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ON SATISFACTION WITH WORK AND FINANCES IN THE EASTERN
TOWNSHIP'S: THE EFFECTS OF AGE AND MOTHER TONGUE ON TEMPORAL
SELF-ASSESSMENTS

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UNIVERSITÉ DU QUÉBEC À TROIS-RIVIÈRES

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ON SATISFACTION WITH WORK AND FINANCES IN THE EASTERN TOWNSHIP'S:
THE EFFECTS OF AGE AND MOTHER TONGUE ON TEMPORAL SELF-ASSESSMENTS

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Cet essai est rédigé en anglais tel qu'il est permis dans les règlements des études de cycles supérieurs (136) de l'Université du Québec à Trois-Rivières. Dans ce cas, le règlement interne mentionne l'obligation de présenter un exposé substantiel rédigé en langue française dans lequel sont présentés les objectifs, la méthodologie, les résultats obtenus, ainsi qu'une discussion sur l'ensemble du travail réalisé.

Abstract

The purpose of this study was to investigate diachronicity: the temporal aspects of satisfaction and subjective well-being (SWB). By extending past studies (Lacey, Smith, & Ubel, 2006; Staudinger, Bluck, & Herzberg, 2003; Stout et al., 2008), the research provided information on perceived work and financial satisfaction in relation to past, present, and future according to age and culture. The sample included 287 Anglophones and Francophones, aged 17 to 95, living in the Eastern Townships in Quebec (Canada). The participants rated their past (10 years ago), present, and future (10 years from now) satisfaction with work and finances, as well as their future in Quebec. A 3 x 3 ANOVA examining the effects of age and diachronicity on satisfaction with work revealed a significant interaction. Simple effects analyses showed the hopeful-effect of young and middle-aged persons, rating the future highest and the past lowest and the nostalgic-effect of older adults rating the past highest and the future lowest. Another 3 x 3 ANOVA examining the effects of age and diachronicity on satisfaction with finances also revealed a significant interaction. This time, satisfaction did not change over time for older adults, demonstrating the so-called realistic effect, while the hopeful-effect was still observed in young and middle-aged adults. As for the effect of culture, results for both work and financial satisfaction domains showed that Anglophones' future satisfaction was lower, if it was specified that they remained in Quebec, compared to ratings of general satisfaction for the future. This change was not displayed in Francophones.

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Résumé substantiel en français

L'objectif de cette étude était d'investiguer la diachronicité, c'est-à-dire, les aspects temporels de la satisfaction et du bien-être subjectif. En poursuivant les études antérieures (Lacey et al., 2006; Staudinger et al., 2003; Stout et al., 2008), la recherche a permis de décrire les variations de la satisfaction au travail et de la satisfaction à l'égard des finances dans le passé, le présent et le futur, selon l'âge et la culture. L'échantillon comportait 287 Anglophones et Francophones, âgés de 17 à 95 ans, habitant la région de l'Estrie au Québec (Canada). Les âges variaient de 17 à 95 ans et ont été répartis dans trois groupes d'âge. Les jeunes ($n = 86$) sont âgés entre 18 et 38 ans ($M = 26,5$ ans). Les adultes ($n = 138$) sont âgés entre 39 et 64 ans ($M = 49$ ans), tandis que les aînés ($n = 63$) sont âgés entre 67 et 95 ans ($M = 79$ ans). Les participants ont été recrutés dans des centres communautaires, des arénas, des églises, des écoles, des résidences privées, des restaurants, des centres d'achat, des bibliothèques et une manufacture.

Le questionnaire utilisé pour la collecte des données était originalement conçu en anglais par l'auteur de la présente recherche (voir Appendice A) et a ensuite été traduit au français (voir Appendice B). Le questionnaire a été adapté à partir d'un sondage téléphonique élaboré dans l'étude MIDUS (MIDMAC, 1995-1996; MIDMAC, 2004) et avait pour objectif de mesurer le bien-être subjectif des participants. L'échelle utilisée permet aux participants d'évaluer, sur une échelle de type Likert en 11 points, leur satisfaction dans le passé (il y a 10 ans), dans le présent et dans le futur (dans

10 ans) dans six domaines : la santé physique, la contribution au bien-être d'autrui, la relation conjugale ou significative, l'aspect sexuel de sa vie, le travail (payé ou non), et la situation financière. La présente étude se concentre sur les niveaux de satisfaction par rapport au travail et aux finances. Par exemple, les questions étaient formulées de la façon suivante: "En vous comparant aux autres, utilisez l'échelle de 0 à 10, 0 étant le pire et 10 le meilleur que vous pouvez possiblement imaginer, comment évaluez-vous votre satisfaction de travail (qu'elle soit rémunérée ou non) aujourd'hui? Il y a 10 ans? Dans 10 ans? Dans 10 ans si vous demeurez toujours au Québec?"

L'objectif de l'étude était d'investiguer les effets des variables indépendantes prédictives, l'âge ou la culture, sur les variables dépendantes de satisfaction à l'égard du travail et des finances. Pour les besoins de l'étude, un plan factoriel mixte à mesures répétées (3 X 3) a été utilisé, avec trois niveaux de la variable intergroupe constituée par l'âge (jeunes, adultes et aînés) et trois niveaux de la variable intragroupe de diachronicité (passé, présent, et futur) pour la satisfaction au travail. Le même plan a été appliqué pour la satisfaction à l'égard des finances. Ensuite, pour regarder l'effet de la variable indépendante de la langue maternelle (culture anglophone et francophone) sur les scores de satisfaction diachronique future, un plan factoriel à mesures répétées (3 X 2 X 2) a été utilisé avec deux variables intergroupes (âge, trois niveaux et culture, deux niveaux) et une variable intragroupe à deux niveaux (futur général et futur au Québec). Ceci a été fait séparément pour la satisfaction face au travail et la satisfaction à l'égard des finances.

En termes de procédure, les participants ont évalué leur bien-être subjectif et leur satisfaction dans six domaines à trois moments différents dans leur vie. Les questionnaires (voir Appendice A pour la version anglophone et B pour la version francophone) ont été administrés dans un environnement confortable et une atmosphère détendue. Les participants ont aussi inscrit l'information sociodémographique, telle que l'âge, le sexe, l'occupation, la langue maternelle, et le niveau de bilinguisme. La procédure entière a duré entre 10 minutes et 1 heure. L'étude a été conduite à l'Université Bishops sous la responsabilité du Professeur Dr. Dale Stout. Une subvention a été offerte par le Centre de Recherche des Cantons de l'Est en 2007. Les données présentées ici font partie de cette étude originale.

Satisfaction au travail : Différences d'âge

Les résultats de l'analyse de variance 3 X 3 à mesures répétées, utilisée pour examiner les effets de la variable intergroupe de l'âge (jeunes, adultes et aînés) et la variable intragroupe du temps diachronique (passé, présent, futur) sur les évaluations de la satisfaction au travail, ont démontré une interaction significative entre le temps diachronique et les catégories d'âge, $F(4, 552) = 25.99$, $p < .001$. Aucun effet principal n'a été trouvé pour l'âge, ($F(2, 276) = 0.31$, $p = .734$). Pour décortiquer la cause de l'interaction, des analyses d'effets simples ont été effectuées. Les résultats indiquent une différence significative entre les temps diachroniques pour les jeunes, ($F(2, 552) = 39.2$, $p < .001$). Chaque moyenne était significativement différente l'une de l'autre (passé, $M = 5.96$; présent, $M = 7.06$; futur, $M = 8.63$). Des différences significatives ont aussi été

trouvées dans le groupe d'âge moyen, $F(2, 552) = 6.38, p < .01$). Les différences ont été observées entre le futur ($M = 7.71$) et les deux autres temps (passé, $M = 6.97$; présent, $M = 7.25$). Les personnes âgées démontraient elles aussi une différence significative au niveau de la diachronicité ($F(2, 552) = 16.26, p < .001$), mais cette fois-ci la tendance était contraire aux deux autres groupes plus jeunes avec des cotes moyennes de satisfaction au travail élevées pour le passé ($M = 8.36$), moyennes pour le présent ($M = 7.49$), et basses pour le futur ($M = 6.47$).

Satisfaction au travail : Différences culturelles

Les résultats de l'analyse de variance 3 X 2 X 2 à mesures répétées, utilisée pour examiner les effets des variables intergroupes de l'âge (jeunes, adultes et aînés) et de la langue maternelle (culture anglophone et francophone) sur la variable intragroupe du temps diachronique (futur général et futur au Québec) pour les évaluations de la satisfaction au travail, n'ont pas démontré une interaction entre les trois facteurs. Par contre, une interaction significative a été trouvée entre la langue maternelle et le temps diachronique, $F(2, 277) = 7.80, p < .01$. L'analyse des effets simples a été effectuée pour mieux comprendre la source de cette interaction. Les comparaisons par paires ont montré qu'il n'y a pas de différence entre la satisfaction future au travail ($M = 7.51$) et la satisfaction au travail dans un futur au Québec ($M = 7.59$) pour les Francophones ($F(1, 277) = 1.19, p = .277$). Toutefois, chez les Anglophones, on observe une différence significative, $F(1, 277) = 7.92, p < .01$, avec une moyenne pour le futur général de 7,72 et de 7,51 pour un futur au Québec. Aucune différence n'a été observée entre les

Anglophones et les Francophones en ce qui a trait à leur satisfaction future générale, ou s'ils continuent de vivre au Québec.

Satisfaction financière : Différences d'âge

Les résultats de l'analyse de variance 3 X 3 à mesures répétées, utilisée pour examiner les effets de la variable intergroupe (catégorie d'âge) et la variable intragroupe (temps diachronique) sur les évaluations de satisfaction financière, ont démontré un effet principal de l'âge ($F(2, 295) = 4.95, p < .01$), et une interaction significative entre l'âge et le temps diachronique ($F(4, 590) = 18.83, p < .001$). Des analyses d'effets simples ont été effectuées pour voir de plus près ce que suggérait l'interaction. Les résultats ont démontré une différence significative entre les temps pour les jeunes ($F(2, 590) = 66.30, p < .001$); ces différences sont observées entre le futur ($M = 8.46$) et les autres temps (passé, $M = 5.66$; présent, $M = 6.08$). Chez les adultes, on observe une différence significative entre les temps ($F(2, 590) = 38.21, p < .001$). Les adultes cotent leur satisfaction financière de façon similaire aux jeunes puisque celle-ci augmente du passé au présent et du présent au futur. Chaque moyenne était significativement différente l'une de l'autre (passé, $M = 5.96$; présent, $M = 6.94$; futur, $M = 7.59$). Chez les personnes âgées, aucune différence significative n'est observée entre les temps diachroniques ($F(2, 590) = .73, p = .481$), les scores de satisfaction financière étant relativement stables avec le temps.

Satisfaction financière : Différences culturelles

Les résultats de l'analyse de variance 3 x 2 x 2 à mesures répétées, utilisée pour examiner les effets des variables intergroupes (catégories d'âge et langue maternelle) et la variable intragroupe (temps diachroniques) sur les évaluations de satisfaction financière, n'ont pas montré d'interaction significative entre les trois facteurs. D'un autre côté, un effet d'interaction significatif entre la langue maternelle et le temps diachronique a été observé, $F(1, 293) = 8.36, p < .01$. L'analyse des effets simples démontre que pour les Francophones, il n'y a aucune différence entre la satisfaction financière future et celle dans un futur au Québec ($F(1, 293) = .001, p = .969$). Toutefois, chez les Anglophones, il y a une différence significative ($F(1, 293) = 16.13, p < .001$) entre ces deux temps; leur score de satisfaction future au Québec est plus bas ($M = 7.28$) que leur satisfaction financière future lorsqu'on ne précise pas le lieu de résidence ($M = 7.60$). Nous avons noté que les Francophones évaluent leurs finances plus positivement que les Anglophones, tant pour le futur général que dans le cas d'un futur au Québec.

Discussion

L'âge et la satisfaction au travail diachronique. Les résultats des recherches antérieures (Lacey et al., 2006; Staudinger et al., 2003; Stout et al., 2008) ont été partiellement reproduits dans la présente étude. Le niveau de satisfaction au travail actuel (moment présent) est similaire pour tous les groupes d'âge. Ainsi leur emploi (rémunéré ou non) leur apporte un niveau élevé de satisfaction, ce qui corrobore

l'observation de Csikszentmihalyi's (2003) que la plupart des gens ont des expériences positives et satisfaisantes au travail.

Tel que prévu, les jeunes ont évalué leur satisfaction future au travail beaucoup plus haute, comparativement au présent, et le passé beaucoup plus bas. Toutefois, contrairement à ce qui était prévu, les adultes d'âge moyen n'ont pas démontré des scores de satisfaction au travail passée, présente, et future similaires; alors que chez les personnes âgées, la satisfaction passée est beaucoup haute et la satisfaction future plus basse, tel que le prévoyait l'hypothèse. Les résultats confirment les effets d'espoir et de nostalgie antérieurement observée par Stout et al. (2008), Lacey et al. (2006), et originalement par Staudinger et al. (2003).

Des parallèles importants peuvent être faits avec les études sur le trauma et peuvent être utilisés pour interpréter les résultats quant aux différences d'âge en ce qui a trait au bien-être subjectif. Plus précisément, les notions de perte et de gain semblent expliquer les patterns opposés trouvés chez les jeunes et les aînés en ce qui a trait au bien-être subjectif diachronique. Les personnes âgées peuvent être comparées aux victimes d'accident (Brickman, Coates, & Janoff-Bulman, 1978) et les victimes de trauma (Holman & Cohen-Silver, 1998), qui rapportaient plus de bonheur dans le passé. Il semble que ceux qui avaient subi les plus grandes pertes se concentraient sur un passé gratifiant. Les personnes âgées sont un peu dans la même situation, elles doivent faire face à plusieurs pertes qui requièrent une grande adaptation aux changements dans leur

vie (Fiksenbaum, Greenglass, & Eaton, 2006). En centrant leur attention sur une époque où elles étaient à leur meilleur, les personnes âgées, qui ont l'impression d'avoir une valeur moindre dans la société d'aujourd'hui et qui craignent un futur incertain, peuvent trouver une valeur personnelle dans ce qu'elles étaient jadis pour conserver leur estime de soi (Pushkar, Arbuckle, Rousseau, & Bourque, 2003; Rickabaugh & Tomlinson-Keasy, 1997). D'un autre côté, les jeunes s'attendent à des gains dans le futur. Ils semblent penser que l'avenir leur appartient, que tout est possible, comme les gagnants à la loterie de l'étude de Brickman et al. (1978) qui s'attendaient à un futur plus heureux à cause de leurs gains. Les jeunes s'attendent peut-être à un futur plus heureux parce qu'ils prennent pour acquis le temps qu'ils ont devant eux, probablement parce qu'ils ont intégré les stéréotypes positifs véhiculés par les médias sur la jeunesse. De leur côté, les adultes d'âge moyen n'avaient pas des scores de satisfaction au travail qui reflétaient l'effet réaliste ou la stabilité qui était observée dans les études antérieures. Quelques facteurs pourraient expliquer ceci. Il est possible que cette tendance reflète celle des jeunes; en effet, les adultes peuvent maintenant anticiper une espérance de vie beaucoup plus longue dans le monde contemporain. De plus, la réduction du nombre de personnes sur le marché du travail, à cause de la prise de retraite de baby-boomers, peut leur permettre d'être optimiste face à leur avenir professionnel.

La langue maternelle et la satisfaction au travail diachronique. Les Francophones et les Anglophones des Cantons de l'Est ont répondu différemment à la question sur la satisfaction au travail. Les Anglophones ont manifesté une diminution de

la satisfaction future s'ils demeuraient toujours au Québec, comparativement à leur satisfaction au travail dans un futur sans précision. Chez les Francophones, les scores de satisfaction future générale et de satisfaction s'ils demeuraient au Québec sont semblables et ce, quel que soit l'âge. La question semble être redondante pour eux. Ceci implique que, pour les Francophones, le domaine du travail ne devient pas plus ou moins inquiétant s'ils sont contraints par le fait de devoir demeurer au Québec. Ce qui est très différent dans la population anglophone pour qui le travail semble devenir problématique s'ils demeurent au Québec. La barrière perçue de la langue par les Anglophones pourrait être la cause de cette observation. Il est possible que les Anglophones croient que l'avancement dans leur profession est restreint par leur capacité à parler français, surtout avec les lois qui deviennent de plus en plus sévères. Ils peuvent peut-être se demander ce que le futur leur réserve. Davantage de recherches sont nécessaires pour comprendre cet aspect de la satisfaction au travail.

L'âge et les temps diachroniques de satisfaction financière. Les résultats des études antérieures (Stout et al., 2008; Lacey et al., 2006; Staudinger et al., 2003) démontrant l'effet d'espoir pour les jeunes, l'effet réaliste pour les adultes d'âge moyen, et l'effet nostalgique pour les personnes âgées ont été partiellement reproduits pour la satisfaction financière. Contrairement aux résultats dans le domaine de la satisfaction au travail, chaque groupe d'âge a répondu différemment à la question sur la satisfaction financière présente. Les personnes âgées ont démontré la satisfaction la plus grande et les jeunes la plus basse. Les trois groupes sont à différentes phases de leur vie au niveau

financier, les jeunes étant le groupe ayant le moins de ressources. L'effet d'espoir a été confirmé, car les jeunes ont un score de satisfaction financière passée plus bas et future plus élevée. Les adultes d'âge moyen n'ont pas coté leur passé, leur présent et leur futur de façon similaire, contrairement à l'hypothèse de recherche. En effet, ils avaient des cotes semblables aux jeunes, la satisfaction augmentant entre le passé et le futur, démontrant ainsi l'effet d'espoir pour eux aussi. Les personnes âgées n'ont pas coté leur satisfaction financière passée de façon plus élevée et leur futur plus bas, contrairement à ce qui était attendu. En fait, leurs cotes illustraient l'effet réaliste qui était attendu des adultes d'âge moyen, leur satisfaction demeurant stable avec le temps. Malgré le fait que le revenu des participants âgés soit inconnu, certaines recherches démontrent qu'ils sont habituellement satisfaits avec leurs finances parce qu'ils se limitent à l'essentiel et qu'ils savent vivre avec des ressources limitées (Laberge, Dumas, Rail, Dallaire, Voyer, 2003). Il est possible qu'ils connaissent la différence entre « besoin » et « désir » et qu'ils soient moins centrés sur la consommation. Il est aussi possible que comparativement au passé, les personnes âgées ont moins de dépenses, de responsabilités familiales et que leur situation financière en général s'est améliorée (Laberge, Dumas, Rail, Dallaire, & Voyer, 2003). Plusieurs personnes âgées regardent en arrière avec satisfaction, avec un sentiment d'avoir contribué à la société et au bien-être de leur famille (Erikson, Erikson, & Kivnick, 1986).

Finalement, il est important de mentionner que les données de cette étude ont été recueillies en 2007. Étant donnée la crise économique actuelle, les résultats à propos de

la satisfaction financière pourraient être très différents si les questionnaires étaient redistribués aujourd'hui.

La langue maternelle et les temps diachroniques de satisfaction financière.

Les Francophones et les Anglophones des Cantons de l'Est ont aussi répondu différemment à la question de satisfaction financière future. Les Anglophones ont démontré une diminution marquée de leur satisfaction financière future s'ils demeurent au Québec comparativement à leur satisfaction financière future en général. Les Francophones, quant à eux, ont donné des résultats semblables, peu importe le futur diachronique (général ou au Québec). Les finances paraissent être problématiques pour les Anglophones des Cantons de l'Est et cet effet se maintient à travers les groupes d'âge. Peut-être que les Anglophones se sentent vulnérables quand ils se projettent dans le futur? Ceci pourrait être associé à la satisfaction au travail, puisque l'employabilité génère les ressources financières. Si les Anglophones sont moins satisfaits avec leur travail futur au Québec, nous pouvons faire l'hypothèse qu'ils seront moins satisfaits financièrement dans le même temps diachronique. Quant aux Francophones, ils avaient une satisfaction plus élevée que les Anglophones peu importe le temps diachronique, indiquant probablement qu'ils ont de meilleurs emplois et qu'ils sont plus stables financièrement que les Anglophones.

Introduction

Subjective well-being (SWB) is a multidimensional concept rather than one single psychological construct (Pavot & Diener, 2004). It is composed of both affective and cognitive features including domain and global judgments of life satisfaction (Diener, Suh, Lucas, & Smith, 1999). Well-being and satisfaction extend beyond the present self; therefore, it could be interesting to examine how satisfaction is perceived in relation to the past, present, and future.

Kurt Lewin (1926/1951) proposed a notion of “life space” that extends not only to physical but also to temporal dimensions, where one's self-concept within this “life space” involves an integration of the self that spans through the past, present, and future. Lewin thought that our relationship to time defined part of our relationship to ourselves. Incorporating Lewin's suggestion that self-concept and time are related, researchers began to incorporate temporal dimensions into the study of SWB ratings (Albert, 1977; Brickman, Coates, & Janoff-Bulman, 1978; Staudinger, Bluck, & Herzberg, 2003; Stout et al., 2008).

Staudinger et al. (2003) explored ‘diachronous’ notions of the self as anchored by subjective time. The view that one's experience of life can be at once synchronous (concurrent with present time) and diachronous (spread out over more than one time period) is highlighted by Staudinger and her colleagues (2003). They investigated

diachronous SWB by having 3,596 adults (aged 25 to 74) rate their SWB in the past (reconstructed from 10 years ago), present, and future (anticipated 10 years from now) and then compared their answers according to their age, gender and personality factors. In keeping with Lewin, and guided by lifespan theory (Erickson, 1982), Staudinger and colleagues (2003) hypothesized that different age groups would integrate their concept of self differently, and these differences would show up in their diachronous ratings or temporal self-assessments of SWB. Thus they considered that one's experience of time varies as a function of age. Staudinger et al. (2003) proposed that older adults experience time at a faster pace, that they live in what they referred to as an "open present", where the present and future are inseparable. For this reason, they hypothesized that diachronous SWB ratings would vary widely for the young group and very little for the oldest group. As predicted, their hypotheses were confirmed for the young group; however, the authors were surprised to find that the oldest group behaved like the young group by producing SWB ratings that varied even more than the middle-aged group. Contrary to what was expected, their results showed that older adults do see the future as a separate category. Furthermore, they found that the young adults and the oldest adults produced patterns of SWB that went in exactly opposite directions. Whereas past ratings of SWB were lowest for the young, they were the highest for the oldest group. The opposite was found for future SWB, where young adults rated the future highest, and the oldest rated it lowest. All age categories rated themselves equally when it came to present SWB. The middle-aged group was found to vary the least in their ratings of temporal SWB.

By drawing on research that has examined ‘diachronous’ SWB, this study will explore temporal aspects of the self-concept. First, we will attempt a replication of Stout and colleagues’ (2008) and Staudinger and colleagues’ (2003) findings with respect to diachronous SWB ratings and age. Because most of the studies on SWB have been conducted with participants from the United States, we thought it would be worthwhile to see if the patterns hold for different cultural groups – in this case, Anglophones and Francophones living in the Eastern Townships region of Quebec.

Theoretical background

In order to set the stage in terms of theoretical foundations, we will look further into temporal comparison, social-cognitive theory and lifespan theory.

Temporal comparison theory and age

In 1977, Albert first introduced temporal comparison theory, where a given construct is assessed at two times by the same individual. The use of temporal comparison suggests that the present can be influenced by one's experience of the past as well as one's expectations for the future; thus, this entails that present SWB would also be influenced by one's past and future.

In an important study by Brickman et al. (1978), lottery winners, accident victims, and a control group were compared on ratings of happiness in the past, present, and future. The accident victims reported being happier in the past prior to the accident, whereas the lottery winners reported being presently happier (since winning) and predicted a brighter future for themselves. The control group also rated the present and future as better than the past. Conversely, the accident victims demonstrated a nostalgic-effect for the past (Brickman et al.).

Holman and Cohen-Silver (1998) looked at temporal orientations toward the past typically found in those coping with trauma. Groups studied were sufferers of incest,

veterans of the Vietnam War, and victims of fire. The relationship between a general past orientation and present psychological distress was elevated. The researchers reported that individuals with the strongest orientation toward the past were those who suffered the greatest loss and their identity was threatened by the traumatic experiences. These victims seemed to be saying that life was better before the trauma (Holman & Cohen-Silver).

Social-cognitive theories

Ross (1989) theorized that individuals reconstruct previous states and memories inaccurately to find consistency with their present beliefs and current self-concept. The same could be true for the pre-construction of a future (ideal) self. Numerous studies have been carried out with respect to past selves, including conceptions such as life reflection (Staudinger, 2001), and autobiographical memory (Libby & Eibach, 2002). Broemer, Grabowski, Gebauer, Ermel, and Diehl (2008) found that past selves are biased by stereotypical information that most people believe about past periods (such as having had a "happy childhood") because the more distant the past becomes, the more the details become difficult to remember and thus the reconstructive memory comes into play. This causes a tendency to have more extreme perceptions and to be more critical of the present self.

Many social cognitive predictors of well-being and life satisfaction have been investigated such as perceived goal progress and self-efficacy (Lent et al., 2005).

According to some authors, these predictors, when applied to the concept of diachronicity through temporal comparison, are most often used for the purpose of self-enhancement and self-improvement (Kwan, John, Kenny, Bond, & Robins, 2004). Self-enhancement effects are commonly found in young adults (Okun, Dittburner, & Huff, 2006). These effects occur when growth from the past to the present is over-amplified, and further, improvement for the future is also overestimated.

Dubé, Jodoin, and Kairouz (1998), looked at contrast effects, a cognitive bias where the past is enhanced or diminished when compared and contrasted to the present. Contrast effects include enhancement effects. However, self-diminishing effects could be considered, where a past positive memory could reduce present SWB, because it makes the present seem not as good in comparison. This bias is most often used by older individuals.

Ross and Wilson (2002) found that participants demonstrated a distancing bias when evaluating two equally distant past times. Participants declared feeling more distant from a past self that involved bad experiences than from a past self that involved more gratifying experiences.

Lifespan theory: Aging, age differences and diachronous SWB

Developmental tasks are often described by words such as growth and decline, gain and loss. These tasks are associated to specific processes at different ages in the

lifespan. However, when placed in juxtaposition to subjective change, these processes have the potential to pose a challenge to one's sense of self and coherence.

When taking into consideration the processes involved with being young, the main focuses are growth and gain, everything is yet to come, including relationships, creating a family, getting a job, etc. (Erikson, 1982). The future holds potentially much more than it would for an older person. It becomes clear that a young person's outlook on the future has yet to be contextualized and remains wide open. However, this open future doesn't absolutely imply that the future will necessarily be better. Still, young people tend to imagine that life will grow to be better with time. This optimism for the future is called the hopeful-effect. In order to preserve a sense of self-consistency through time, the past is seen as inferior to the present and the future as superior (Lachman, 2001).

Older adulthood, on the other hand, is characterized by the concern with the end of life approaching. This is a time for an integration of the self, a time for reflection. Older adults' diachronous sense of self through time may reflect their longer time lived, whereby their sense of the past is more distant, disconnected, gone; this has the likelihood of making anyone feel nostalgic for the past. The future seems all too imminent and close to the present. Health can become a major concern as the body starts to decline with age. Older individuals may see their death as nearer and as more real than ever before, more so than most young or middle-aged adults do (Erickson, 1982). It is conjectured that this will have an influence on projections of future SWB, which will

be much lower than at other times and for other age groups. Given the proximity of time to death, older individuals idealize the past and have fond memories of "the good old days". The nostalgic-effect appeared for the oldest group in both Stout et al.'s (2008) and Staudinger et al.'s (2003) results, whereby old people's ratings of the past tended to be much higher than any other diachronous rating. Further, if a parallel is made between the studies on traumatic life events (Brickman et al., 1978; Holman & Cohen-Silver, 1998; McFarland & Alvaro, 2000) and gerontology, it is possible that aging in North American society today is traumatic because of the increased value given to youth, power and productivity. It is also possible that the processes of aging threaten one's very identity (Cruikshank, 2003).

Middle age is a time for growth, but also for maintenance. Middle-aged individuals are generally temporally equidistant from the past and the future; that is, between birth and death. They tend to be neither more hopeful about the future nor more pessimistic about the past. It is an "ideal" place to be in the sense that generally fewer illusory biases are employed. This is because the sense of self through time is already consistent and there is no need to try to use any social-cognitive mechanisms to make it consistent. It is thought that this will be reflected in stable ratings of diachronous SWB (Staudinger et al., 2003) with mean patterns, forming a straight horizontal line from past, to present, to future. For the purposes of this study, this straight diachronic SWB line will be called the realistic-effect.

Lacey and colleagues (2006) were interested that people generally appear to dread getting old, despite proof that well-being improves with age. They looked at the differences in happiness between young participants (with a mean age of 31) and old participants (with a mean age of 68), by comparing their present self-reported happiness with their estimates of the happiness of the average person at ages 30 and 70. The researchers showed that despite increasing happiness as a function of age in these participants, both age groups still reported that happiness declines with age for the average person (Lacey et al.).

Integrating the theories of temporal comparison, social-cognition, and lifespan, it is possible to think that an individual could reconstruct the past in order to serve the present, and even more so in order to find consistency with expectations of a future that is still left to be constructed. This reconstruction would be age-specific. This idea was manipulated and integrated in a study by Bryant, Smart and King (2005) where they used the past to improve the present. Happiness was successfully increased through having participants look back at constructive and optimistic memories. Other treatments have been tried to improve present and future outlooks, with adaptive and proactive coping in thinking about and preparing for the future (Aspinwall, 2005; Ong & Bergeman, 2004), or controlling life regrets (Wrosch, Bauer, & Scheier, 2002; Wrosch & Heckhausen, 2002). Wilson and Ross (2001) found that participants are more critical of their past selves than their present selves, and this effect was shown to be true even when there was no actual improvement of the present self as compared to the past.

These are interesting findings, yet participants in all of the aforementioned studies were university students - presumably young. This is an example of how the effect of age is missing, neglected, or not quite developed in most studies on SWB and temporal comparison. Even the Staudinger et al. (2003) study, despite looking at age effects, was itself based on data from the study of Midlife Development in the United States (MIDUS) (MIDMAC, 1995-1996; MIDMAC, 2004), where the goal was to cover the “middle ages” ranging from 25 to 74. Therefore, it was not quite representative of very young adults just graduating from high school, or very old adults preparing for the end of life. However, until Stout and colleagues’ (2008) study, the Staudinger study was the only one to look at past, present, and future SWB for all age groups. Most studies with a diachronous outlook tend to use undergraduate students as participants in their studies (e.g. Caplan, Tripathi, & Naidu, 1985). Both Stout et al. (2008) and Staudinger et al. (2003) found age differences in the comparison between present and past ratings, and again in the comparison between present and future ratings. Therefore, they successfully included the temporal dimension, lacking in most studies and took into account crucial age differences throughout the lifespan.

The underlying goal of the present study is to look at the diachronous perceived SWB of three age groups and to compare English and French-speaking communities in Quebec.

The issue of mother tongue

The province of Quebec is special in that it is the only province with a Francophone majority within the country of Canada, where its inhabitants primarily speak English. Within Quebec however, there is a population of Anglophones that hold an official minority status. The Quebec population is rapidly aging and this, combined with a mass exodus of young Anglophones, creates an even more aged population (Floch, 2005). Because the French language gained protection in 1969 at the federal level with the Official Languages Act, and then provincially with Bill 22 in 1974, and Bill 101 in 1977 (Goyder, 1995), all bilingual public signs became strictly Francophone. This resulted in a growing sense of insecurity for those English Quebecers who were not bilingual. Many Anglophones actually left for neighbouring provinces, but a number of them stayed, many of which are still settled in the Eastern Townships. Francophones, on the other hand, have felt a growing sense of insecurity due to the fact that their language is threatened by its isolation within the rest of Canada as well as North America, which are both quite Anglophone. Research has been conducted about Francophone life satisfaction and well-being (Goyder & McCutcheon, 1995). It would be interesting, however, to contrast it with that of Anglophones.

The aforementioned history of Anglophones and Francophones in Quebec leads us to believe that certain cultural differences may emerge when it comes to life satisfaction and well-being. The present study aims to answer the question of whether Anglophone and Francophone Quebecers reflect similar or different patterns of diachronous ratings

of future satisfaction. Moreover, if the diachronous future question was left open versus if it was constrained by the remark “if you stay in Quebec”, would this have an effect on ratings? SWB and satisfaction have been the focus of cultural comparisons (Diener & Diener, 2009; Diener, Oishi, & Lucas 2003), for example between Germany and the U.S.A. (e.g. Staudinger, Fleeson, & Baltes, 1999; Westerhof & Barrett, 2005), and between Russia and the U.S.A. (Tucker, Ozer, Lyubomirsky, & Boehm, 2006). It is our belief that the two official language groups living in Quebec could be perceived as different cultures with different roots and heritage.

A look at employment and financial concerns in the Townships

More specifically, we imagine that distinctions will arise between the two language groups with respect to satisfaction with work and finances. There have been domain-specific studies with respect to SWB (Steverink & Lindenberg, 2006). Staudinger et al. (2003) and Stout et al. (2008) looked at six domains for SWB, including physical health, contribution to the welfare and well-being of others, marriage or close relationship, the sexual aspect of life, satisfaction with work (paid or unpaid), and financial situation. We are mostly interested here by the latter two, satisfaction with work and one’s financial situation out of concern for the occupational and economic situation of people living in the Eastern Townships region. Both of these concerns are important because they often motivate choices to emigrate from or immigrate to a given area. In terms of work and employment, we include productive activities, both paid and unpaid, that serve to provide one with a sense of purpose. Work is a concern at any age;

however, at the beginning of one's participation in the work force, work and finances can become predominant concerns, where much time can be spent studying, job hunting, and going back to school in order to find a place where one can contribute and earn a living. After retirement, older adults try to find activities that make them feel useful or that help add to their reduced income.

In the present study, we were interested in finding out several things. Regardless of mother tongue, are the young satisfied with their work situation? Are the old less satisfied with their productive activities given that many are retired or close to retirement? Are the middle-age individuals the most satisfied with work and finances? Is there financial dissatisfaction among any of the groups across age and mother tongue? Moreover, if the perception that job prospects are for the most part open for Francophones only, then this could cause a great deal more insecurity about work within a young individual who is a unilingual Anglophone. With these questions in mind, SWB in the domains of satisfaction with work and finances will be surveyed.

Objectives and hypotheses

The purpose of this study is to extend past studies of diachronicity (Lacey et al., 2006; Staudinger et al., 2003; Stout et al., 2008), not only looking at the temporal aspect of satisfaction and SWB, but also providing information related to the effects of age and culture on evaluations of subjective well-being. Furthermore, this study aims to shed

light on the differences between Anglophones' and Francophones' satisfaction with work and finances.

Age differences in diachronic work satisfaction

Hypothesis 1. It is predicted that relative to the present time, young adults will have a diachronous sense of the future as reserving greater work satisfaction, and thus will show higher mean satisfaction ratings for the future than for the present or the past – the so-called hopeful-effect.

Hypothesis 2. Middle-aged adults are expected to show similar past, present, and future work satisfaction ratings – the so-called realistic effect.

Hypothesis 3. Conversely, older adults' diachronous sense of past satisfaction with work will tend to be higher; demonstrating the so-called nostalgic-effect, and thus satisfaction ratings for the past will be higher than ratings of both the present and future.

Cultural differences in diachronic satisfaction with work

Hypothesis 4. It is predicted that, across age, Anglophones will show lower future work satisfaction ratings if they stay in Quebec compared to general future work satisfaction ratings.

Hypothesis 5. It is predicted that, across age, Francophones will show ratings for future work satisfaction that will be similar to ratings when projecting a future where they would be staying in Quebec.

Age differences in diachronic financial satisfaction

Hypothesis 6. It is predicted that relative to the present time, young adults will have a diachronous sense of the future as reserving greater financial satisfaction, and thus will show higher mean satisfaction ratings for the future than for the present or the past – the so-called hopeful-effect.

Hypothesis 7. Middle-aged adults are expected to show similar past, present, and future financial satisfaction ratings – the so-called realistic effect.

Hypothesis 8. Conversely, older adults' diachronous sense of past satisfaction with finances will tend to be higher; demonstrating the so-called nostalgic-effect, and thus satisfaction ratings for the past will be higher than ratings of both the present and future.

Cultural differences in diachronic satisfaction with finances

Hypothesis 9. It is predicted that, across age, Anglophones will show lower future financial satisfaction ratings if they stay in Quebec compared to general future financial satisfaction ratings.

Hypothesis 10. It is predicted that, across age, Francophones will show ratings for future financial satisfaction that will be similar to ratings when projecting a future where they would be staying in Quebec.

Method

Participants

Our sample (see Table 1) included 287 participants which were invited to participate in the study on a voluntary basis. There were 146 Francophones and 141 Anglophones. Both genders were equally represented (145 women and 142 men). Ages ranged from 17 to 95 years and for the purpose of the study, participants were categorized into three age groups. The young group ($n = 86$) was aged 18 to 38 with a mean of 26.5 years of age. The middle-aged group ($n = 138$) ranged from 39 to 64 years of age, with a mean age of 49 years. The older-aged group ($n = 63$) ranged from 67 to 95 years of age, with a mean age of 79. Five participants omitted to record their age and thus were excluded from the study. Participants were recruited from community centers, arenas, shuffle board tournaments, community bingo nights, church services, schools, private homes and residences for the elderly, various universities, colleges, high schools, and elementary schools, restaurants, shopping malls, libraries, and one textile factory. Participants did not receive any payment for their participation; however, their names were entered to win one of three music CDs.

Table 1

Sample by mother tongue, age category and gender

	Francophones (n = 146)			Anglophones (n = 141)			Total
	Young	Middle	Old	Young	Middle	Old	
Women	23	33	24	17	26	22	145
Men	27	32	7	19	47	10	142
Total	50	65	31	36	73	32	287

Measure

The questionnaire used for data collection was originally conceived in English by the author of the present study (see Appendix A) and was then translated into French (see Appendix B). It was adapted from part of an elaborate telephone survey used in the MIDUS study (MIDMAC, 1995-1996; MIDMAC, 2004), intended to measure participants' subjective well-being. The scale we were interested in was an 11-point measure involving a subjective assessment of one's satisfaction with the past (10 years ago), the present, and future (10 years from now), as well as future satisfaction (10 years from now) if one remained in Quebec. Six domains were assessed, including physical health, contribution to the welfare and well-being of others, marriage or close relationship, the sexual aspect of life, satisfaction with work (paid or unpaid), and financial situation. For the purpose of the present study, we chose to focus on satisfaction ratings with respect to work and finances. For example, the questions were

phrased like the following: “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 satisfaction with work (paid or unpaid) these days? looking back 10 years ago? looking ahead 10 years into the future? in 10 years if you stay in Quebec?” Socio-demographic details such as age, sex, occupation, mother tongue, and level of bilingualism were also recorded.

Design

The design was set up in order to investigate the effects of the independent predictor variables of age and culture on the dependent variables of diachronous ratings of satisfaction with work and finances. For the purpose of the study, a one-between, one-within mixed design was used, with three levels of the between variable of age (young, middle, and older adults), and three levels of the within variable of diachronous ratings (past, present, and future). Subsequently, in order to look at the effects of the independent variables of mother tongue on diachronous ratings of subjective well-being in the future, a two-between, one within mixed design was used with three levels of the first between-groups variable of age (young, middle, and old age), two levels of the second between-groups variable of mother tongue (Francophone and Anglophone), and two levels of the within-participants variable of diachronous future satisfaction (future and future in Quebec). This was done for both work and financial satisfaction.

Procedure

Participants were asked to rate their satisfaction in the present, recall the past, predict the future, and the future if they remained in Quebec. Participants were essentially asked to evaluate their subjective-well-being and satisfaction in six different domains at three different times in their lives. The questionnaires (see appendix A for the English version and B for the French version) were administered in comfortable and relaxed atmospheres (in classrooms, community centers, break rooms in the work place, private homes, libraries, church basements, etc.) chosen by the participants themselves. Every effort was made to accommodate the individual, particularly with respect to older persons and those with physical and mobility challenges. Participants were asked to read the questions carefully and were reassured that there was no right or wrong answer; therefore they were to be as honest as possible. The researcher clarified any questions or concerns the participants had before they proceeded to answering the items. This done, participants were requested to record background details such as age, sex, occupation, mother tongue, and level of bilingualism. Finally, participants were thanked and informed to a greater extent as to the details of the study. The entire procedure took anywhere from 10 minutes to 1 hour depending on the amount of time each participant needed to read the questions and think about their responses.

Ethics

The research was conducted at Bishop's University, under the supervision and responsibility of Professor Dr. Dale Stout. A research grant was awarded by the Eastern

Townships Research Centre in 2007. The data presented here are part of this original study. Ethical concerns in this study embraced both informed consent and protection of the participant. In order to ensure these were appropriately respected, all possible information was provided to participants prior to filling out the questionnaires, without giving away the hypothesis. They were told that no potential harm was expected, asked to sign a consent form, and assured that confidentiality would be respected. Participants were not obliged to participate. If they felt the need or desire to withdraw at any point, it was their right to do so. One individual chose to withdraw for personal reasons. Also, the researcher made sure to treat participants with absolute respect and dignity. The topic under investigation here is well-being after all and this was not in any way threatened.

Results

For the analyses pertaining to the present study, alpha was set at the .05 level for all statistical tests. The results are structured as follows: first, age differences were examined with respect to work satisfaction followed by the analysis of cultural differences. The same was carried out with respect to financial satisfaction.

Age differences in satisfaction with work

Figure 1 shows satisfaction with work ratings given by participants in three age categories (young, middle, and old) across 3 different diachronic times (past, present, and future). The results of the 3 x 3 mixed ANOVA, used to examine the effects of the between-groups variable (age category) and the within-participants variable (diachronic time) on evaluations of satisfaction with work, revealed there was a significant interaction effect between diachronic time and age category, $F(4, 552) = 25.99, p < .001$. No main effect was found for age ($F(2, 276) = 0.31, p = .734$). In order to appreciate the cause of the interaction, simple effects were explored to locate the differences. The results showed that there was a significant difference between diachronic times for the young age group ($F(2, 552) = 39.2, p < .001$). Every mean time rating was significantly different from each other (past, $M = 5.96$; present, $M = 7.06$; future, $M = 8.63$). Similar to the young, significant differences were also found in the middle-aged group ($F(2, 552) = 6.38, p < .01$). These differences were observed between the future

($M = 7.71$) and the other times (past, $M = 6.97$; present, $M = 7.25$). Old-aged individuals, albeit significantly different over diachronic time ($F(2, 552) = 16.26, p < .001$), showed the opposite pattern to the young and the middle-aged, with high mean satisfaction with work ratings for the past ($M = 8.36$), average ratings for the present ($M = 7.49$), and low ratings for the future ($M = 6.47$). Therefore, as can be observed in Figure 1, mean work satisfaction ratings increase in slope over time (from past to present to future) for young adults, increase slightly for the middle-aged and decrease for old adults (for means consult Table 2).

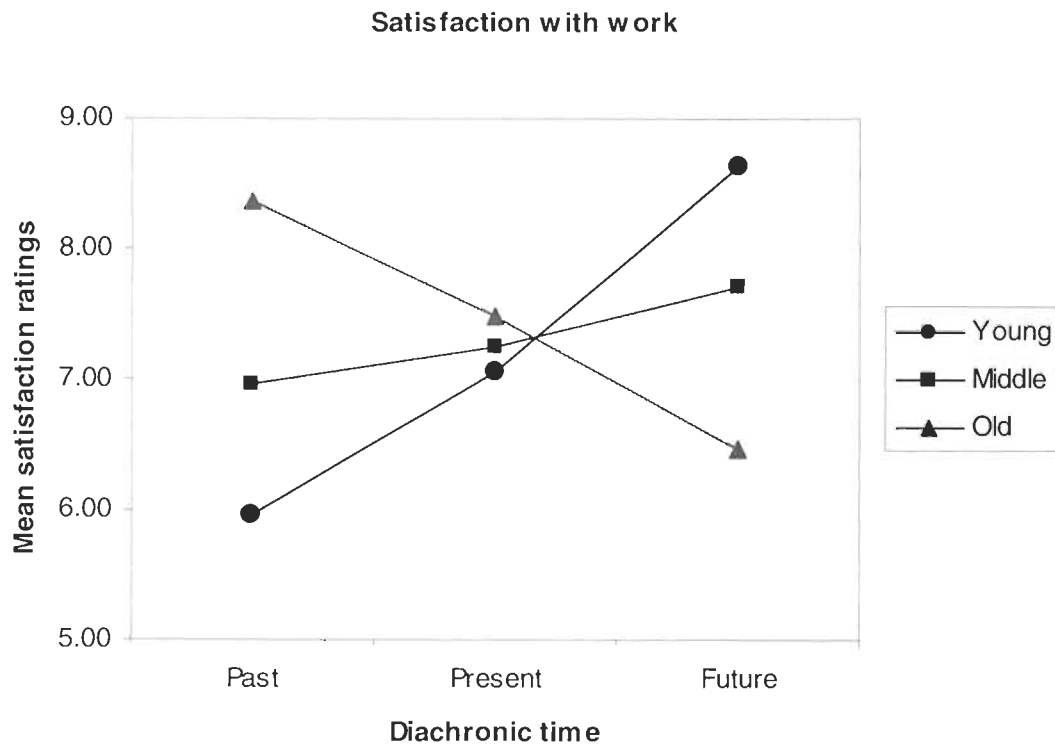


Figure 1. Differences in work satisfaction plotted by age category.

Table 2
Estimated means and standard deviations of work satisfaction

Age	Diachronic time	<i>M</i>	<i>SD</i>	<i>F</i>	<i>P</i>
Young	Past	5.96	2.80		
	Present	7.06	2.33		
	Future	8.63	1.34		
	Total			39.21	.000
Middle	Past	6.97	2.03		
	Present	7.25	1.91		
	Future	7.71	2.02		
	Total			6.38	.002
Old	Past	8.36	2.06		
	Present	7.49	2.69		
	Future	6.47	2.97		
	Total			16.26	.000

Looking at the simple effects analyses in a different way, the results showed that, for the past, there was a significant difference between age groups, $F(2, 276) = 18.23$, $p < .001$. This difference was observed between the young ($M = 5.96$) and the other two age groups (middle-aged $M = 6.97$ and old $M = 8.36$). For the present, no significant differences were found between age groups ($F(2, 276) = 0.62$, $p = .54$); participants in all three groups did not differ in their mean work satisfaction ratings. For the future, there

was a significant difference between age groups, $F(2, 276) = 16.51, p < .001$; every age group was significantly different from each other (young $M = 8.63$, middle-aged $M = 7.71$, old $M = 6.47$). For all means consult Table 2.

Cultural differences in satisfaction with work

Figure 2 shows mean satisfaction with work ratings given by participants in the two mother tongue groups (French and English) across two diachronic times (future and future in Quebec). The results of the $3 \times 2 \times 2$ mixed ANOVA, used to examine the effects of the between-groups variables (age category and mother tongue) and the within-participants variable (diachronic time) on evaluations of satisfaction with work, revealed no interaction between the three factors. However, there was a significant interaction effect found for diachronic time by mother tongue $F(2, 277) = 7.80, p < .01$. In order to understand the source of the interaction found, we looked at the simple main effects. Pairwise comparisons showed that there were no differences between projected work satisfaction in the future ($M = 7.51$) versus a future in Quebec ($M = 7.59$) for Francophones ($F(1, 277) = 1.19, p = .277$). Anglophones, however, did demonstrate a significant difference, $F(1, 277) = 7.92, p < .01$, with mean for general future being 7.72 and future in Quebec being 7.51 (see Table 3). It was noted that no differences were observed between Anglophones and Francophones, be it for work satisfaction in a future if they stay in Quebec or work satisfaction in a general future.

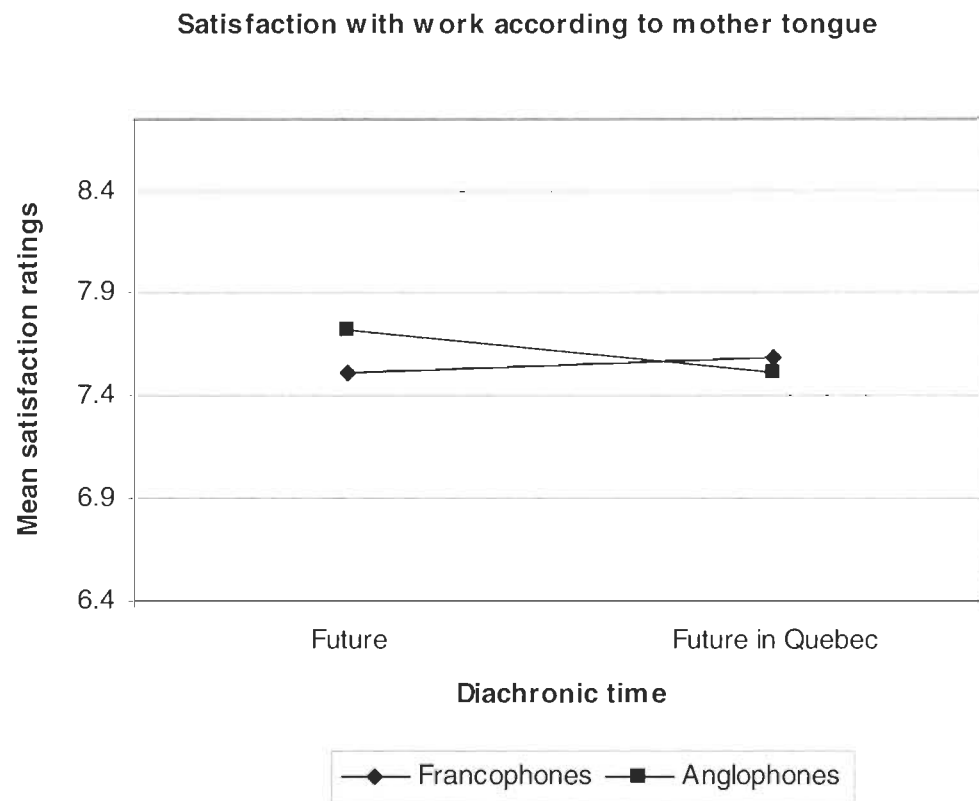


Figure 2. Mean work satisfaction ratings according to mother tongue.

Table 3

Satisfaction with work across mother tongue groups

	Future	Future Quebec	Total	
	<i>M</i>	<i>M</i>	<i>F</i>	<i>P</i>
Mother tongue				
Francophone	7.51	7.59	1.19	.277
Anglophones	7.72	7.51	7.92	.005

Age differences in satisfaction with finances

Figure 3 shows financial satisfaction ratings given by participants in three age categories (young, middle-aged, and old) across three different diachronic times (past, present, and future). The 3 x 3 mixed ANOVA, used to examine the effects of the between-groups variable (age category) and the within-participants variable (diachronic time) on evaluations of satisfaction with finances, revealed a main effect for age ($F(2, 295) = 4.95, p < .01$), and a significant interaction between diachronic time and age category ($F(4, 590) = 18.83, p < .001$). Therefore, to see more clearly what the interaction suggested, simple main effects were explored to pinpoint the differences. The results showed a significant difference in diachronic time for the young age group ($F(2, 590) = 66.30, p < .001$); these differences were observed between the future ($M = 8.46$) and the other times (past, $M = 5.66$; present, $M = 6.08$). Middle-aged adults showed a significant difference in terms of diachronic time ($F(2, 590) = 38.21, p < .001$), rating their financial satisfaction similarly to the young, once again increasing over time. Every mean time

rating was found to be significantly different from each other (past, $M = 5.96$; present, $M = 6.94$; future, $M = 7.59$). Old-aged individuals, on the other hand, revealing no significant difference for diachronic time ($F(2, 590) = .73, p = .481$), with ratings of financial satisfaction being relatively stable over time. For means, consult Table 4.

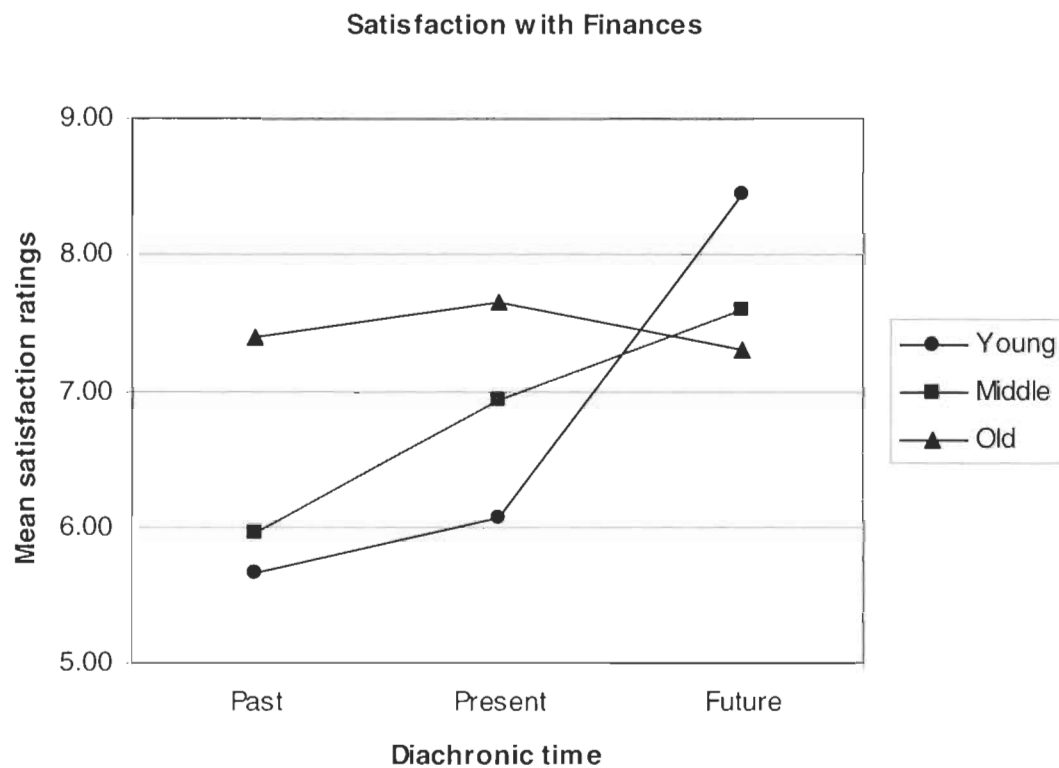


Figure 3. Differences in financial satisfaction plotted by age category.

Table 4

Estimated means and standard deviations of financial satisfaction

Age	Diachronic time	<i>M</i>	<i>SD</i>	<i>F</i>	<i>P</i>
Young	Past	5.66	2.59		
	Present	6.08	2.48		
	Future	8.46	1.33		
	Total			66.30	.000
Middle	Past	5.96	2.12		
	Present	6.94	1.93		
	Future	7.59	1.78		
	Total			38.21	.000
Old	Past	7.40	1.89		
	Present	7.65	1.76		
	Future	7.31	2.12		
	Total			0.73	.481

Looking at the simple main effect analyses from an alternate perspective, the results showed that, for the past, there was a significant difference between age groups, $F(2, 295) = 12.85, p < .001$. There was a significant difference between the old and the other age groups; the old revealed a significantly higher financial satisfaction ($M = 7.40$)

than the young ($M = 5.66$) and the middle-aged ($M = 5.96$). For the present, significant differences were found between age groups, $F(2, 295) = 10.63, p < .001$. This difference was observed between the young and the other two age groups, wherein the young rated the present as significantly lower ($M = 6.08$) than the middle-aged ($M = 6.94$) and the old ($M = 7.65$). For the future, there was also a significant difference between age groups, $F(2, 295) = 9.08, p < .001$. This difference was once again observed between the young and the other two age groups; this time the young had significantly higher mean ratings for future financial satisfaction ($M = 8.46$) than the middle-aged ($M = 7.59$) and the old ($M = 7.31$). For all means, consult Table 4.

Cultural differences in satisfaction with finances

Figure 4 shows financial satisfaction ratings given by participants from the two mother tongue groups (French and English) across both diachronic times (future and future in Quebec). The $3 \times 2 \times 2$ mixed ANOVA, used to examine the effects of the between-groups variables (age category and mother tongue) and the within-participants variable (diachronic time) on evaluations of financial satisfaction, did not reveal an interaction between the three factors. On the other hand, a significant interaction effect for diachronic time by mother tongue was observed, $F(1, 293) = 8.36, p < .01$. The interaction was explored further using pairwise comparisons which showed that for Francophones, there was no difference between projected financial satisfaction in the future and projected financial satisfaction in a future in Quebec ($F(1, 293) = .001, p = .969$). Anglophones, however, demonstrated a significant difference

($F(1, 293) = 16.13, p < .001$); they rated financial future satisfaction in Quebec lower ($M = 7.28$) than general projected financial satisfaction ($M = 7.60$). It was noted that Francophones evaluate their finances more positively than Anglophones, be it for the general future or the future if they stay in Quebec. For means, consult Table 5.

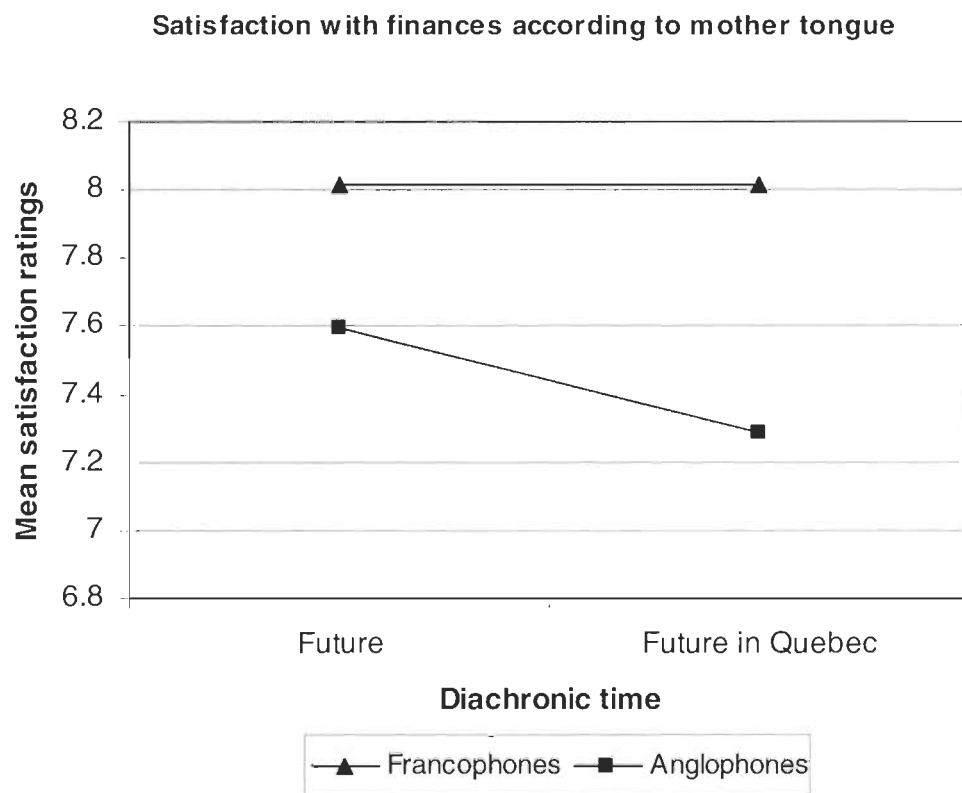


Figure 4. Mean financial satisfaction ratings according to mother tongue.

Table 5

Satisfaction with finances across mother tongue groups

	Future	Future Quebec	Total	
	<i>M</i>	<i>M</i>	<i>F</i>	<i>P</i>
Mother Tongue				
Francophones	8.02	8.02	.001	.969
Anglophones	7.60	7.28	16.13	.000

Discussion

The present study modeled Stout and colleague's (2008) method for evaluating diachronous SWB across age; however, two new domain factors were explored in the analysis: work and financial satisfaction. Generally speaking, some predictions were upheld, while others weren't, bringing original and interesting perspectives into the study of satisfaction, especially with respect to work and finances in the Eastern Townships of the province of Quebec.

Age predicts diachronous ratings of satisfaction with work

Results of previous studies were partially replicated (Lacey et al., 2006; Staudinger et al., 2003; Stout et al., 2008). All age groups offered a similar account of their present work satisfaction, with ratings that did not differ from one another. All ages seem to feel that their work, paid and unpaid, brings them some satisfaction, confirming Csikszentmihalyi's (2003) observation that most people have very positive and satisfying experiences at work.

Hypothesis 1, predicting that relative to the present time, young adults would rate their future satisfaction much higher and past much lower was supported. Hypothesis 2, predicting that middle-aged adults would show similar past, present and future ratings of satisfaction with work was not supported. Finally, Hypothesis 3 expecting that older adults would rate past satisfaction with work as higher and the future as lower was

supported. The results demonstrated and provided evidence for the hopeful and nostalgic effects that were previously observed by Stout et al. (2008), Lacey et al. (2006), and originally by Staudinger et al. (2003).

Important parallels can be drawn from the studies on trauma and can be used in interpreting the results regarding age differences in SWB. More specifically, the notions of loss and gain seem to explain the connections and reasoning behind the hypotheses predicting opposite diachronous SWB patterns for young and old. Older adults can be compared to Brickman et al.'s (1978) accident victims and Holman et al.'s (1998) trauma victims, who reported being happier in the past. It seems that those who suffered the greatest losses needed to orient themselves toward a gratifying past. With age, older adults also have to face numerous losses that require increased adaptation to the changes occurring in their life (Fiksenbaum, Greenglass, & Eaton, 2006). By centering their attention on the time when they were at their prime, older adults, who feel they have less value in today's youth-centered society and who are fearful of an uncertain future, can find personal worth in what they once were in order to maintain self esteem (Pushkar, Arbuckle, Rousseau, & Bourque, 2003; Rickabaugh, & Tomlinson-Keasy, 1997). On the other hand, the young are expecting to gain in the future. They seem to think that they have the world at their feet, that everything is possible, much like Brickman et al.'s lucky lottery winners who expected a happier future for themselves because of the lottery gains. The young perhaps expect a happier future because they take the time they have ahead of them for granted. It is also possible that the media is having an impact on the young

wherein they have fully integrated the positive stereotyping of youth these days. As for the middle-aged participants, their ratings of work satisfaction did not reflect the “realistic effect” or stability that was expected from previous studies in the scientific literature. There are a few factors that could explain this. It is possible that this trend reflects that of the young participants because middle-aged individuals now have a higher life expectancy. What is more, recently there has been a reduction of people in the workforce due to the retirement of baby boomers. This could allow for greater, more interesting possibilities for career advancement and middle-aged adults could react to these opportunities much like Brickman et al.’s lucky lottery winners. It is also possible that middle-aged persons fear aging and death in a youth-valued society and are reacting to the same media stereotyping by trying to identify with their younger counterparts, integrating the latter’s value-system in their temporal orientation and their identity (Turner, Brown, & Tajfel, 1979; Turner & Reynolds, 2004; Onorato, & Turner, 2001).

It is worth mentioning that two individuals in the oldest group just flat out refused to answer questions about the future. This could reflect a level of integration into one’s perception of self that the wider societal attitude assumes that the future is bleak for aging individuals. Young and middle-aged individuals, on the other hand, seem to lack hindsight, insofar as they are overly focused on the future as reserving great things; essentially protecting them from a fear of the future and from the impression of aging itself, yet giving less value to the past. These perceptions and misperceptions need to be

investigated to understand if they are useful for these age groups in order to face fears or hopes for the future.

Mother tongue influences diachronous ratings of work satisfaction

Francophone and Anglophone groups from the Eastern Townships behaved differently on the future satisfaction with work question. Hypothesis 4 was supported, as Anglophones showed a marked decrease between their ratings of future satisfaction with work if they stay in Quebec, compared to their ratings of future satisfaction with work in general. Hypothesis 5 was also supported, as Francophones showed similar ratings of general future satisfaction with work and ratings of future satisfaction with work if they stay in Quebec. Therefore, the question appears to be redundant for Francophones. In fact, across age groups, Francophones rated both future diachronics very similarly. This means that, for Francophones, though work is a concern, it does not become more or less of a concern when constrained by staying in Quebec. This is remarkably unlike the Anglophone population in the Eastern Townships for whom work seems to be an issue of concern only if they stay in Quebec, as this effect was upheld regardless of age (the 3 X 2 X 2 ANOVA was not significant). This could be due to the perceived language barrier in the workforce. It is possible to think that Anglophones believe that advancement within one's particular field is limited, especially if they are unable to speak French, when the laws are becoming stricter as shown in order to protect the French language. They may wonder what the future holds for them. Further investigation is required to tap into this layer of satisfaction.

Age does not predict diachronous ratings of financial satisfaction

The results of previous studies (Lacey et al., 2006; Staudinger et al., 2003; Stout et al., 2008) showing the hopeful effect for the young, the realistic effect for the middle-aged, and the nostalgic effect for the old, were partially replicated when it comes to financial satisfaction. Contrary to the results observed in the domain of work satisfaction, all age groups offered significantly different accounts of their present financial satisfaction, with older adults showing the highest satisfaction and young adults the lowest. All three age groups are at different stages in their lives financially speaking. The young presumably have the least amount of finances and seemingly, adults' financial situations improve as a function of age.

Hypothesis 6 predicting that relative to the present time, young adults would rate their future satisfaction much higher and past much lower was supported, confirming the hopeful effect. The prediction that middle-aged adults would show similar past, present and future ratings of financial satisfaction (Hypothesis 7) was not supported. The middle-aged actually had rating trends that were similar to that of young adults, with little satisfaction in the past, increasing from past to present to future, demonstrating a hopeful effect for the future for this age group as well. They appear to believe that finances will improve. It is probable that young and middle-aged participants have seen an improvement of their financial situation over the last 10 years, making them believe that this improvement will continue through time. Older adults did not rate past financial

satisfaction as higher and the future lower as expected; therefore, Hypothesis 8 was not supported. In fact, their ratings demonstrated the realistic effect that was expected from the middle-aged; the level of financial satisfaction of older adults did not change over time. Although older participants' income is unknown, some research has shown that elders are usually satisfied with their finances because they are content with the essentials and know how to live with limited resources (Laberge et al., 2003). It is possible to think that they know the difference between needing and wanting and aren't centered on consumption. It is also feasible that compared to the past, older people have fewer expenses, few familial responsibilities and their general situation has improved. They are also perhaps able to put things into perspective, by comparing themselves to people who are less fortunate, for example (Laberge, Dumas, Rail, Dallaire, & Voyer, 2003). This is surprising since (depending on their age) they probably had a better income ten years ago when they were working. One way of understanding these results is expressed by Erikson, Erikson, and Kivnick (1986). Many older adults can look back on life with satisfaction, with a sense of meaning and contribution; what Erikson et al. call integrity.

Finally, it is important to mention that the data for the present research was collected in the year 2007. Given the current economic crisis, financial satisfaction results could prove different for all three age groups if the data were collected today.

Mother tongue influences diachronous ratings of financial satisfaction

Francophone and Anglophone groups from the Eastern Townships also behaved differently on the future financial satisfaction questions. Hypothesis 9 was supported, as Anglophones showed a marked decrease of future financial satisfaction if they stayed in Quebec compared to their ratings of general future financial satisfaction. Hypothesis 10 was also supported, as Francophones showed similar ratings for both future financial satisfaction diachronic times (general future and if they stay in Quebec). Finances seemed to be an issue of concern for Anglophones in the Eastern Townships and this effect was upheld regardless of age. Perhaps Anglophones feel vulnerable when they project themselves into the future. It would have been interesting to ask how they would see their future financial situation in another province or another country. This could be associated to the domain of satisfaction with work, because employability brings in money. If Anglophones are less satisfied with work in a projected future in Quebec, then it can be conjectured that they are less financially satisfied in this same future diachronic time. Further examination is necessary however, in order to really tap into this layer of satisfaction. As for Francophones, they had higher financial satisfaction than Anglophones for both diachronic times, probably indicating that they are better employed and more financially stable than Anglophones. Floch's (2005) research shows that the unemployment rate among Anglophones in the Eastern Townships is on average 11% higher than Francophones. Furthermore, considerably more Anglophones than Francophones are unemployed due to reduced employment prospects and unpaid labor such as home care.

By taking the time to engage in discussion after questionnaires were filled out, it was discovered that the Eastern Townships population's comments could help in understanding the results. For example, one elderly English lady said that it made her very anxious to have to deal in French concerning her money. A young Francophone man complained that he was insecure about whether or not he could obtain a permanent position in his place of work because he wasn't fully bilingual. Qualitative research is indeed needed and could prove to be interesting in the study of satisfaction and SWB.

Implications for future research

In light of these observations, rating past and future work and financial satisfaction could prove to be a practical research method with self-evaluative research. It may be helpful in establishing more integrated, hopeful and fulfilling diachronous senses of the past, present, and future. For example, in their research, Pavot and Diener (2004) propose a "national index" of SWB indicators that could potentially enhance the objective economic and social indicators already in place. It could therefore be feasible to use mean evaluations of population SWB, especially financial and work satisfaction. In fact, since Pavot and Diener's proposal, several countries have developed their own happiness indices. In fact, Veenhoven (2011) has developed a world Database of Happiness, where different countries can be assessed in terms of happiness. The idea of Gross National Happiness has even become part of economic terminology (Frey & Stutzer, 2009). With the economic crisis looming all over the Western world, the level of financial and work

satisfaction could change, influencing the hopeful-effect of young and middle-aged persons and probably increasing the nostalgic-effect in all age groups.

Subsequent research should focus on the distinct differences between age groups with respect to mother tongue. Social domains of satisfaction and SWB still have to be explored using the data from the Eastern Townships' survey (Stout et al., 2008), including one's marriage or close relationship, the sexual aspect of one's life, and the contribution to the welfare and well-being of others. It might prove interesting to see what differences will surface between age groups and mother tongues. Will the pattern of the hopeful, realistic and nostalgic effects, and those related to culture be upheld? More interesting would be to look at the relationships between various domains of SWB, for example to verify if work and financial satisfaction have an influence on satisfaction in the other three aforementioned social domains. Taking all domains into consideration, it might be feasible to create a satisfaction model.

Limits of the study

There are certain limits to the study that need to be mentioned. First and foremost, the study had already been conducted by the main researcher (Stout et al., 2008). Therefore, since the data was already available, it was impossible to add other variables of interest that could better explain temporal aspects of satisfaction and SWB. For example, more information on participants' income and work conditions could have been useful to study time perception and SWB.

Another weakness that has generated several questions and concerns was the way that the age groups were categorized in the present survey. The young group started at 17 because we figured that looking back 10 years would bring them to the age of 7 and very close to a time that they might have no recollection of. Perhaps it might be worth considering and trying out different possibilities of categorization to see what effects it would have on the results. Also, perhaps different cultures have varying perspectives on the age categories or markers within the lifespan and so one should be mindful of this reality prior to forming age categories.

It should be mentioned that given that this is a subjective self-evaluative research method, we have no way to verify if participants' responses were influenced by a need for social approval. Also, this method does contain potential sources of bias including the possibility of such phenomena as selective memory (such as only remembering the good parts of one's past) or exaggeration (embellishing the future for example). Thus, a longitudinal dimension could be added in order to provide more information to this type of research.

In retrospect, the questionnaire used in the present research presented the questions in a given order (see Appendices A or B); however, this order could have influenced how participants answered, either having a positive or negative impression, depending on their age or the questions presented. For example, given that health is often in decline at old

age, older adults may have been negatively primed right away because the first question concerned health.

Also, the questionnaire could have included other items useful in understanding life satisfaction and SWB. For example, it would be interesting to add a question investigating the possibility of a previous accident or traumatic event. In light of Brickman et al.'s (1978) and Holman et al.'s (1998) conceptions of nostalgic effects, it could be possible that age would not provide a pattern so much as the past negative experience tainting perceptions of diachronic times including the future.

Conclusion

This study examined diachronicity through extending past studies of temporal comparison (Lacey et al., 2006; Staudinger et al., 2003; Stout et al., 2008). The present study accomplished its aim to provide information on perceived work and financial satisfaction in relation to past, present, and future according to age and culture. Participants rated their satisfaction in the past (10 years ago), present, and future (10 years from now) with respect to work and finances, as well as their future satisfaction in Quebec. Past results were replicated in terms of the effects of age and diachronicity on work satisfaction. However, upon examining the effects of age and diachronicity on financial satisfaction, a new finding was encountered wherein satisfaction did not change over time for older adults, demonstrating the so-called realistic effect; while the young and middle-aged adults resembled each other in their ratings, showing the hopeful-effect. Uniquely, there was an absence of the nostalgic age effect in the financial satisfaction aspect of this study. As for the effect of culture, results for both work and financial satisfaction domains showed that Anglophones' from the Eastern Townships rated future satisfaction as lower, if it was specified that they remained in Quebec, compared to ratings of general satisfaction for the future. This change was not displayed in Francophones.

As a rule, age is a strong predictor of diachronous ratings of past, present, and future work and financial satisfaction. Of even more importance, the future work and

financial satisfaction of the Eastern Township's Anglophone population is influenced by the Quebec question. All things considered, age and culture provide patterns for understanding diachronic ratings of satisfaction. The diachronic research method tested in the present study has been verified to be an effective and noteworthy contribution to the current methods employed in self-evaluative research.

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Appendix A

Questionnaire rating diachronous SWB (English version)

Age: _____	Mother Tongue: French English Other
Sex: _____	
Status: married / with partner <input type="checkbox"/> separated / divorced <input type="checkbox"/> single <input type="checkbox"/> widow <input type="checkbox"/>	Bilingual Scale not very 1 2 3 4 5 6 7
Occupation: _____	
Birth order with siblings: _____ out of _____	Language most used at home: French English Other
Number of years apart: _____ and _____ years.	Language most used at work: French English Other

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):

	WORST	BEST
your physical health...		
these days?	0 1 2 3 4 5 6 7 8 9 10	
looking back 10 years ago?	0 1 2 3 4 5 6 7 8 9 10	
looking ahead 10 years into the future?	0 1 2 3 4 5 6 7 8 9 10	
in 10 years if you stay in Quebec?	0 1 2 3 4 5 6 7 8 9 10	
your contribution to the welfare and well-being of others...		
these days?	0 1 2 3 4 5 6 7 8 9 10	
looking back 10 years ago?	0 1 2 3 4 5 6 7 8 9 10	
looking ahead 10 years into the future?	0 1 2 3 4 5 6 7 8 9 10	
in 10 years if you stay in Quebec?	0 1 2 3 4 5 6 7 8 9 10	
your marriage or close relationship...		
these days?	0 1 2 3 4 5 6 7 8 9 10	
looking back 10 years ago?	0 1 2 3 4 5 6 7 8 9 10	
looking ahead 10 years into the future?	0 1 2 3 4 5 6 7 8 9 10	
in 10 years if you stay in Quebec?	0 1 2 3 4 5 6 7 8 9 10	
the sexual aspect of your life...		
these days?	0 1 2 3 4 5 6 7 8 9 10	
looking back 10 years ago?	0 1 2 3 4 5 6 7 8 9 10	
looking ahead 10 years into the future?	0 1 2 3 4 5 6 7 8 9 10	
in 10 years if you stay in Quebec?	0 1 2 3 4 5 6 7 8 9 10	
your satisfaction with work (paid or unpaid)...		
these days?	0 1 2 3 4 5 6 7 8 9 10	
looking back 10 years ago?	0 1 2 3 4 5 6 7 8 9 10	
looking ahead 10 years into the future?	0 1 2 3 4 5 6 7 8 9 10	
in 10 years if you stay in Quebec?	0 1 2 3 4 5 6 7 8 9 10	
your financial situation...		
these days?	0 1 2 3 4 5 6 7 8 9 10	
looking back 10 years ago?	0 1 2 3 4 5 6 7 8 9 10	
looking ahead 10 years into the future?	0 1 2 3 4 5 6 7 8 9 10	
in 10 years if you stay in Quebec?	0 1 2 3 4 5 6 7 8 9 10	
your life overall...		
these days?	0 1 2 3 4 5 6 7 8 9 10	
looking back 10 years ago?	0 1 2 3 4 5 6 7 8 9 10	
looking ahead 10 years into the future?	0 1 2 3 4 5 6 7 8 9 10	
in 10 years if you stay in Quebec?	0 1 2 3 4 5 6 7 8 9 10	

Thank you for taking the time to fill out this questionnaire. You have contributed to the well-being of others ☺.

Appendix B
Questionnaire rating diachronous SWB (French version)

Âge: _____	Langue Maternelle: Français Anglais Autre
Sexe: _____	
Statut: marié / conjoint de fait <input type="checkbox"/> séparé / divorcé <input type="checkbox"/> célibataire <input type="checkbox"/> veuve <input type="checkbox"/>	Niveau de Bilinguisme: pas bilingue _____ très bilingue _____ 1 2 3 4 5 6 7
Occupation: _____	
L'ordre de naissance dans votre famille: _____ sur _____	Langue le plus utilisée à la maison: Français Anglais Autre
Nombre d'années d'intervalle: _____ et _____ ans.	Langue le plus utilisée au travail: Français Anglais Autre

En vous comparant aux autres, utilisez l'échelle de 0 à 10, 0 étant le pire et 10 le meilleur que vous pouvez possiblement imaginer, comment évaluez-vous:

	PIRE										MEILLEUR
vous santé physique...											
aujourd'hui?	0	1	2	3	4	5	6	7	8	9	10
il y a 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans si vous demeurez toujours au Québec?	0	1	2	3	4	5	6	7	8	9	10
vous contribution au bien-être des autres...											
aujourd'hui?	0	1	2	3	4	5	6	7	8	9	10
il y a 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans si vous demeurez toujours au Québec?	0	1	2	3	4	5	6	7	8	9	10
vous mariage ou relation de couple...											
aujourd'hui?	0	1	2	3	4	5	6	7	8	9	10
il y a 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans si vous demeurez toujours au Québec?	0	1	2	3	4	5	6	7	8	9	10
l'aspect sexuel de votre vie...											
aujourd'hui?	0	1	2	3	4	5	6	7	8	9	10
il y a 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans si vous demeurez toujours au Québec?	0	1	2	3	4	5	6	7	8	9	10
vous satisfaction de travail... (qu'il soit rémunéré ou non)...											
aujourd'hui?	0	1	2	3	4	5	6	7	8	9	10
il y a 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans si vous demeurez toujours au Québec?	0	1	2	3	4	5	6	7	8	9	10
vous situation financière...											
aujourd'hui?	0	1	2	3	4	5	6	7	8	9	10
il y a 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans si vous demeurez toujours au Québec?	0	1	2	3	4	5	6	7	8	9	10
vous vie en général...											
aujourd'hui?	0	1	2	3	4	5	6	7	8	9	10
il y a 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans?	0	1	2	3	4	5	6	7	8	9	10
dans 10 ans si vous demeurez toujours au Québec?	0	1	2	3	4	5	6	7	8	9	10

Merci d'avoir pris le temps de répondre à ce questionnaire. Vous avez contribué au bien-être d'autrui.