Racial Identity and the Healthy Immigrant Effect: Does Racial Background Affect Mental Health Among Immigrants in Canada?

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Preface. This thesis presents original, unpublished, and independent work by the author, Kyara Liu. No ethics approval was required for the completion of this research.

Acknowledgements. I would like to thank Dr. Gerry Veenstra for all of his encouragement, support and insight in this thesis, which would not have been possible without his guidance. I'd also like to thank Dr. Oral Robinson for his support as the Sociology Honours Chair throughout this process.Finally, to my parents, whose experiences of immigration inspired this work. Thank you for all of your hard work and sacrifices for me.

Abstract. The concept of the "Healthy Immigrant Effect" emerged through findings suggesting that while immigrants are healthier than the native-born population due to a selection process favouring better health and higher education, their health tends to diminish over time due to the unique challenges they encounter in their new nation of residence (Yang, 2020). In this study, I hypothesize that established immigrants and visible minority immigrants would have worse mental health (as per the Healthy Immigrant Effect) in comparison to established immigrants and White immigrants. Furthermore, I predict that female visible minority immigrants have worse mental health than female White immigrants, due to the application of the stress process model (SPM) to infer the greater psychosocial stressors faced by women of colour (racism and sexism etc.). This study contributes to the literature surrounding the Healthy Immigrant Effect in the context of mental health, while adding dimensions of racial identity and gender producing a more nuanced and greater understanding of the concept. I implemented ordered logistic regression using a hybrid variable consisting of racial identity and length of time since migration in order to investigate social determinants of immigrant mental health. The findings suggest that both White and visible minority immigrants residing in Canada for

10 to 20 years had worse mental health than immigrants who immigrated less than 10 years ago, with implications varying depending on gender due to the different meanings of work attributed to each gender role. Overall, this study makes a strong contribution to the literature on the Healthy Immigrant Effect.

Introduction

Canada is a country built on immigration (Elamoshy & Feng, 2018). The healthy immigrant effect is a phenomenon observed in Canada where, due to their job skills and educational qualifications, immigrants tend to have better health than non-immigrants (Constant et al., 2018; Yang, 2020). However, it has been noted that their health tends to decline over time towards, or even below, the national average (Vang et al., 2017). Declines in immigrant health can begin as soon as two years after arrival (Newbold, 2009). Similar trends have also been observed in the mental health of immigrants (Ng & Zhang, 2020). As the time since immigration continues to increase for the large waves of immigrants entering Canada in the 1990s to 2000s, the long-term impacts of immigration on health can be explored. Whilst this decline in health can be partly attributed to the result of individual lifestyle factors such as diet and smoking behaviour, poor mental health can also cause poor lifestyle choices (Keuroghlian et al., 2013). In addition, the stressors of adapting to a new culture such as facing language barriers, limited economic resources, downward mobility, clashing cultural values, and social isolation can contribute to declines in immigrant mental health (Lee & Hadeed, 2009). On top of immigration, racial identity has been identified in previous studies as an important social determinant of health (Williams & Mohammed, 2013; Ramraj et al., 2016). Experiences of racism, including violence, stereotyping and "cultural assumptions and practices which place non-White or racialized minorities outside legitimate avenues of power and decision-making" can also negatively affect one's mental health (Fleras, 2014, pp. 123-124; Williams, 2018). This includes a greater vulnerability for anxiety, depression and other stress related mental health concerns, thus indicating a need for research and interventions that focus on immigrant visible minority groups (Williams, 2018).

In this thesis, I implement ordered logistic regression for analysis of a sample of immigrants from the 2012 mental health cycle of the Canadian Community Health Survey (CCHS). I approached this plan of analysis as per the theoretical background of the Healthy Immigrant Effect and the stress process model (SPM). The SPM is a useful conceptual model in the analysis of the health declines of immigrants noted in the healthy immigrant effect. It treats "status inequality as the starting point from which marginalized groups are exposed to greater psychosocial stressors that erode their psychosocial resources, eventually manifesting in greater mental health risks than those faced by more privileged groups" (Yang, 2020, p. 3). My analysis is conducted on the immigrants in

the CCHS sample that I stratified by genders as previous literature identifies the diverse experiences of different identities, to further explore differences in the association between time since immigration and psychological distress. I hypothesize that established immigrants would have worse mental health (as per the Healthy Immigrant Effect) and that visible minority immigrants would have worse mental health in comparison to White immigrants. Furthermore, I predict that female immigrants would have worse mental health than their male counterparts due to the higher rates of mental health issues noted in women than men in the literature (Otten et al., 2021). Additionally, due to the patriarchal conditions of Canadian society, the SPM would infer that the greater psychosocial stressors faced by women, such as sexism would result in them having worse mental health. This study contributes to the literature surrounding the Healthy Immigrant Effect while contributes greater nuance to the literature on the Healthy Immigrant Effect through the added dimensions of racial and gender identity.

Literature Review

There is a vast amount of literature exploring the topics of immigrant health and racial health inequality. However, there is a need for more research addressing the experiences of visible minority immigrants, particularly on determinants of negative mental health outcomes (Yang, 2020). Building on Yang (2020), I hypothesize that mental health declines the longer immigrants reside in Canada but especially so for visible minorities because of experiences of racism, further exacerbated in female immigrants (Chuang et al., 2013; Creese & Wiebe, 2012; Ng & Zhang, 2020).

The Healthy Immigrant Effect versus the Healthy Immigrant Paradox

In the past, immigrants have been overlooked in health research due to the assumptions around a 'Healthy Immigrant Paradox,' where despite the challenges faced in the migration experience, immigrants are healthier than nonimmigrants due to the selection process in Canada for their health status, job skills and educational qualifications and health assessment prior to migration (Treas & Gubernskaya, 2016; Yang, 2020). The Healthy Immigrant Effect suggests that this superior level of health is seldom maintained (Constant et al., 2018; Premji & Shakya, 2017). This is due to a range of factors such as poorer labour market outcomes (Creese & Wiebe, 2012; Premji & Shakya, 2017), experiences of discrimination (Noh, Kaspar & Wickrama, 2007) and barriers in health care access (Ahmed, Shommu, Rumana & Turin, 2016). The current literature exemplifies the difficulties immigrants face throughout their migration and establishment in their new country. For instance, language deficiency affects access to resources such as employment, social integration and health care, and therefore has a negative effect on the health

of immigrants (Clarke & Isphording, 2017). Language ability also enables individuals to efficiently utilize these resources for maintaining their health status (Clarke & Isphording, 2017). These barriers manifest as a form of status inequality in that they contribute added stress to the lives of immigrants that non-immigrants do not face. An application of the stress process model demonstrates how the accumulation of stress and disadvantage deteriorates immigrant mental health (Yang, 2019).

Conceptualizing Racism and Discrimination

Racism can be defined as a system of oppression that categorizes and ranks social groups based on racial identity that devalues, disempowers, and differentially allocates desirable societal opportunities and resources to groups deemed as inferior (Bonilla-Silva, 1997; Williams & Mohammed, 2013). It can lead to the "development of negative attitudes (prejudice) and beliefs (stereotypes) toward nondominant, stigmatized racial groups and differential treatment (discrimination) of these groups by both individuals and social institutions" (Williams & Mohammed, 2013, p. 1153). On the individual level, racism can occur in the actions and beliefs of a person, but also in more hidden forms of covert racism and unconscious bias. On the societal level, racism operates through institutions and culture (Williams & Mohammed, 2013). Racism persists in Canadian culture through the portrayal of racial minorities in the news and media. This can create internal racism among racial minorities as well as the *stereotype threat*, defined as the "activation of negative stereotypes among stigmatized groups that creates expectations, anxieties, and reactions that can adversely affect social and psychological functioning" and the stigma of inferiority that causes negative health processes for racial minorities (Williams & Mohammed, 2013, p. 1163). Institutional racism occurs on a greater scale and is deeply embedded in our societal systems on the basis of white superiority and the inferiority of visible minority identities (Phillips, 2011). Some argue that it is the most damaging form of racism, due to its reproduction in policies, education, healthcare and other institutions that shape health (Hansen et al., 2018). These different sub-concepts of racism can be applied to the three aforementioned areas of immigrant distress in the labour market, healthcare access and social integration, which then manifest in worse mental and physical health outcomes.

The Paradox of Immigrant Labour Outcomes

The paradox of immigrant labour outcomes refers to the fact that while Canada recruits immigrants for their skill and credentials, these same immigrants are pushed into work outside of their fields that they are over-educated and over-qualified for (Shan, 2013). As such, this perpetuates the Healthy Immigrant Effect as while these immigrants may enter Canada having high educational and career attainments, their mental health may deteriorate when their work outcomes in Canada do not align with their expectations

and prior experience. Work-related stress has been shown to have an effect on health for reasons pertaining to job security, low levels of perceived control in work and stress from overqualification (Cukier, 2020; Gong et al., 2021). These issues manifest more deeply in immigrant populations who have to navigate a foreign labour market lacking the cultural and social capital Canadian-born workers often take for granted (Creese & Wiebe, 2012; Cukier, 2020). Between 1991 and 2001, it was found that 1 in 4 immigrants who held a post secondary degree were employed in work that required no more than a high school education (Cukier, 2020). Globally, the majority of immigrant workers end up in the "3D" occupations, categorized for being dirty, dangerous, and difficult, occupations that local workers will not take (Creese & Wiebe, 2012; Kosny, Santos & Reid, 2016). Immigrants are also regularly hired for jobs they are overqualified for, often engaging in low-skilled, low-wage, insecure forms of "survival employment" due to the labour market's common demands for Canadian experiences, Canadian credentials, and Canadian accents (Creese & Wiebe, 2012; Sakamoto et al., 2010). Cultural capital, which is most important to immigrant integration into the labour market, is institutionalized such as academic credentials and embodied cultural capital, including accents and other local cultural competencies (Creese & Wiebe, 2012; Nohl et al., 2006). Some immigrants, despite being formally educated in English in their home countries, are treated as if they are incompetent at the language by others upon hearing their accent (Creese & Wiebe, 2012; Cukier, 2020). This results in many immigrants working jobs far below their credentials and skill level which can lead to psychological distress (Harari et al., 2017) and is harmful to the Canadian labour market by deskilling immigrants, who lose access to the occupations they previously held (Creese & Wiebe, 2012).

As such, this emphasizes the paradox in which Canada's immigration policy and labour market contradicts itself, where highly educated newcomers are recruited yet labour market practices deny them the ability to use the skills that allowed them to immigrate there in the first place (Creese & Wiebe, 2012; Nohl et al., 2006). This is further perpetuated in the racialization of the labour market, wherein White and Canadian-born men and women fare better than their counterparts of colour, immigrants, and Indigenous Canadians holding equivalent educational backgrounds and skill levels (Block & Galabuzi, 2011; Creese & Wiebe, 2012). In addition, White immigrants faring better is contributing to a racialized 'economic apartheid' in the Canadian labour market (Block & Galabuzi, 2011; Creese & Wiebe, 2012). In a study of African immigrants in Vancouver, participants noted a devaluation of their educational attainment and skills in order to leave better jobs for White Canadians because "White people don't like [doing that work]" (Creese & Wiebe, 2012, p. 63). A participant of the study also added that while she was told that her "African accent" when speaking English was the justification for limiting her job options, she is convinced that the real reason she was not promoted to a job that interacts directly with customers (one that she is overqualified for based on her credentials) was because she is Black (Creese & Wiebe, 2012). The study also found that African men were more likely to be better educated than their female counterparts at the time of migration,

but were more often trapped in manual labour jobs as they were more likely to be hired for them but were then unable to move up (Creese & Wiebe, 2012). This is an example of how immigrant men of colour face different challenges than women. However, even when female immigrants of colour were highly educated, they were mostly employed in low skilled, manual work, unemployed or homemakers (Fuller & Vosko, 2007). This goes to show how the hardships faced in the Canadian labour market can negatively affect the health of immigrants of colour, limiting women more than men because of the added challenges faced from sexism and the patriarchy.

The struggles faced in the labour market by immigrants can also transfer intergenerationally. Downward assimilation is a concept that outlines the downward social mobility of second generation immigrants to one that is lower than their immigrant parents (Le, 2020; Portes & Rumbaut, 2006). This is characterized by higher rates of substance use, lower education and higher rates of criminal offence which is thought to be driven by economic barriers and exposure to racism (Le, 2020).

Immigrant Health Care Accessibility

One of the declines in immigrant health as seen in the Health Immigrant Effect may be attributed to the barriers to health care utilization experienced by immigrants (Ahmed et al., 2016; Durbin et al., 2015; Edge & Newbold, 2013). As the majority of immigrants to Canada come from countries where neither English or French is spoken, a language barrier in accessing health care presents itself (Ahmed et al., 2016; Durbin et al., 2015). Patient-provider interactions can become difficult as a result and affect their ability to provide more optimal care due to frustration and an inability to communicate effectively. Professional translators often lack clarity in their role and have difficulties with conveying a patient's exact feelings, and as a result their availability is limited in health care settings across Canada (Ahmed et al., 2016). Transportation to these services are also a barrier (Ahmed et al., 2016). Lack of knowledge has also been identified as a barrier to accessing health care for immigrants. New immigrants are not given any orientation about the Canadian health care system and utilizing it or ways of finding necessary health care and resources (Ahmed et al., 2016). As such, this evidence implicates the ideas of the Healthy Immigrant Paradox and strengthens the claims of the Healthy Immigrant Effect, in which immigrant health declines over time due to the barriers they face in accessing healthcare services.

Discriminatory practices in health care present as forms of cultural insensitivity and ignorant treatment from providers, with experiences varying based on the racial/ethnic identity of the immigrant (Edge & Newbold, 2013, p. 143; Durbin et al., 2015). Studies have found that ignorant treatment and frustration in respect to the religious and cultural practices and female physician preferences are commonly seen in Asian, South Asian and practicing Muslim women (Edge & Newbold, 2013; Ahmed et al., 2016). Beyond

this, Asian women and Muslim women often prefer physicians from the same ethnic background because they believe these physicians would better understand their cultural and religious norms, something that becomes more difficult due to lack of representation among doctors in some parts of Canada (Ahmed et al., 2016).

Racial identity and ethnicity further impacts immigrants in health care through patient provider relationships. Internalized stereotypes and beliefs about certain groups of patients are pathways to producing clinically unwarranted disparities in health services, highlighting that even to well-intentioned providers a patient's race-ethnicity can result in unconscious social cognition processes resulting in racial-ethnic inequalities in health care (Shim, 2010). As a result, a physician's personal beliefs and biases about a patient's racial identity can impact their behaviour towards the patient as well as their interpretations of health information which can have an effect on the patient's self-management and acceptance of physician advice (Shim, 2010). This puts immigrants, especially visible minority immigrants, at a further disadvantage in regards to their health care. Characteristics like accent, English speaking ability and knowledge of Western medicine practices are things that impact most immigrant's cultural health capital which in turn affects their health status, but visible minority immigrants have the added dimension of being racialized (Shim, 2010). Overall, the barriers to health care for minority newcomer populations can be traced to "inadequate cultural competency and respect for alternative health values and practices" of the Canadian medical system (Edge & Newbold, 2013, p. 145). Studies have also found that most visible minority groups have lower socio-economic status in comparison to their White counterparts (Williams et al., 2016). As previously mentioned, socioeconomic status affects immigrants' ability to access health care for reasons due to work, it can be suggested that visible minority immigrants are also hit harder with the same disadvantages due to their racial identity. This added barrier of discrimination affects the utilization of health care services and subsequently, the declining health of immigrants.

Struggles in Social Integration

Beyond this, immigrants face the struggle of social integration in society. Differing political ideologies on immigration as well as distrust of outsiders can impact immigrant acceptance by native-born citizens (da Silva Rebelo et al., 2016). Norms of reciprocity, a foundational aspect of *generalized trust*, defined as a predisposition towards engagement and cooperation with others, allows individuals to engage in social, economic, and political exchanges with the belief that others will likewise treat them with respect and honesty (Bilodeau & White, 2016). This concept promotes social interactions, and thus generalized trust is also thought to be an important part of immigrant integration. Due to perceptions of immigrants as 'outsiders,' foreign to the expectations and norms structuring social interactions in their new country of residence, this status has implications for their overall integration into Canadian society (Bilodeau & White, 2016). While the

level of trust immigrants have for Canadians is related to pre-migration experiences, it is suggested that post-migration experiences are more influential (Bilodeau & White, 2016). It is indicated that the quality of relationship with the new country's society declines with experiences of discrimination, and these negative experiences accumulated may be a part of the reason for the decline in trust in other Canadians as immigrants' time in Canada increases (Bilodeau & White, 2016). As a result, this limits immigrant integration into Canadian society which can have consequences for their mental health outcomes. Studies have emphasized the role of integration and sense of belonging to one's community on their mental health (Moeller et al., 2020; Rubin et al., 2019).

Overall, it can be inferred that the issues surrounding the labour market, health care utilization and social integration, further shaped by racial identity and gender, work to drive the Healthy Immigrant Effect in that these factors negatively affect the health of immigrants. However, most studies are more focused on the physical health of immigrants rather than mental health. As such, this study seeks to apply the theoretical basis of the Healthy Immigrant Effect to the mental health of immigrants.

Methods

Sample

This study utilized the Canadian Community Health Survey (Mental Health 2012 [CCHS-MH]) dataset collected by Statistics Canada. The CCHS-MH used a multistage stratified cluster probability sampling of Canadians 15 and older in all provinces and territories. This survey is representative of the population up to 97%, excluding people in military service, Aboriginals living on reserves and people who are institutionalized who made up less than 3% of the target population. The sample in this investigation was reduced to n=3191 by only investigating those who were age 25 and older, because the major components investigated in this study (work and health care access) can be examined more accurately for this age group. The sample was examined separately by male and female gender (conceptualized as sex) as a biological distinction due to the binary nature of the question in this survey's questionnaire.

Measures

Focal dependent variables. Mental health is operationalized as overall mental well-being examined with two variables. Psychological distress is the first dependent variable, measured by the Kessler K10 Distress scale consisting of a 10-item questionnaire intended to produce a measure of distress. It is based on questions about anxiety and depressive symptoms that a person has experienced in the most recent 4 week period, wherein higher

scores indicate higher levels of distress from the respondent (Yang, 2020). Scores ranged from 0 to 40 and were coded into three groups from 1 to 3 for this study. These three groups were rescaled, with responses 1, 2 and 3 coded as 1 indicating low levels of distress, responses 4 to 13 as 2 indicating medium levels of distress, and responses 14 and higher as 3 indicating high levels of distress. This breakdown was done in order to establish 3 distinct groups that will be meaningfully large enough for analysis. The next focal dependent variable is positive mental health. This variable was measured using Keyes' 14 item scale that examined three dimensions of positive mental health: emotional, psychological and social well being (Yang, 2020). This scale is scored from 0 to 70 and was reverse coded into three groups from 3 to 1 so that overall higher scores reflected more positive mental health. This variable was also rescaled so that responses 0 to 50 were coded as 3 indicating lowest levels of positive mental health, responses 51 to 64 were coded as 2 and responses 65 and over were coded as 1 to indicate highest levels of positive mental health. These two variables were chosen to operationalize mental health in two dimensions: mental distress and mental well-being.

Focal independent variables. Racial identity was used as one of the focal independent variables. It was broken down into a dichotomous variable as visible minority and White. I created a six part hybrid variable that combines racial identity and length of time since migration. The original racial identity variable has thirteen categories, including White, Black, seven different Asian identities, Arab, Latin American, other and mixed race. It is not included in the public use file due to the sensitivity of the information. The CCHS defines racial identity as minorities who are non-Caucasian in race or non-white in colour. As such, racial identity is treated as both a physical and socially constructed aspect of identity. In addition, time spent in Canada was investigated as an independent variable as it is thought that the adverse effects of racism and discrimination takes years to manifest. These two variables were combined together as a six-part variable indicating racial identity and length of time since migration. These groups were White and Recent (0 - 9 years), White and Fairly Recent (10 or more years), White and Not Recent (Over 20 years), Visible Minority and Recent (0 - 9 years), Visible Minority and Fairly Recent (10 or more years), and Visible Minority and Not Recent (Over 20 years). To assess the differences in mental health, recent immigrants were set as the reference due to the Health Immigrant Effect documenting that recent immigrants would have the best health in comparison to more established immigrants.

Control variables. Due to previous literature highlighting the importance of demographic and socioeconomic factors, a variety of such factors were incorporated in my analysis (Clarke & Isphording, 2017; Wade & Tavris, 1999; Williams et al., 2016). These were gender, age, household size, marital status, household income, language spoken at home, education, current employment status, full-time/part-time employment status, chronic conditions, smoking and alcohol consumption. Gender was dummy coded as male (reference) and female. Household size was coded as one-person household (reference), two persons, and three or more. Household income was coded into 5 values

as no income or less than $20,000, $20,000 to $39,999, $40,000 to $59,999, $60,000 to $79,999, and over $80,000 (reference). Marital status was coded as single, married or common-law (reference) and divorced, separated, or widowed. Education was coded as less than high school, high school and post-secondary degree (reference). Employment status was recoded as employee (reference) and self-employed. Full-time versus part-time employment status was coded as full-time (reference), part time and not applicable. Language spoken at home was coded as not English or French and either English, French and/or another foreign language (reference). Presence of a chronic condition was coded as yes or no (reference). Smoking was coded as nonsmokers (reference), former smokers, occasional smokers, and daily smokers, and alcohol consumption was coded as nondrinkers (reference), occasional drinkers and daily drinkers. Reference groups were chosen due to logical assumptions in that group having better health than others.

Plan of Analysis

To reiterate, I hypothesize that (a) established immigrants would have worse mental health (as per the Healthy Immigrant Effect) and that (b) visible minority immigrants would have worse mental health in comparison to White immigrants. Furthermore, I predict that (c) female visible minority immigrants would have worse mental health than female White immigrants, due to the application of the stress process model (SPM) to infer the impacts of greater psychosocial stressors faced by women of colour (racism and sexism etc.). Additionally, due to the patriarchal conditions of Canadian society, the SPM would infer that these greater psychosocial stressors would result in them having worse mental health. I used ordered logistic regression to implement my investigation. I created a 6-part hybrid variable to combine categories of racial identity and length of time since migration. I also analyzed men (Table 2 and 4) and women (Table 3 and 5) in separate regressions to highlight the differences as per my hypothesis (c)'s objectives.

Table 1 describes the socio-demographic characteristics of the immigrant sample of the CCHS-MH separately by gender. Table 2 provides the ordered logistic regression of the variables. Model 1 describes the racial identity and length of time since migration variable and psychological distress (K10) variable controlling for age (as it was found to have a heavy influence); Model 2 controls for other demographic characteristics; Model 3 investigates the key variables with demographic and socioeconomic characteristics and Model 4 examines the key variables with demographic, socioeconomic characteristics and health factors. These models will address parts (a) and (b) of the hypotheses to determine whether established immigrants would have worse mental health (as per the Healthy Immigrant Effect) and that visible minority immigrants would have worse mental health in comparison to White immigrants. Table 3 depicts the same sequence of models as previously mentioned, but with the female sample. Table 4 repeats the same model with

positive mental health (Keyes) as the dependent variable instead of the male sample. Positive mental health was reverse coded so that higher scores reflected lower positive mental health to be more comparable to the psychological distress variable. Table 5 proceeds with the same process as Table 4 with the female sample. Regressions with the 'visible minority and recent' category as the reference were also set for each table and model. This was done in order to compare the declines in mental health within each racial identity group and to then examine the outcomes between groups.

Results

Descriptive Statistics

Table 1 describes socio-demographic characteristics of the immigrant sample, separated by gender. A few key things should be noted from this Table. First, due to the historical context of Canadian immigration, proportionately more White immigrants have resided in Canada for over 20 years. When interpreting the mental health outcomes of these immigrants, it is important to consider the historical and political contexts shaping trends of immigration at the time these immigrants arrived in Canada. Literature has suggested the implications of mental well-being for war refugees due to PTSD and other mental disorders (Hynie, 2018). In consideration of these political contexts, a survey collected in 2012 would find that the immigrants who reported their time in Canada as more than 10 to less than 20 years would have immigrated during the period of 2002 to 1992. During this time period, about 20% of White identifying immigrants were Eastern European (Statistics Canada, 2017). Furthermore, proportionately more White immigrants are in the older age groups than visible minority immigrants for reasons tied to the historical context of Canadian immigration. This may affect my results and how I interpret my findings as older individuals could have worse health overall than younger individuals due to old age and in conjunction with the historical context of the migration of some older immigrants. Additionally, a few gender differences stand out. Many more men (58%) and fewer women (37%) indicated engaging in full time work (Table 1). Additionally, more men reported smoking behaviours in comparison to women.

Racial Identity and Length of Time Since Migration: Psychological Distress

In Table 2, none of the comparisons between "White and not recent" and the other White immigrant categories were statistically significant across categories. White fairly recent immigrants were more likely to report higher psychological distress across all models. When "visible minority and not recent" was set as the reference, significance (at the 0.05 level) emerged in Model 3 after socioeconomic factors were controlled for, meaning that visible minority fairly recent immigrants were more likely to report higher

Table 1. Socio-demographic characteristics of unweighted sample (n = 3751)

	Men (n = 1486) %	Women (n = 1,705) %
Kessler Psychological Distress		
1 (lowest)	46.28	44.07
2	45.58	47.22
3 (highest)	6.74	7.34
Keyes Positive Mental Health		
1 (highest)	35.76	35.65
2	45.64	44.26
3 (lowest)	7.09	6.01
Racial Identity		
White	47.44	49.80
Visible Minority	52.03	50.12
Time in Canada		
0 to 9 years	23.60	23.09
10 or more years	15.41	16.10
Over 20 years	60.76	60.61
Racial Identity & Time in Canada		
White and Recent (0 - 9 years)	5.64	4.58
White and Fairly Recent (10 or more years)	4.07	4.10
White and Not Recent (Over 20 years)	37.67	41.01
Visible Minority and Recent (0 - 9 years)	17.85	18.51
Visible Minority and Fairly Recent (10 or more years)	11.34	12.01
Visible Minority and Not Recent (Over 20 years)	22.67	19.45
Age		
25 to 39 years	27.26	26.88
40 to 64 years	43.49	41.61
65 to 80 and older	29.06	31.52
Household Size		
One person	29.01	32.35
Two persons	36.63	34.42
Three or more persons	34.36	33.23
Language Spoken at Home		
English/French and/or another language	73.95	72.38
Not English or French	25.70	27.03

Marital Status		
Single	16.74	10.44
Married/common law	68.31	58.44
Divorce/separated/widowed	14.65	30.82
Education		
Less than high school	14.30	16.74
High school	10.93	13.39
Post secondary	74.53	69.33
Household Income		
No income or less than $20,000	4.88	8.27
$20,000 to $39,999	16.05	23.34
$40,000 to $59,999	24.48	21.81
$60,000 to $79,999	17.79	17.23
$80,000 or more	36.80	29.30
Employment Status		
Employee	48.20	39.98
Self employed	15.58	7.53
Other	36.22	52.29
Work Status		
Full time work	57.97	36.98
Part time work	5.41	10.59
Not applicable	36.22	52.29
Chronic Condition		
Yes	56.45	62.58
No	43.31	37.42
Smoking Behaviour		
Non smoker	34.07	62.58
Former smoker	45.47	28.06
Occasional smoker	5.23	3.20
Daily smoker	15.12	6.06
Drinking Behaviour		
Non drinker	24.30	40.37
Occasional drinker	66.45	55.24
Daily drinker	9.07	4.33

psychological distress than their reference (OR = 1.74, CI = 1.00 - 3.01). Significance was lost when health factors were controlled for in Model 4. This supports my hypothesis that affirms the Healthy Immigrant Effect.

Table 3 examines female psychological distress and racial identity/length of time since immigration. When “White and recent immigrants” were set as the reference, no statistically significant results emerged, nor were any major differences between length of time categories observed among White immigrants. When visible minority recent im-

migrants were set as the reference, similar to the last model, no statistically significant results emerged, nor were any major differences between length of time categories observed among visible minority groups.

Racial Identity and Length of Time Since Migration: Positive Mental Health

Table 4 regresses reported mental health with racial identity/length of time for male immigrants. This variable was reverse coded so that higher scores reflected lower levels of positive mental health and lower scores reflected higher levels of positive mental health in order to be more easily compared to the previously mentioned psychological distress variable. In the first row of the table setting with White and recent immigrants as the reference, no significant associations were observed within the other White categories. When the reference category was shifted in the second row to visible minority and recent immigrants, fairly recent visible minority immigrants were found to be more likely to report worse mental health than recent visible minority immigrants when only controlling for age (OR = 1.71, CI = 1.04 - 2.79). Significance, however, disappears in Model 2 when controlling for other demographic characteristics and reappears when adding controls for socioeconomic characteristics (OR = 1.68, CI = 1.00 - 2.79). Significance disappears when health characteristics are controlled for.

Table 5 examines the relationship between lower positive mental health with the hybrid racial identity/length of time since immigration for female respondents. When White and recent immigrants were set as the reference, Model 1 controlling for just age did not yield any significant associations. However, in Model 2 when adding on other demographic controls, White and fairly recent immigrants were found to be significantly ($p < 0.01$) more likely to report worse mental health than the reference group (OR = 2.40, CI = 1.09 - 5.26). Significance persisted in that White and fairly recent immigrants were found to be significantly more likely to report worse mental health than the reference group when controlling for socioeconomic characteristics (OR = 2.55, CI = 1.17 - 5.54) and health factors (OR = 2.62, CI = 1.17 - 5.88). When visible minority and recent immigrants were set as the reference in order to compare visible minority mental health across categories, no significant associations between the categories were found across all models. These results contradict the proposed hypothesis in that White immigrants had worse mental health than visible minorities.

Discussion

The existing literature emphasizes barriers in the labour market, in accessing health care, and to social integration as important factors in shaping immigrant mental health outcomes, as well as the fact that racism and discrimination have a deteriorating outcome on

Table 2. Ordered Logistic Regression of Racial Identity and Length of Time Since Migration on Psychological Distress (with 95% Confidence Intervals for Odds Ratios Weighted; n = 1486) - MEN

	Model 1 OR (95% CI)	**Model 2** OR (95% CI)	**Model 3** OR (95% CI)	**Model 4** OR (95% CI)
Racial Identity and Length of Time Since Migration				
Visible minority				
Recent	1.039 (0.548 - 1.969)	1.084 (0.585 - 2.010)	1.008 (0.511 - 1.988)	1.141 (0.575 - 2.267)
Fairly recent	1.501 (0.747 - 3.017)	1.605 (0.806 - 3.217)	1.752 (0.511 - 1.988)	1.484 (0.743 - 2.962)
Not recent	1.397 (0.722 - 2.704)	1.264 (0.667 - 2.395)	1.753 (0.816 - 3.764)	1.853 (0.873 - 3.930)
White				
Not recent	1.237 (0.605 - 2.531)	1.001 (0.500 - 2.003)	1.417 (0.697 - 2.876)	1.199 (0.575 - 2.267)
Fairly recent	2.100 (0.949 - 4.647)	1.873 (0.852 - 4.114)	1.949 (0.850 - 4.467)	2.001 (0.915 - 4.377)
Recent (reference)	1.000	1.000	1.000	1.000
White				
Recent	0.963 (0.508 - 1.825)	0.922 (0.503 - 1.956)	0.992 (0.503 - 1.956)	0.876 (0.441 - 1.740)
Fairly recent	2.022 (1.071 - 3.821)*	1.933 (0.991 - 3.771)	1.933 (0.991 - 3.771) *	1.753 (0.906 - 3.394)
Not recent	1.191 (0.694 - 2.043)	1.166 (0.722 - 1.882)	1.213 (0.683 - 2.154)	1.051 (0.577 - 1.914)
Visible minority				
Not recent	1.345 (0.843 - 2.146)	1.405 (0.855 - 2.309)	1.405 (0.855 - 2.309)	1.300 (0.927 - 2.844)
Fairly recent	1.445 (0.861 - 2.424)	1.739 (0.855 - 2.310)	1.739 (1.004 - 3.013) *	1.623 (0.927 - 2.844)
Recent (reference)	1.000	1.000	1.000	1.000

*$p < 0.05$ = *, $p < 0.01$ = **, $p < 0.001$ = ****

Model 1 regresses the dependent variable psychological distress with the focal independent variable racial identity with time since migration controlling for age. Model 2 controls for demographic characteristics, Model 3 adds on socioeconomic factors and Model 4 adds on health factors.

Table 3. Ordered Logistic Regression of Racial Identity and Length of Time Since Migration on Psychological Distress (with 95% Confidence Intervals for Odds Ratios Weighted; n = 1,705) - WOMEN

	Model 1 OR (95% CI)	**Model 2** OR (95% CI)	**Model 3** OR (95% CI)	**Model 4** OR (95% CI)
Racial Identity and Length of Time Since Migration				
Visible minority				
Recent	0.832 (0.470 - 1.473)	0.829 (0.461 - 1.489)	0.802 (0.442 - 1.454)	1.159 (0.595 - 2.255)
Fairly recent	0.877 (0.469 - 1.642)	0.892 (0.467 - 1.704)	0.888 (0.460 - 1.715)	1.197 (0.584 - 2.454)
Not recent	1.003 (0.543 - 1.851)	1.065 (0.566 - 2.005)	1.135 (0.596 - 2.163)	1.355 (0.672 - 2.730)
White				
Not recent	1.500 (0.833 - 2.703)	1.759 (0.923 - 3.349)	1.967 (1.018 - 3.798)	1.801 (0.823 - 3.941)
Fairly recent	1.725 (0.829 - 3.588)	1.861 (0.884 - 3.917)	1.814 (0.854 - 3.856)	1.948 (0.964 - 3.935)
Recent (reference)	1.000	1.000	1.000	1.000
White				
Recent	1.201 (0.679 - 2.126)	1.207 (0.672 - 2.168)	1.247 (0.688 - 2.262)	0.863 (0.443 - 1.680)
Fairly recent	2.072 (1.083 - 3.964) *	2.245 (1.173 - 4.296) **	2.263 (1.191 - 4.300) **	1.555 (0.812 - 2.976)
Not recent	1.802 (1.116 - 2.910) **	2.122 (1.262 - 3.568) **	2.453 (1.456 - 4.133) ***	1.682 (0.976 - 2.897)
Visible minority				
Not recent	1.205 (0.725 - 2.001)	1.285 (0.771 - 2.143)	1.416 (0.852 - 2.352)	1.169 (0.713 - 1.918)
Fairly recent	1.054 (0.627 - 1.772)	1.077 (0.643 - 1.802)	1.108 (0.664 -- 1.850)	1.033 (0.624 - 1.710)
Recent (reference)	1.000	1.000	1.000	1.000

*$p < 0.05$ = *, $p < 0.01$ = **, $p < 0.001$ = ****

Model 1 regresses the dependent variable psychological distress with the focal independent variable racial identity with time since migration controlling for age. Model 2 controls for demographic characteristics, Model 3 adds on socioeconomic factors and Model 4 adds on health factors

Table 4. Ordered Logistic Regression of Racial Identity and Length of Time Since Migration on Positive Mental Health (with 95% Confidence Intervals for Odds Ratios Weighted; n = 1486) - MEN

	Model 1 OR (95% CI)	**Model 2** OR (95% CI)	**Model 3** OR (95% CI)	**Model 4** OR (95% CI)
Racial Identity and Length of Time Since Migration				
Visible minority				
Recent	0.575 (0.296 - 1.906)	0.543 (0.270 - 1.093)	0.542 (0.267 - 1.103)	0.594 (0.278 - 1.283)
Fairly recent	0.981 (0.505 - 1.906)	0.858 (0.421 - 1.743)	0.911 (0.445 -1.869)	0.968 (0.446 - 2.101)
Not recent	0.850 (0.445 - 1.624)	0.758 (0.381 - 1.508)	0.794 (0.394 - 1.601)	0.822 (0.386 - 1.750)
White				
Not recent	0.629 (0.308 -1.286)	0.758 (0.371 - 1.508)	0.643 (0.309 - 1.335)	0.595 (0.270 - 1.308)
Fairly recent	2.020 (0.848 - 4.809)	2.000 (0.820 - 4.877)	2.007 (0.812 - 4.956)	1.874 (0.753 - 4.659)
Recent (reference)	1.000	1.000	1.000	1.000
White				
Recent	1.738 (0.893 - 3.379)	1.840 (0.915 - 3.700)	1.842 (0.907 - 3.743)	1.684 (0.780 - 3.639)
Fairly recent	3.510 (1.636 - 7.527) ***	3.680 (1.683 - 8.048) ***	3.696 (1.663 - 8.216) ***	3.155 (1.463 - 6.808) **
Not recent	1.093 (0.622 - 1.923)	1.083 (0.605 - 1.938)	1.184 (0.659 - 2.125)	1.001 (0.544 - 1.845)
Visible minority				
Not recent	1.476 (0.918 - 2.374)	1.395 (0.851 - 2.287)	1.463 (0.863 - 2.479)	1.385 (0.811 - 2.365)
Fairly recent	1.705 (1.043 - 2.788)*	1.578 (0.851 - 2.287)	1.679 (1.001 - 2.791) *	1.631 (0.969 - 2.744)
Recent (reference)	1.000	1.000	1.000	1.000

*$p < 0.05$ = *, $p < 0.01$ = **, $p < 0.001$ = ****

Model 1 regresses the dependent variable psychological distress with the focal independent variable racial identity with time since migration controlling for age. Model 2 controls for demographic characteristics, Model 3 adds on socioeconomic factors and Model 4 adds on health factors.

Table 5. Ordered Logistic Regression of Racial Identity and Length of Time Since Migration on Positive Mental Health (with 95% Confidence Intervals for Odds Ratios Weighted; n = 1,705) - WOMEN

	Model 1 OR (95% CI)	**Model 2** OR (95% CI)	**Model 3** OR (95% CI)	**Model 4** OR (95% CI)
Racial Identity and Length of Time Since Migration				
Visible minority				
Recent	0.722 (0.416 - 1.254)	0.813 (0.461 - 1.425)	0.784 (0.450 - 1.367)	1.053 (0.568 - 1.952)
Fairly recent	0.874 (0.462 - 1.654)	1.086 (0.574 - 2.053)	1.116 (0.598 - 2.084)	1.466 (0.754 - 2.853)
Not recent	0.711 (0.385 -1.309)	0.918 (0.493 - 1.707)	1.003 (0.543 - 1.853)	1.198 (0.613 - 2.342)
White				
Fairly recent	1.873 (0.930 - 3.774)	2.397 (1.092 - 5.262) *	2.549 (1.172 - 5.544) *	2.617 (1.165 - 5.879) *
Not recent	1.108 (0.607 - 2.025)	1.517 (0.801 - 2.874)	1.636 (0.867 - 3.088)	1.646 (0.840 - 3.226)
Recent (reference)	1.000	1.000	1.000	1.000
White				
Recent	1.385 (0.798 - 2.405)	1.230 (0.697 - 2.171)	1.275 (0.731 -2.224)	0.949 (0.512 - 1.759)
Fairly recent	2.594 (0.798 - 2.405) **	2.949 (1.467 - 5.927) **	3.250 (1.625 -1.149) ***	2.485 (1.214 - 5.088) **
Not recent	1.536 (0.936 - 2.520)	1.866 (1.090 - 3.197) **	2.087 (1.214 - 3.587) **	1.563 (0.899 - 2.718)
Visible minority				
Not recent	0.984 (0.595 - 1.627)	1.129 (0.685 - 1.860)	1.279 (0.776 - 2.107)	1.138 (0.828 -2.340)
Fairly recent	1.210 (0.706 - 2.076)	1.336 (0.789 - 2.261)	1.424 (0.845 - 2.400)	1.392 (0.828 - 2.340)
Recent (reference)	1.000	1.000	1.000	1.000

*$p < 0.05$ = *, $p < 0.01$ = **, $p < 0.001$ = ****

Model 1 regresses the dependent variable psychological distress with the focal independent variable racial identity with time since migration controlling for age. Model 2 controls for demographic characteristics, Model 3 adds on socioeconomic factors and Model 4 adds on health factors.

immigrant health (Berger & Sarnyai, 2015). In my findings, White immigrants who have been in Canada over 10 years stood out right away as being more likely to report worse mental health in comparison to recent White or visible minority immigrants. When recent visible minority immigrants were set as the reference, declines in mental health were also noted in visible minority fairly recent immigrants reporting worse mental health, however appearing to be less drastic than seen in White immigrants.

Labour Market Outcomes on White Identifying Immigrants' Mental Health

There is a significant finding in this sample that among White fairly recent immigrants' mental health was worse than recent White immigrants (when mental health was measured with the Keyes Positive Mental Health scale). There are a few possible explanations for this. White immigrants may come to Canada with higher expectations for what their experiences will be like, such as obtaining a job of similar occupational status as they previously held in their home country. However, after 10 to 20 years, their actual experiences violate their expectations and lead to life dissatisfaction and subsequently, poorer mental health (Baran et al., 2018). Beyond this, labour market outcomes could be a contributor. As discussed previously in the literature review, immigrants are often hired for jobs they are overqualified for, often engaging in low-skilled, low-wage, insecure forms of "survival employment" (Creese & Wiebe, 2012). The finding that immigrant females report worse mental health can also be linked to the patriarchy. Immigrant women, as seen in Creese and Wiebe (2012), are even more disadvantaged in the labour market, which similarly to men, lead to doing overqualified work for their educational qualifications. On top of that, this may further push women into domestic labour or increase stress through a heavy burden of both domestic labour in the household and paid labour in the workforce (Khoudja, 2018). This finding, however, is contradictory to the proposed hypothesis that female visible minority immigrants would have worse mental health than their White counterparts.

The Racial Paradox in Mental Health

Declines in mental health were also observed in visible minority immigrants, though less drastic than the White immigrants in this study. A concept known as the racial mental health paradox could be a potential explanatory factor (Mouzon, 2013). Emerging from research examining Black-White mental health outcomes, studies have found similar or better mental health outcomes among Blacks than Whites (Mouzon, 2013). As such, this may provide some explanation for the mental health of visible minority immigrants in this sample.

Family relationships have been found to be protective of mental health. Previous studies have shown that family members are a critical part of wellbeing in Chinese, Ko-

rean and Indian immigrants in the United States (Cobb et al., 2019). In a study examining aging in racial minority communities, authors found that social support gained from close relationships may reduce stress in everyday life, help maintain positive interpersonal attachments and promote healthy behaviours. In cross tab examinations of the sample (not shown in the paper), more White immigrants live in smaller households, while visible minority immigrants are more likely to have more than three members in their household as seen in Table 1.

In comparison, visible minority immigrants may come to the country with less expectations for themselves in comparison to their White immigrant counterparts, and perceive their migration as a necessary sacrifice for their family and their children (Guo, 2013). This can contribute to a more content life in comparison to White immigrants. Cultures especially rooted in collectivism, and notably East Asian countries, are reflective of these cultural values (Cobb et al., 2019). In addition, female visible minority immigrants may be less affected by labour market stressors by choosing to work in the home, such as in the case of Chinese immigrants, who see it as a way of self-sacrifice for their family and as a way to uphold traditional gender norms (Yu, 2015). Beyond this, other factors may impact visible minority mental health. As mentioned in the literature, social integration and community are integral parts of mental health. Thus the presence of an ethnic community for immigrants may also be a protective factor to immigrant mental health. For example, large ethnic enclaves exist in urban areas such as Vancouver for East Asian immigrants that can foster and strengthen a sense of community (Chu, 2002). However, due to the limitations in the dataset, this can only be speculated.

Labour Market Burdens on Visible Minority Men

Socioeconomic controls strengthened the association for higher psychological distress for visible minority immigrant men, supporting the claims in the literature around the gendered experiences of immigrant labour. This aligns with the stated hypothesis that visible minority immigrants would have worse mental health than White immigrants. While cultural ideologies in visible minority women may allow more cognitive ease in conforming to traditional gender roles these ideals may produce more pressure on minority immigrant men (Yu, 2015). Visible minority immigrant men may face layers of deeply rooted traditional masculinity that intersects with their racial and cultural identity, especially cultures that place high emphasis on traditional masculine ideals of strength and breadwinning (Harris, 2018), thus contributing to the declines in mental health when controlled for socioeconomic characteristics (Table 2, Model 3). As previously mentioned, visible minority immigrants in particular face an array of challenges in the labour market, and often end up in low wage, deskilled work (Creese & Wiebe, 2012; Kosny et al., 2016). Given the traditional male gender role as the primary provider, the unwelcoming atmosphere of the Canadian labour market can cause difficulties in providing for a family, causing feelings of inadequacy in fulfilling their role as the breadwinner, contributing to

mental health declines (Artazcoz et al., 2004).

Cultural Perceptions of Mental Health

It is important to note the cultural context of mental health in Western countries in comparison to others. Studies have found that mental health and illness is deeply stigmatized in many Asian countries, such as China (Seeman et al., 2016). As a result, when completing this survey set, visible minority immigrants may be more reluctant in reporting poor mental health due to unawareness or shame. Visible minority immigrant men face masculine ideals in conjunction with cultural stigma, which may have led to the under-reporting of poor mental health. As such, the differences in the K10 psychological distress scale and the Keyes positive mental health scale may have contributed to the findings for each variable. While K10 aims to determine the psychological distress caused by mental health disorders, the Keyes scales look more closely at mental well being. Clearer disparities in mental health are noted with the positive mental health variable, possibly due to these differences in cultural perceptions around mental health.

Gendered Language Divides in Female and Male Immigrants

White women's mental health worsened after controlling for demographic characteristics such as household size, primary language spoken, home, and income (Table 5, Model 2). As previously mentioned, despite being highly educated, immigrants often end up in overqualified and deskilled work, especially women who face the intersections of their immigrant identity while navigating through patriarchal institutions (Creese & Wiebe, 2012). As a result, many immigrant women may end up unemployed or spending time at home doing unpaid domestic labour, contributing to their mental health outcomes in a few ways. This finding is in alignment with the stress process model (SPM), as the sexism underlying unemployment has been found to lead to poor mental and physical health due to decreases in income, loss of status and self-esteem, and unhealthy behaviours and coping strategies (Premji & Shakya, 2017). Furthermore, unemployment can also socially isolate immigrant women and prevent them from strengthening their English or French proficiency through interactions outside their household which can be a learning resource (Anisef, 2012). Meanwhile, their male counterparts who participate more actively in the workforce are able to raise their English or French proficiency in the workplace and through the social circles they may cultivate, while still speaking their native non-English or French language at home with their family. Language barriers create implications for immigrant womens' mental health in a few ways. It prevents women from integrating into Canadian society and their communities causing further isolation, which has been shown to negatively affect mental health (Lee & Hadeed, 2009). However, connection with their ethnic enclaves may be a protective factor to this. It also further strains their ability to enter the Canadian labour market and creates more difficulties in accessing

health resources (Creese & Wiebe, 2012; Noh et al., 2007; Clarke & Isphording, 2017).

Limitations

Fundamentally, mental health is a concept that is difficult to operationalize and measure. The differences observed in the Kessler K10 versus the Keyes scale is a reflection of this. Due to the subjectivity of psychological distress and positive mental health in addition to the outcomes of multiple intersections such as culture and gender, careful consideration should be given. As self-reported mental health measures may be obscuring, other ways of counteracting this in research may be to measure the number of visits to a mental health professional.

As place of origin and specific racial group was not able to be identified in this study, this places a limitation in homogenizing diverse and unique experiences of immigrants in Canada. A key limitation of this data set is the lack of indication of immigrant status/category (refugee, economic or skilled). As mentioned previously, considering the historical and political contexts shaping trends of immigration at the time of arrival of White immigrants is vital for determining immigrant health. To reiterate, the literature notes the heightened risk of worse mental health for war refugees due to PTSD and other mental disorders (Hynie, 2018). A proportion of these immigrants were migrating to Canada after the collapse of the Soviet Union and other Eastern Bloc countries, which could be a factor in poor mental health outcomes rather than the experiences as an immigrant in Canada itself.

Furthermore, this study also highlights the problematic nature of dichotomizing the racial identity variable. Homogenizing 'visible minorities' as a group dismisses the diversity of cultures and backgrounds and most importantly, the varying levels of racial injustice experienced due to one's racial identity. The dichotomization of this variable can result in obscuring data. However, it does illuminate the experiences of White immigrants and identifies areas of need for this group. In addition, the limitations of the public use data file did not allow for the examination of the country of origin, which proved to be problematic in homogenizing both White and visible minority groups.

Although distinct racial health inequalities between White and visible minorities were not found in this particular study, this does not mean they do not exist. A substantial amount of existing literature supports notions of race and a social determinant of health and inequality.

Conclusion and Further Research

Immigrating to Canada is a stressful and difficult experience, with immigrants facing numerous challenges in the labour market, in accessing health care, and in social integration that can be harmful to their mental health outcomes. Overall, the findings for all immigrants are consistent with the Healthy Immigrant Effect, where immigrant mental health deteriorates over time.

In relation to the stress process model that predicted worse mental health in visible minority immigrants due to exposure to racism, a psychological stressor that erodes health and psychosocial resources, was also found for visible minority immigrants. They reported having slightly worse mental health than White immigrants in some cases (though these results were not statistically significant). Cultural background and values can be both protective and harmful to the mental health outcomes of immigrants in Canada. Due to patterns of immigration, it is suspected that many of the recent immigrants sampled are from non-Westernized countries where mental health is a taboo and unrecognized topic which can result in underreporting of poor mental health. As such, White immigrants who have lived in Canada for 10 years in particular, reported the worst levels of mental health in comparison to their recent White counterparts. Female White immigrants also reported worse mental health than their visible minority counterparts, contrasting from the predicted hypothesis. This may be explained by the built-up exhaustion from challenges in the labour market that deskills qualified immigrants, as well as the potential higher expectations and disappointing actual outcomes for this group. This dataset may have been obscuring the results of visible minority immigrant experiences, whose cultural beliefs and perceptions about mental health differ from Western perspectives, possibly resulting in inaccurate self-reporting and the discrepancies between this study's results and the existing literature.

In reference to the stress processes model and healthy immigrant effect, immigrant mental health would erode as time passes. As this data set was compiled in 2012, at this time, the majority of White immigrants have been established for over 20 years while the majority of visible minority immigrants landed less than 20 years ago. According to previous studies, experiences of racism and discrimination take time to manifest and impact health and mental health. Based on findings around visible minority men's mental health, further research examining this group as distinct categories rather than a homogenous group may be more enlightening and informative, which would allow for more targeted and specific support.

Further research should focus on more recent data as this wave of immigrants will have spent more time living in Canada and a better examination of their health in relation to racism can be explored. In the current political context where xenophobia has increasingly become more prevalent as a result of the COVID-19 pandemic, attention

should be turned to immigrants, especially racial minorities who experience intersecting oppressions due to their racialized and immigrant identities.

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