Title

Black, White, Black and White: Mixed race and health in Canada

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Abstract

Objectives: To document inequalities in hypertension, self-rated health, and self-rated mental health between Canadian adults who identify as Black, White, or Black and White and determine whether differences in educational attainment and household income explain them.

Design: The dataset was comprised of ten cycles (2001-2013) of the Canadian Community Health Survey. The health inequalities were examined by way of binary logistic regression modelling of hypertension and multinomial logistic regression modelling of self-rated health and self-rated mental health. Educational attainment and household income were investigated as potentially mediating factors using nested models and the Karlson-Holm-Breen decomposition technique.

Results: Black respondents were significantly more likely than White respondents to report hypertension, a disparity that was partly attributable to differences in income. White respondents reported the best and Black respondents reported the worst overall self-rated health, a disparity that was entirely attributable to income differences. Respondents who identified as both Black and White were significantly more likely than White respondents to report fair or poor mental health, a disparity that was partly attributable to income differences. After controlling for income, Black respondents were significantly less likely than White respondents to report fair or poor mental health. Educational attainment did not contribute to explaining any of these associations.

Conclusion: Canadians who identify as both Black and White fall between Black Canadians and White Canadians in regards to self-rated overall health, report the worst self-rated mental health of the three populations, and, with White Canadians, are less likely than Black Canadians to report hypertension. These heterogeneous findings are indicative of a range of diverse processes operative in the production of Black-White health inequalities in Canada.

Introduction

Previous research has established that Canada is home to a range of health inequalities associated with a stark distinction between self-identified Black identity and self-identified White identity. For example, researchers have documented that, after controlling for age and immigrant status, Black Canadians are more likely than White Canadians to report hypertension and diabetes (Veenstra 2009; Chiu et al. 2010; Liu et al. 2010; Veenstra and Patterson 2015; Ramraj et al. 2016; Patterson and Veenstra 2016; Veenstra and Patterson 2016) and native-born Black Canadians are more likely than native-born White Canadians to report poor self-rated health (Veenstra and Patterson 2015). Conversely, Black women are less likely than White women to report poor self-rated mental health (Veenstra and Patterson 2016) and Black Canadians have lower age-standardized mortality rates than White Canadians (Wilkins et al. 2008; Pinault et al. 2016).

Although the literature on Black-White health inequalities in Canada is steadily growing, Canadian health researchers have heretofore neglected the health-related experiences of people reporting multiracial identities such as Black and White, despite the fact that the number of people embracing hybrid racial identities is on the rise (Shih and Sanchez 2009). There are several good reasons to focus on the health of multiracial people as such. First, people who espouse multiple racial identities may experience health damaging or promoting phenomena that are unique to their circumstances. For example, multiracial people can experience "visual ambiguity, identity confusion, rejection from familial or ethnic groups, and inability to identify with every component of a diverse racial background" (Phillips et al. 2007: 797). On the other hand, the capacity of some multiracial people to adopt or display one racial identity or another depending on the context can be a health-promoting resource (Rockquemore et al. 2009). Second, the health-related experiences of multiracial people can help researchers adjudicate different explanations for racial health

inequalities in general. For instance, the experiences of people reporting a hybrid Black and White identity may be aligned with those of people who identify as Black in regards to forms of discrimination which target all visible minorities but aligned with neither Black or White experiences in regards to integration into racially defined communities.

This study provides a first indication of the potential usefulness of attending to multiracial identities in quantitative studies of racial health inequalities in Canada. Specifically, I use pooled data from ten cycles of the Canadian Community Health Survey (CCHS) to explore inequalities in hypertension, self-rated health, and self-rated mental health between self-identified Black, White, and Black & White Canadians. The main contributions of the study are twofold. First, I illuminate previously unknown health-related circumstances of Canadians who identify as Black & White. In particular, I find that Black & White Canadians fall between Black Canadians and White Canadians in regards to level of self-rated overall health, report the worst self-rated mental health of the three populations, and, with White Canadians, are less likely than Black Canadians to report hypertension.

Second, I provide insight into the degree to which socioeconomic status explains Black-White health inequalities more generally. Previous attempts to explain the relatively high risk of hypertension for Black Canadians compared to White Canadians by way of introducing indicators of socioeconomic status to regression models have largely been unsuccessful. For example, one study reported an odds ratio of 2.52 for hypertension among women that only declined to 2.29 after controlling for education and income; among men these ratios were 1.41 and 1.36, respectively (Veenstra and Patterson 2016). Researchers have had more success using socioeconomic status to explain Black-White health inequalities in self-rated health. For example, one study found that an odds ratio of 1.51 for fair/poor self-rated health declined to 1.20 after

controlling for education, income, and employment status among native-born Canadians (Veenstra and Patterson 2015) while another reported an odds ratio of 1.37 that declined to 1.10 after controlling for education and income in a sample of immigrant women (Patterson and Veenstra 2016). The relatively low risk of poor self-rated mental health for Black women compared to White women was actually found to be suppressed by socioeconomic status in one study (Veenstra and Patterson 2016). However, the problem of residual variance in logit and probit models means that changes in regression coefficients across nested models can reflect changes in the scaling of the dependent variable rather than – or in addition to – the effects of mediation or confounding (Mood 2010). A failure to address the problem of residual variance in this literature means that the role of socioeconomic status in explicating Black-White inequalities in hypertension, self-rated health, and self-rated mental health has not yet been conclusively established. Using the Karlson-Holm-Breen method of decomposing direct and indirect effects in the context of nested non-linear probability models (Karlson et al. 2011; Karlson and Holm 2011), I find that income differences are implicated in the relatively high risks of hypertension and poor self-rated health for Black respondents and poor self-rated mental health for Black & White respondents and suppress the relative tendency of Black respondents to report excellent or very good self-rated mental health. Educational attainment, by contrast, does not contribute to explaining any of the associations. This kaleidoscope of findings is indicative of a range of social processes operative in the production of Black-White health inequalities in Canada.

Methods

Survey sample

The CCHS is a cross-sectional survey that collects information related to health status, health care utilization, and health determinants for the Canadian population. Statistics Canada conducted the CCHS in 2001, 2003, and 2005 and annually from 2007 onwards. The target population for these surveys is all persons 12 years of age and older residing in Canada, excluding individuals living on Indian Reserves and Crown Lands, institutional residents, fulltime members of the Canadian Armed Forces, and residents of some remote regions. Response rates for the surveys ranged from a high of 84.7% in 2001 to a low of 66.7% in 2013. I pooled data from all ten cycles of the CCHS that occurred between 2001 and 2013 to produce a sample of 7,310 Black respondents, 675 Black & White respondents, and 664,163 White respondents aged 18 and older. Socio-demographic and health-related characteristics of this sample are described in Tables 1 and 2, respectively. The Black respondents were the most likely to be an immigrant and poor and to live in an urban setting. The Black & White respondents were younger and the most likely to be female while the White respondents were older and the most likely to be born in Canada, married or common-law, uneducated, and wealthy and to live in a rural setting.

<Tables 1 and 2 about here>

Variables

Racial identity is derived from the following survey question: "People living in Canada come from many different cultural and racial backgrounds. Are you: White? Chinese? South Asian (e.g., East

Indian, Pakistani, Sri Lankan)? Black? Filipino? Latin American? Southeast Asian (e.g., Cambodian, Indonesian, Laotian, Vietnamese)? Arab? West Asian (e.g., Afghan, Iranian)? Japanese? Korean? Aboriginal (North American Indian, Métis, or Inuit)? Other – Specify." Interviewers were instructed to read all of the categories to the respondent and record all that apply. This study is restricted to the subsample of respondents who selected Black (only), White (only), or both Black and White (and none other). Marital status distinguishes between married/common-law, divorced/separated/widowed, and single/never married. Immigrant status distinguishes between immigrated to Canada and born in Canada. Educational attainment distinguishes between less than a high school diploma, high school diploma, community college or trade school diploma, and bachelor's degree or higher. Household income, expressed in population quintiles, depicts each respondent's household income relative to a low-income cut-off that accounts for household size and the population size of the respondent's community of residence. A simple dichotomous indicator assesses the presence of hypertension. Self-rated health and self-rated mental health are recoded to distinguish between excellent or very good, good, and fair or poor health.

Statistical methods

An inordinately high amount of missing data for self-rated mental health reflects the fact that data for this item was not available in the 2001 cycle. I adopted the imputed data for household income provided by Statistics Canada for the 2005-2013 cycles, used missing data categories for household income in 2001 and 2003 and for immigrant status, and applied list-wise deletion to the dependent variables. I applied binary logistic regression to hypertension and multinomial logistic regression to self-rated health and self-rated mental health and created sequences of nested models

to investigate whether socioeconomic status mediates associations between racial identity and health. I also applied the Karlson-Holm-Breen method of decomposing effects in non-linear probability models via application of the *khb* command in Stata (Kohler et al. 2011). To account for the complex sampling design of the CCHS, I applied the master weight and 500 replicate weights provided by Statistics Canada to all regression models. The statistical analyses were executed in Stata 13 and the study was ethically approved by the Behavioural Research Ethics Board at the University of British Columbia.

Results

Hypertension

Model 1 of Table 3 indicates that Black respondents were significantly more likely than White respondents to report hypertension (OR=1.815, 95% CI=1.605-2.050), controlling for age and immigrant status. Sequentially controlling for gender, marital status, and urban/rural residence had little effect on this association (results not shown). This means that White and Black & White respondents were jointly least likely to report hypertension and Black respondents were the most likely to do so. Comparison of Models 1 and 2 in Table 3 suggests that the association may be partly explained by income. This is confirmed by the Karlson-Holm-Breen decomposition which indicates that 11.6% of the relatively high risk of hypertension for Black respondents compared to White respondents can be attributed to income. Educational attainment did not explain any of the association between racial identity and hypertension (results not shown).

<Tables 3–5 about here>

Self-rated health

Model 1 of Table 4 indicates that, compared to White respondents and with excellent or very good health as the reference category, Black and Black & White respondents were both relatively likely to report good self-rated health (OR=1.107, 95% CI=1.008-1.217 and OR=1.786, 95% CI=1.306-2.442, respectively). In addition, Black respondents were significantly more likely than White respondents to report fair or poor health (OR=1.305, 95% CI=1.142-1.489); interestingly, Black & White respondents and White respondents did not differ significantly in this regard. Sequentially controlling for gender, marital status, and urban/rural residence had little effect on the coefficients for racial identity (results not shown). Comparison of Models 1 and 2 in Table 4 suggests that the relative likelihood that Black & White respondents report good health is partly explained by income; the Karlson-Holm-Breen decomposition indicates that 13.0% of this association is attributable to income in these data. Comparison of Models 1 and 2 also suggests that the relatively high risk of fair or poor health for the Black respondents is entirely explained by income differences, a conclusion supported by the Karlson-Holm-Breen decomposition. Educational attainment did not explain any of the association between racial identity and self-rated health (results not shown).

Self-rated mental health

Model 1 of Table 5 indicates that, controlling for age and immigrant status and with excellent or very good health as the reference category, Black & White respondents were significantly more likely than White respondents to report fair or poor mental health (OR=2.680, 95% CI=1.242-3.329). Sequentially controlling for gender, marital status, and urban/rural residence had little

effect on the association between racial identity and self-rated mental health (results not shown). Comparison of Models 1 and 2 in Table 5 suggests that household income explains a portion of the association. This is confirmed by the Karlson-Holm-Breen decomposition which indicates that 18.6% of the relatively risk of fair or poor mental health for Black & White respondents can be attributed to income differences in these data. In addition, Model 2 indicates that, after controlling for income, Black respondents were significantly less likely than White respondents to report the poorest mental health outcomes (OR=0.783, 95% CI=0.698-0.881 for good health and OR=0.680, 95% CI=0.558-0.829 for fair/poor health). In other words, the Black respondents and White respondents reported the best mental health and the Black & White respondents reported the worst mental health, disparities that were entangled with differences in income. Educational attainment did not explain any of the association between racial identity and self-rated mental health (results not shown).

Discussion

In this study I adopt the assumption that human genetic diversity does not align with existing racial typologies (Morning 2014; Graves 2015; Hughey and Byrd 2015; Zuberi et al. 2015). This means that racial identities such as Aboriginal or Indigenous, African or Black, Asian, South Asian, and European or White, as well as multiracial identities such as Eurasian and Black & White, cannot be causally associated with health for genotypic reasons. However, racial identities both singular and hybrid are imbued with social significance in Canadian society which means that they can be causally implicated in the production of health inequalities for social reasons. Consistent with previous research (Veenstra 2009; Chiu et al. 2010; Liu et al. 2013; Veenstra and Patterson 2015;

Ramraj et al. 2016; Patterson and Veenstra 2016; Veenstra and Patterson 2016), I find that, compared to White Canadians, Black Canadians are relatively likely to report hypertension after controlling for age and immigrant status. A small portion of this risk is attributable to differences in income. Possible explanations for this association that were not investigated in this study but have been studied extensively in the United States include the residential segregation of racial minorities, differential access to quality health care, internalization by racial minorities of the larger society's negative characterizations of them, and the psychosocial stress that can result from experiences of interpersonal racism and discrimination (Williams and Neighbors 2001). The fact that Canada has universal health care and less residential segregation along racial lines than the United States (Fong 1996) may make some of these explanations more plausible than others.

I also find that, compared to White Canadians, Black Canadians are relatively likely to report fair or poor self-rated health. It appears that distinguishing excellent or very good from good health allowed a statistically significant difference between Black and White Canadians to emerge in my study, in contrast with previous studies (Veenstra 2009; Veenstra and Patterson 2016) that combined these responses. The risk of fair or poor self-rated for Black Canadians appears to be entirely attributable to the fact that they tend to have lower incomes than White Canadians. The self-rated health of Canadians who identify as both Black and White falls between that of Black Canadians and White Canadians, and the relatively poor self-rated health of Black & White Canadians compared to White Canadians is partly explained by their lower incomes.

Consistent with previous research (Veenstra and Patterson 2016), I find that Black Canadians are relatively unlikely to report fair or poor self-rated mental health after controlling for income. The literature from the United States similarly documents a mental health paradox wherein African Americans tend to report better mental health than White Americans (Zuvekas

and Fleishman 2008; Keyes 2009; Mouzon 2013). American scholars hypothesize that many African Americans develop a kind of resilience in the face of racism and discrimination, perhaps fostered in religious or familial contexts, which contributes to mental wellbeing (Keyes 2009). Factors such as these may be at play in Canada as well.

Lastly, I find that Canadians who identify as both Black and White have the worst self-rated mental health of the three populations, a disparity that is only partly attributable to income. This finding, documented for the first time in Canada, is consistent with research from the United States which also suggests that some hybrid racial identities can be associated with negative mental health outcomes (Lusk et al. 2010). Future research of a qualitative nature is needed to generate plausible explanations for the correspondence between hybrid Black & White identity and relatively poor self-rated mental health reported here.

Limitations

This study has several notable limitations that also serve as directions for future research. First, for reasons of cell size limitations I was unable to examine other health indicators such as asthma, diabetes, cancer, and heart disease. The small numbers of Black & White respondents reporting hypertension, fair or poor self-rated health, and fair or poor self-rated mental health prevented me from controlling for a lengthy list of potential confounders. I was also prevented from examining the racial health inequalities separately by gender, again for reasons of cell size, an important limitation in light of previous research that identifies stronger Black-White inequalities in hypertension and self-rated mental health for women than for men (Patterson and Veenstra 2016;

Veenstra and Patterson 2016). The addition of future cycles of the CCHS to this pooled dataset may allow other researchers to address these limitations.

Another limitation of my study concerns the nature of the racial identity indicator itself. The notion of hypodescent which is deeply embedded in American society suggests that many people with one Black parent and one White parent will identify as Black rather than as mixed race (Rockquemore 2002). "While in the past, the offspring of interracial unions may have considered themselves to be biracial, they were recognized in society as Black. Today, the one-drop rule is slowly losing power over racial identity construction, accompanied by new hybrid categories of identity that reflect the changing nature of race relations" (Rockquemore 2002: 485). To the degree that hypodescent is salient in Canada, a complex issue in and of itself (Inniss 2007; Fraile 2012), some of the Black respondents in the CCHS may share experiences with the Black & White respondents, clouding the statistical comparison between Black and Black & White identities in my models. In addition, adopting a multiracial rather than monoracial identity in such circumstances may be affected by factors that also influence health, e.g., the racial composition of schools and social networks (Aspinall 2003). Failure to control for such potentially confounding factors could produce a spurious association between racial identity and health.

A related limitation of the study concerns the fact that my measure of racial identity is unidimensional, assessing the self-identifications of survey respondents but failing to assess the racial identities imputed to them by others in everyday life (Veenstra 2011; Roth 2016). This means that my study may address the health effects of psychosocial processes pertaining to identity and cultural affiliations more directly than it addresses the health effects of racism which engages people who are racialized in particular ways. Rather than applying singular measures of racial identity as blunt weapons to be thrown at any and all health outcomes, health researchers are

encouraged to use the measures of racial identity that are directly implicated in the social processes of interest. Some of these processes may require measures of racial identity very different from the one utilized in this study.

Main Messages

1. Black Canadians are more likely than White Canadians to report hypertension. This is partly attributable to the fact that Black Canadians tend to be poorer than White Canadians.

2. White Canadians report the best and Black Canadians report the worst overall self-rated health. This is entirely explained by the fact that Black Canadians tend to be poorer than White Canadians.

3. After controlling for income, Black Canadians are less likely than White Canadians to report fair or poor mental health. This is consistent with research from the United States where African Americans often report better mental health than White Americans.

4. Canadians who identify as both Black and White are more likely than White Canadians to report fair or poor mental health, only partly attributable to the fact that Black & White Canadians tend to be poorer than White Canadians. This is consistent with research from the United States which finds that some hybrid racial identities are associated with poor mental health.

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Table 1. Socio-demographic characteristics of the unweighted sample

	Black n (%)	Black & White n (%)	White n (%)
Gender			
Male	3,285 (44.9)	269 (39.9)	298,461 (44.9)
Female	4,025 (55.1)	406 (60.1)	365,702 (55.1)
Age			
18-24	1,002 (13.7)	184 (27.3)	56,562 (8.5)
25-34	1,733 (23.7)	150 (22.2)	92,996 (14.0)
35-44	1,814 (24.8)	126 (18.7)	105,322 (15.9)
45-54	1,036 (14.2)	69 (10.2)	111,053 (16.7)
55-64	874 (12.0)	70 (10.4)	121,339 (18.3)
65+	851 (11.6)	76 (11.3)	176,891 (26.6)
Immigration status			
Born in Canada	1,702 (23.3)	512 (75.9)	596,617 (89.9)
Immigrated to Canada	5,470 (74.8)	160 (23.7)	66,582 (10.0)
Missing	138 (1.9)	3 (0.4)	964 (0.1)
Marital status			
Married/common-law	3,086 (42.2)	268 (39.7)	375,492 (56.5)
Single/never married	2,883 (39.4)	305 (45.2)	139,474 (21.0)
Divorced/separated/widowed	1,324 (18.1)	100 (14.8)	148,222 (22.3)
Missing	17 (0.2)	2 (0.3)	975 (0.2)
Urban/rural residence			
Urban	6,967 (95.3)	583 (86.4)	478,419 (72.0)
Rural	343 (4.7)	92 (13.6)	185,744 (28.0)
Educational attainment			
Less than HS diploma	1,052 (14.4)	99 (14.7)	146,018 (22.0)
High school diploma	1,898 (26.0)	224 (33.2)	166,494 (25.1)
College or TS diploma	2,716 (37.1)	232 (34.4)	237,373 (35.7)
Bachelor degree and above	1,552 (21.2)	114 (16.9)	107,596 (16.2)
Missing	92 (1.3)	6 (0.9)	6,682 (1.0)
Household income quintile (imputed)			
1 (lowest)	2,608 (35.7)	166 (24.6)	121,427 (18.3)
2	1,659 (22.7)	129 (19.1)	127,042 (19.1)
3	1,235 (16.9)	144 (21.3)	125,775 (18.9)
4	908 (12.4)	122 (18.1)	123,146 (18.5)
5 (highest)	627 (8.6)	96 (14.2)	134,772 (20.3)
Missing	273 (3.7)	18 (2.7)	32,001 (4.8)
Total	7,310	675	664,163

Table 2. Health profile of the unweighted sample

	Black n (%)	Black & White n (%)	White n (%)
Self-rated health			
Excellent/very good	4,322 (59.1)	379 (56.2)	370,743 (55.8)
Good	2,099 (28.7)	215 (31.8)	194,737 (29.3)
Fair/poor	879 (12.0)	81 (12.0)	97,945 (14.8)
Missing	10 (0.1)	0 (0)	738 (0.1)
Self-rated mental health			
Excellent/very good	4,758 (65.1)	430 (63.7)	392,544 (59.1)
Good	1,276 (17.5)	135 (20.0)	122,292 (18.4)
Fair/poor	332 (4.5)	61 (9.0)	30,888 (4.7)
Missing	944 (12.9)	49 (7.3)	118,436 (17.8)
Hypertension			
No	5,920 (81.0)	566 (83.9)	512,511 (77.2)
Yes	1,381 (18.9)	106 (15.7)	150,031 (22.6)
Missing	9 (0.1)	3 (0.4)	1,621 (0.2)
Total	7,310	675	664,163

Table 3. Weighted binary logistic regression models on hypertension (with 95% confidence intervals for odds ratios based on bootstrapped variance estimation; *n*=670,515)

		Model 1		*Model 2*	
		OR	95% CI	OR	95% CI
Racial identity	Black	1.815	1.605…2.050	1.694	1.501…1.910
	Black & White	1.138	0.781…1.655	1.126	0.778…1.631
	White (ref)	1.000		1.000	
Age in years		1.203	1.196…1.210	1.208	1.202…1.215
Square of age (x 100)		0.905	0.899…0.908	0.899	0.895…0.903
Immigrant status	Immigrated to Canada	0.936	0.905…0.969	0.928	0.897…0.960
	Born in Canada (ref)	1.000		1.000	
Income quintile	5 highest			0.690	0.654…0.728
	4			0.780	0.750…0.811
	3			0.818	0.787…0.850
	2			0.894	0.864…0.925
	1 lowest (ref)			1.000	

Table 4. Weighted multinomial logistic regression models on self-rated health (with 95% confidence intervals for odds ratios based on bootstrapped variance estimation; *n*=671,400)

		Model 1		Model 2	
		OR	95% CI	OR	95% CI
Good self-rated health					
Racial identity	Black	1.107	1.008…1.217	0.942	0.857…0.966
	Black & White	1.786	1.306…2.442	1.657	1.224…2.241
	White (ref)	1.000		1.000	
Age in years		0.993	0.990…0.996	1.009	1.006…1.012
Square of age (x 100)		1.025	1.022…1.028	1.007	1.005…1.010
Immigrant status	Immigrated to Canada	1.040	1.004…1.074	1.005	0.969…1.042
	Born in Canada (ref)	1.000		1.000	
Income quintile	1 lowest			2.201	2.128…2.280
	2			1.738	1.684…1.795
	3			1.449	1.402…1.498
	4			1.207	1.171…1.245
	5 highest (ref)			1.000	
Fair or poor self-rated health					
Racial identity	Black	1.305	1.142…1.489	0.898	0.785…1.026
	Black & White	0.900	0.608…1.331	0.798	0.549…1.160
	White (ref)	1.000		1.000	
Age in years		1.019	1.014…1.023	1.052	1.047…1.058
Square of age (x 100)		1.024	1.020…1.028	0.989	0.984…0.993
Immigrant status	Immigrated to Canada	1.052	1.010…1.096	0.982	0.942…1.024
	Born in Canada (ref)	1.000		1.000	
Income quintile	1 lowest			6.547	6.190…6.801
	2			3.248	3.096…3.408
	3			2.083	1.976…2.197
	4			1.496	1.419…1.579
	5 highest (ref)			1.000	

Base outcome = excellent or very good self-rated health

Table 5. Weighted multinomial logistic regression models on self-rated mental health (with 95% confidence intervals for odds ratios based on bootstrapped variance estimation; *n*=552,719)

		Model 1		*Model 2*	
		OR	95% CI	OR	95% CI
Good self-rated mental health					
Racial identity	Black	0.934	0.831…1.050	0.783	0.698…0.881
	Black & White	1.161	0.812…1.660	1.077	0.757…1.530
	White (ref)	1.000		1.000	
Age in years		0.995	0.992…0.998	1.012	1.008…1.015
Square of age (x 100)		1.013	1.010…1.017	0.995	0.991…0.998
Immigrant status	Immigrated to Canada	1.006	0.966…1.049	0.969	0.930…1.009
	Born in Canada (ref)	1.000		1.000	
Income quintile	1 highest			0.430	0.413…0.448
	2			0.536	0.506…0.547
	3			0.629	0.605…0.653
	4			0.761	0.733…0.790
	5 lowest (ref)			1.000	
Fair or poor self-rated mental health					
Racial identity	Black	0.989	0.813…1.203	0.680	0.558…0.829
	Black & White	2.680	1.242…3.329	2.259	1.067…4.787
	White (ref)	1.000		1.000	
Age in years		1.014	1.007…1.021	1.050	1.043…1.058
Square of age (x 100)		0.991	0.983…0.997	0.952	0.946…0.959
Immigrant status	Immigrated to Canada	0.939	0.871…1.012	0.862	0.799…0.929
	Born in Canada (ref)	1.000		1.000	
Income quintile	1 highest			0.177	0.164…0.191
	2			0.234	0.218…0.251
	3			0.312	0.292…0.334
	4			0.460	0.432…0.490
	5 lowest (ref)			1.000	

Base outcome = excellent or very good self-rated mental health