense, like health) with something that isn't an instrument (in the strict sense of the word, like our subjective assessment of health) cannot be handled from the outside. This form of metric works from the inside to the outside. So it is with subjective ratings of health: they work from the inside out.

These subjective ratings represent our way of giving voice to a language drawn from the wordless familiarity that we have with our own health. These ratings may be simple ("7", or "8.5" or "3") but they are saturated with information. We know that they are very good predictors of future health, mortality and future use of medical services. The problem is that SRH are poorly understood outside of their predictive capabilities.

Subjective assessments are judgments about the appropriateness of a fit. How well does a number fit with our own sense of good health? This is what is so elusive. But judgment is informed by context – the context of the culture within which we have grown up, our age, meaningful relationships, socioeconomic status, etc. Thus, in attempting to better understand SRH, we identified possible cultural and demographic factors that might have an impact on these self-assessments.

The research literature shows that SRH and SWB are correlated. Higher levels of life satisfaction go hand-in-hand with higher assessments of health. Following Bailis's suggestion that SRH are influenced by an "enduring self-concept", and not on a monitoring of one's own physical conditions, it makes sense that SRH would follow other kinds of self-assessments that may also draw from the resources of one's self concept. What we need to sort through for future research is whether inquiries into health and well-being are different questions or simply two ways of asking the same question. Whatever the answer, Seligman's (2008) suggestion that health be nested within the research perspectives of Positive Psychology provides a valuable directive.

Given the relationship between SRH and SWB, we predicted that certain patterns would prevail in terms of temporal ratings of health, that is, we hypothesized that they would follow the basic patterns found in the research literature on the temporal ratings of SWB. This led to the prediction that SRH for all age groups would **not** be significantly different in the present, which was confirmed. It is common to think that as we get older, our self-assessments of health drop. In other words, we think that when we are older we will feel less healthy than we do today. Yet, our data show that when older people are asked about their present state of health, they rate it on average about the same as middle-aged and younger adults. This pattern has been confirmed by longitudinal studies as well.

What this suggests is that we need to re-think the future and envision it as being, more or less, a moving image of the present. The best way of ensuring a positive future health, then, would be by ensuring a positive present health. We need to be mindful about what can be done now to enhance health for all age groups.

Turning to the temporal patterns of SRH across different ages, we noted that they tended to follow the patterns found in studies on temporal ratings of well-being. There were interesting exceptions. We know, for instance, that young people tend to rate their past well-being lower than their present one, while middle-aged people rate it about the same, and older-aged participants rate their past SWB as the highest. Subjective ratings of health are different, however, in that within every age group, past SRH are higher than present health ratings. That is, regardless of age, our past health is seen as better. This pattern makes intuitive sense as a younger body is, generally speaking, a healthier body.

Consistent with those studies suggesting that SRH are affected by our enduring self-concept and other cultural dimensions (and not from spontaneous assessment of our physical well-being) is our finding that our young participants assess their future health as being better than their present health. How can an older body be perceived as a healthier body? In fact, for this group, the future SRH mean was significantly higher than the other two temporal means. It is interesting to note Wilson & Ross's (2000) finding that younger adults disparaged the past in an effort to gratify current levels of life satisfaction. For their part, Okun, Dittburner & Huff (2006) found that younger participants produced higher future well-being scores. This tendency of younger participants to see themselves as better in the future seems to hold for SRH. An older body by ten years is seen to be not just as healthy as today's body, but being in better health. These young people enhance their future health. If nothing else, the temporal patterns of SRH show these ratings to be complex constructs that are informed by judgments that seem not to be reducible to a simple accounting of physical states of health.

The second part of our study probed the idea that SRH are nested within broader social and cultural contexts. Here we aimed at understanding the impact of language and culture on future SRH by looking at the response patterns of Anglophones and Francophones. We found that while Anglophones rated their future health "in Quebec" lower than their future health "unspecified" as to place, Francophones' future SRH were the same in both conditions. In fact, regardless of age category, Anglophones rated their future health lower "if they stay in Quebec" (see figure 3 below)⁷.

These patterns show that more is involved in the determination of SRH than a spontaneous summing up of physical indicators of one's current state of health. Futures always begin in the present. Although these SRH patterns are future projections, they reflect something about the present. Aspinwall (2005) reminds us that future-oriented thinking – our aspirations, hopes, plans, anticipated sorrows, worries and stress – are the "stuff of mental life". So what does the thought of a future in Quebec hold for Anglophones

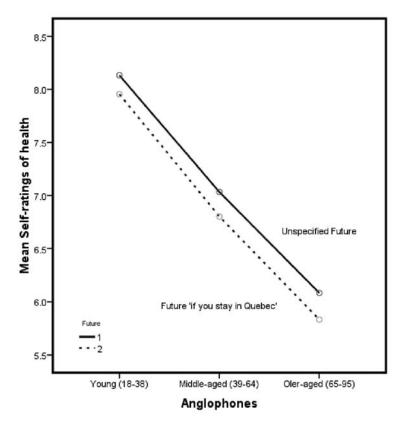


Figure 3: Anglophones' SRH for a future unspecified as to location and a future "if you stay in Quebec".

that dampens their outlook on their future health?

We were first drawn to the idea that the minority status of Quebec's English-speaking community was at the heart of the issue. From previous studies we know that Anglophones have deplored the fact that their access to English services is limited. English health care services appear to be wanting. When asked, then, to think about a future in Quebec, one might surmise that Anglophones are not only concerned about having to cope with health problems, but with problems of communication as well. These kinds of preoccupations compounded by the added stress that they generate might translate into lowered projections of future health.

Thinking about the drop in SRH along these lines provided us with a reasonable hypothesis to test. If language is at the heart of the issue, then bilingual Anglophones should not show these depressed scores on future SRH. With this in mind, we reanalyzed our data while controlling for bilingualism. As previously mentioned, Francophones and Anglophones were not different in their average level of bilingualism. Controlling for bilingualism, however, did not remove the interaction between mother tongue and future (unspecified/ "in Quebec") SRH. It remained statistically significant.

What this indicates is that bilingualism is not a factor in producing the drop in expected SRH among Anglophones, which is surprising. Being bilingual for Anglophones does not change the fact that they tend to downgrade (slightly, but significantly) their future health in Quebec when compared with a future whose location is unspecified. More seems to be at stake here than simple issues of language accessibility. There is something of a cultural dimension that strikes at the heart of the English-speaking community which finds no resonance in the French-speaking community.

It should be pointed out, however, that bilingualism was significantly correlated with future SRH. That is, the more bilingual the subjects were, the higher their subjective ratings of health. This observation held for both Anglophones and Francophones. This may reflect the influence of other variables associated with good self-assessments of health, such as higher levels of education and income.

In an attempt to further clarify our results while at the same time seeking directions for a follow-up qualitative study, we interviewed 25 Anglophones (15 from the older-aged category, 10 from the younger-aged group)⁸. Although the results obtained from these interviews were not in any way conclusive, they suggest a direction for future research. Some older participants were quoted as saying, "It makes no difference whether I'm in Quebec in 10 years or not. I speak French and have no fears of poor health service in the future." Again, "As long as I can get service in English I'll be OK. I'll have to make the best of it." While some elderly individuals gave no reason for their different future ratings, others simply didn't acknowledge having done so. Many spoke of their affection for Quebec, acknowledging their reluctance to leave a place where they knew so many people.

The younger people interviewed focused more on language: "If I stay in Quebec, the only problem would be the language barrier." Another younger participant added, "It's a language thing: in 10 years will Quebec still be in Canada? The Maritimes are so much nicer. A change may be good." Another simply said, "I don't want to stay in Quebec." Yet most of the young participants wanted to

stay here if they could, while some thought that being bilingual "was a big advantage".

The older people seemed less troubled by language as exemplified in this statement: "I don't speak French but I'll get by. It makes no difference." An informal comparison of comments made by younger and older participants shows that stress-provoking thoughts about possible future illness are a concern for the elderly. One person said, "If I were to get sick, I couldn't stay so far from my kids, who live in Ontario." While this comment doesn't reflect a concern about language, it speaks to a preoccupation that may bear negatively on future SRH if one were to remain in Quebec.

Of note is the fact that many people did not admit to distinguishing between an "unspecified" future and one "in Quebec" when rating their future health, stating that it "makes no difference". In fact, it was the most commonly stated phrase. The drop in Anglophones' ratings of future health when cued to think about a "future in Quebec" is not explicitly acknowledged. Although language issues did come up in our interviews, they were not the single most important issue raised. This appears to be supported by the results of our quantitative analysis controlling for bilingualism.

It may very well be that barriers to accessing English health services negatively impact Anglophones' future SRH when asked to consider a future in Quebec. Estimating the magnitude of this influence proves challenging. There is no denying the fact that Francophones are as affected as Anglophones by limited access to needed services when they are faced with long waiting periods, but with this difference: when Francophones access these services, they are provided in a language they can understand. This is not always the case for Anglophones.

Yet there is something more than language affecting Anglophone's future SRH, something that bears the imprint of culture and community. A comment from one participant resonates: "If I were to get sick, I couldn't stay so far from my kids, who live in Ontario." This reflects a heartfelt reality in the Anglophone community, which has to contend with the out-migration of its children. Though young people across Quebec leave the province, the problem is not as pronounced for the majority Francophone community. Young Anglophones don't simply go to Montreal; they venture into the rest of Canada. That youth migration might have ties to health issues is not evident. Yet a comment such as the one quoted above urges us to think of health as a community issue that is irreducible to simple matters of language.

Summary

Issues such as those raised in this paper call for broader perspectives on health. A community health perspective recognizes health not as a state, but as a resource or a capacity (Frankish, et al., 1998; Hancock, Labonté, & Edwards, 1999). Health, in this view, is what allows us to be active in the pursuit of goals and the acquisition of skills while facilitating community involvement and engagement in supportive relationships. According to Frankish et al. (1998), this broader notion of health recognizes the range of its social, economic, cultural and physical environmental determinants. Health is less about illness and more about the weave of interconnections making up the fabric of a community's health experience.

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NOTES

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- 2. See the Canadian Population Health Initiative (CPHI) which is part of the Canadian Institute for Health Information (1999).
- 3. Positive psychology emphasizes the study of factors leading to, or expressed in, positive relationships and mental health, positive emotions, well-being, engagement, purpose and positive accomplishment. Although it was rooted in the early developments of "hedonic psychology" (see Kahneman, Diener, and Schwarz, 1999), it is Martin Seligman who has been central in drawing attention to positive psychology as an emerging field of study (see Seligman, 2002; Seligman, Steen, Park, and Peterson, 2005; Seligman, 2008).
- 4. By using mother tongue we want to address the sticky problem of identifying anyone who speaks English as being an "Anglophone", or anyone who speaks French as being a "Francophone". Literally this is the case, of course. By looking at mother tongue we are attempting to include a cultural dimension that is not simply a condition of a learned language. The language one learns from the cradle, so to speak, carries culture in ways that distinguish it from our second language.
- 5. The range of each age category was chosen so as to be comparable with other studies, in particular Staudinger et al., 2003.
- 6. We carried out a Multivariate analysis of variance on Time (past, present, future) which revealed a significant effect (as expected given the larger analysis), $F_{(2,345)} = 18.28$, p.= .000. All further pair-wise contrasts were carried out using a Sidak correction for multiple comparisons.
- 7. We have omitted the graph for the Francophones as the two lines for future SRH are on top of one another. The descending curve with age is the same in both graphs which reflects the lack of an interaction between age and mother tongue.
- 8. We would like to thank Megan Pope for helping us in conducting these brief interviews. We simply asked Anglophones to speak to the differences we found in their future ratings.