SENSITIVITY ANALYSES: Comparison of the 2 groups (chronic v. no chronic condition) across waves

Aim:

This document shows the sensitivity analysis in order to demonstrate that the independent sample across survey rounds are similar enough in terms of demographics so that they can be compared. Because we analyzed independent sub-samples of a representative survey across seven time points, we compared these samples on the main demographic characteristic within each group: chronic and no chronic health condition. Individuals with chronic health condition did not vary on any variables. Individuals with no chronic health conditions showed minor discrepancies in age, sex, and educational distributions between separate waves. The complete table output is available on the study repository. See below for the exact breakdowns and details.

TABLE S1: Young adults with chronic health conditions across survey rounds/waves

No significant differences were observed.

##		Stratif	fied by	wave			
##		2		3		4	
##	n	277		293		299	
##	age_yrs (mean (SD))	29.99	(5.83)	30.16	(5.64)	29.72	(6.08)
##	sex = Male (%)	100	(36.1)	114	(39.2)	120	(40.3)
##	edu (%)						
##	College	135	(49.5)	133	(46.2)	144	(48.3)
##	Graduate	63	(23.1)	64	(22.2)	58	(19.5)
##	Primary	7	(2.6)	7	(2.4)	2	(0.7)
##	Secondary	68	(24.9)	84	(29.2)	94	(31.5)
##	<pre>province_full (%)</pre>						
##	Alberta	29	(10.5)	47	(16.0)	38	(12.7)
##	British Columbia	37	(13.4)	40	(13.7)	40	(13.4)
##	Manitoba	7	(2.5)	9	(3.1)	12	(4.0)
##	New Brunswick	5	(1.8)	10	(3.4)	7	(2.3)
##	Newfoundland	3	(1.1)	5	(1.7)	5	(1.7)
##	Nova Scotia	8	(2.9)	4	(1.4)	8	(2.7)
##	Ontario	116	(41.9)	103	(35.2)	106	(35.5)
##	Prince Edward Island	1	(0.4)	0	(0.0)	0	(0.0)
##	Quebec	62	(22.4)	64	(21.8)	77	(25.8)
##	Saskatchewan	9	(3.2)	11	(3.8)	6	(2.0)
##	<pre>chronic_descriptive (%)</pre>						
##	Autoimmune	36	(13.0)	31	(10.6)	38	(12.7)
##	Cancer	9	(3.2)	6	(2.0)	10	(3.3)
##	Diabetes	14	(5.1)	16	(5.5)	22	(7.4)
##	Heart disease	51	(18.4)	63	(21.5)	54	(18.1)
##	Hypertension	40	(14.4)	43	(14.7)	43	(14.4)

```
##
        Lung disease
                                 96 (34.7)
                                               106 (36.2)
                                                              103 (34.4)
##
                                 28 (10.1)
                                                17 (5.8)
                                                               23 (7.7)
        Obesity
##
        Other
                                   3 (1.1)
                                                11 (3.8)
                                                                6(2.0)
##
     chronic_multi = 1 (%)
                                 108 (39.0)
                                               119 (40.6)
                                                              119 (39.8)
##
     any_m_health = 1 (%)
                                 136 (49.1)
                                               142 (48.5)
                                                              156 (52.2)
##
     hoinc (%)
##
        Bottom 3rd
                                 75 (29.6)
                                                91 (36.0)
                                                               87 (34.0)
##
        Middle 3rd
                                               138 (54.5)
                                 140 (55.3)
                                                              148 (57.8)
##
        Top 3rd
                                  38 (15.0)
                                                24 (9.5)
                                                               21 (8.2)
##
                             Stratified by wave
##
                              5
                                                            7
##
                                               209
                                                              229
                                 237
     age_yrs (mean (SD))
##
                              30.69 (5.78)
                                             29.56 (6.11)
                                                            30.48 (5.67)
     sex = Male (%)
##
                                 86 (36.3)
                                                77 (37.4)
                                                               85 (37.4)
##
     edu (%)
##
        College
                                 122 (52.4)
                                                96 (45.9)
                                                              119 (52.7)
##
                                                35 (16.7)
                                                               40 (17.7)
        Graduate
                                 44 (18.9)
##
        Primary
                                  7 (3.0)
                                                 2 (1.0)
                                                                3 (1.3)
##
                                 60 (25.8)
                                                76 (36.4)
                                                               64 (28.3)
        Secondary
##
     province full (%)
##
        Alberta
                                 24 (10.1)
                                                26 (12.4)
                                                               32 (14.0)
##
        British Columbia
                                 30 (12.7)
                                                33 (15.8)
                                                               37 (16.2)
##
                                 11 (4.6)
                                                 6 (2.9)
                                                                7 (3.1)
        Manitoba
##
        New Brunswick
                                   4 (1.7)
                                                 3(1.4)
                                                                5 (2.2)
##
        Newfoundland
                                                 1 (0.5)
                                                                0(0.0)
                                   6(2.5)
##
        Nova Scotia
                                   6(2.5)
                                                11 (5.3)
                                                                8 (3.5)
##
        Ontario
                                 92 (38.8)
                                                79 (37.8)
                                                               79 (34.5)
##
        Prince Edward Island
                                                 1 (0.5)
                                                                0(0.0)
                                  1 (0.4)
##
        Quebec
                                 56 (23.6)
                                                44 (21.1)
                                                               54 (23.6)
##
        Saskatchewan
                                  7 (3.0)
                                                 5 (2.4)
                                                                7 (3.1)
##
     chronic_descriptive (%)
##
        Autoimmune
                                 38 (16.0)
                                                35 (16.7)
                                                               29 (12.7)
##
        Cancer
                                  2 (0.8)
                                                 3(1.4)
                                                                4 (1.7)
##
        Diabetes
                                 12 (5.1)
                                                 9 (4.3)
                                                               18 (7.9)
##
        Heart disease
                                 31 (13.1)
                                                29 (13.9)
                                                               27 (11.8)
##
        Hypertension
                                 39 (16.5)
                                                25 (12.0)
                                                               41 (17.9)
##
        Lung disease
                                 86 (36.3)
                                                78 (37.3)
                                                               79 (34.5)
##
        Obesity
                                 26 (11.0)
                                                22 (10.5)
                                                               21 (9.2)
##
        Other
                                   3 (1.3)
                                                 8 (3.8)
                                                               10 (4.4)
##
     chronic_multi = 1 (%)
                                                75 (35.9)
                                                               73 (31.9)
                                 89 (37.6)
##
     any m health = 1 (%)
                                               115 (55.0)
                                                              110 (48.0)
                                 137 (57.8)
##
     hoinc (%)
        Bottom 3rd
                                 62 (32.3)
                                                60 (33.7)
                                                               49 (24.1)
##
##
                                                              131 (64.5)
        Middle 3rd
                                 110 (57.3)
                                               102 (57.3)
##
                                 20 (10.4)
                                                               23 (11.3)
        Top 3rd
                                                16 (9.0)
##
                             Stratified by wave
##
                                                    test
                                             р
##
                                 247
     age_yrs (mean (SD))
##
                              29.87 (5.47)
                                              0.319
     sex = Male (%)
                                              0.072
##
                                 118 (48.6)
##
     edu (%)
                                              0.140
##
        College
                                 113 (46.3)
##
        Graduate
                                 63 (25.8)
##
        Primary
                                   6(2.5)
```

##	Secondary	62	(25.4)	
##	<pre>province_full (%)</pre>			0.756
##	Alberta	39	(15.8)	
##	British Columbia	38	(15.4)	
##	Manitoba	11	(4.5)	
##	New Brunswick	7	(2.8)	
##	Newfoundland	6	(2.4)	
##	Nova Scotia	4	(1.6)	
##	Ontario	94	(38.1)	
##	Prince Edward Island	1	(0.4)	
##	Quebec	43	(17.4)	
##	Saskatchewan	4	(1.6)	
##	<pre>chronic_descriptive (%)</pre>			0.065
##	Autoimmune	30	(12.1)	
##	Cancer	6	(2.4)	
##	Diabetes	16	(6.5)	
##	Heart disease	61	(24.7)	
##	Hypertension	37	(15.0)	
##	Lung disease	71	(28.7)	
##	Obesity	21	(8.5)	
##	Other	5	(2.0)	
##	chronic_multi = 1 (%)	112	(45.3)	0.105
##	$any_m_health = 1 (%)$	144	(58.3)	0.072
##	hoinc (%)			0.025
##	Bottom 3rd	81	(37.5)	
##	Middle 3rd	124	(57.4)	
##	Top 3rd	11	(5.1)	

TABLE S2: Young adults with no chronic health conditions across survey rounds/waves

There exist minor differences between some waves in variables age, sex, education level, and perceived income status.

```
\hbox{\it \#\# Warning in ModuleReturnVarsExist(vars, data): These variables only have NA/NaN: } \\ \hbox{\it \#\# chronic\_descriptive Dropped}
```

Warning in ModuleReturnVarsExist(factorVars, data): These variables only have
NA/NaN: chronic_descriptive Dropped

##		Stratif	ied by w	ave			
##		2		3		4	
##	n	857		670		761	
##	age_yrs (mean (SD))	28.94	(5.89)	29.25	(5.89)	28.36 (6.15)	
##	sex = Male (%)	356	(41.7)	255	(38.3)	287 (37.9))
##	edu (%)						
##	College	473	(55.6)	366	(55.1)	378 (50.2)
##	Graduate	139	(16.3)	111	(16.7)	116 (15.4)
##	Primary	2	(0.2)	2	(0.3)	8 (1.1)
##	Secondary	237	(27.8)	185	(27.9)	251 (33.3)
##	<pre>province_full (%)</pre>						
##	Alberta	90	(10.5)	68	(10.1)	110 (14.5))

```
108 (14.2)
##
        British Columbia
                                126 ( 14.7)
                                               102 (15.2)
##
        Manitoba
                                 30 (3.5)
                                                20 ( 3.0)
                                                                22 ( 2.9)
                                                                16 ( 2.1)
##
        New Brunswick
                                 15 ( 1.8)
                                                20 ( 3.0)
##
        Newfoundland
                                 10 ( 1.2)
                                                 7 ( 1.0)
                                                                 5 ( 0.7)
##
        Nova Scotia
                                 23 ( 2.7)
                                                13 ( 1.9)
                                                                16 ( 2.1)
##
        Ontario
                                324 (37.8)
                                               254 (37.9)
                                                               286 (37.6)
##
        Prince Edward Island
                                  0(0.0)
                                                 3(0.4)
                                                                 2(0.3)
        Quebec
                                                               177 ( 23.3)
##
                                213 ( 24.9)
                                               158 (23.6)
##
        Saskatchewan
                                 26 ( 3.0)
                                                25 ( 3.7)
                                                                19 ( 2.5)
##
     chronic_multi = 0 (%)
                                857 (100.0)
                                               670 (100.0)
                                                               761 (100.0)
##
     any_m_health = 1 (\%)
                                166 (19.4)
                                               136 (20.3)
                                                               155 ( 20.4)
##
     hoinc (%)
        Bottom 3rd
                                               148 ( 26.7)
##
                                189 ( 24.9)
                                                               168 ( 26.8)
                                                               393 (62.7)
##
        Middle 3rd
                                446 (58.8)
                                               335 (60.4)
##
        Top 3rd
                                124 ( 16.3)
                                                72 (13.0)
                                                                66 (10.5)
##
                             Stratified by wave
##
                                                             7
                              5
##
                                814
                                               766
                                                               758
     age_yrs (mean (SD))
##
                              29.95 (5.89)
                                             29.06 (6.03)
                                                             29.20 (5.90)
##
     sex = Male (%)
                                317 ( 39.0)
                                               312 (41.0)
                                                               322 (42.6)
     edu (%)
##
##
        College
                                412 (50.9)
                                               393 (51.6)
                                                               377 (49.9)
                                               158 ( 20.7)
                                                               160 (21.2)
##
        Graduate
                                154 ( 19.0)
##
        Primary
                                  7 ( 0.9)
                                                 5 ( 0.7)
                                                                 9 (1.2)
##
                                236 ( 29.2)
        Secondary
                                               206 (27.0)
                                                               209 (27.7)
##
     province_full (%)
##
        Alberta
                                 95 (11.7)
                                                91 (11.9)
                                                                90 (11.9)
##
        British Columbia
                                112 ( 13.8)
                                               122 ( 15.9)
                                                               111 ( 14.6)
##
                                                                27 ( 3.6)
        Manitoba
                                 29 ( 3.6)
                                                31 (4.0)
##
        New Brunswick
                                 18 ( 2.2)
                                                 8 (1.0)
                                                                 9 (1.2)
                                 10 ( 1.2)
                                                10 ( 1.3)
                                                                10 ( 1.3)
##
        Newfoundland
##
        Nova Scotia
                                 22 ( 2.7)
                                                21 ( 2.7)
                                                                14 ( 1.8)
##
        Ontario
                                311 (38.2)
                                               277 (36.2)
                                                               294 (38.8)
##
        Prince Edward Island
                                  2 ( 0.2)
                                                 3(0.4)
                                                                 2 ( 0.3)
                                190 (23.3)
                                               176 (23.0)
                                                               185 ( 24.4)
##
        Quebec
                                 25 ( 3.1)
                                                                16 ( 2.1)
##
        Saskatchewan
                                                27 ( 3.5)
##
     chronic multi = 0 (%)
                                814 (100.0)
                                               766 (100.0)
                                                               758 (100.0)
##
     any_m_health = 1 (%)
                                175 ( 21.5)
                                               167 (21.8)
                                                               183 (24.1)
##
     hoinc (%)
##
        Bottom 3rd
                                158 ( 22.9)
                                               144 ( 22.4)
                                                               157 ( 25.0)
##
        Middle 3rd
                                438 (63.5)
                                               417 (65.0)
                                                               394 (62.8)
##
        Top 3rd
                                 94 (13.6)
                                                81 (12.6)
                                                                76 (12.1)
##
                             Stratified by wave
##
                              8
                                                    test
                                             p
##
                                769
     age_yrs (mean (SD))
##
                              29.06 (5.88)
                                             <0.001
     sex = Male (%)
##
                                335 (44.0)
                                              0.123
##
     edu (%)
                                              0.018
##
        College
                                409 (53.5)
##
        Graduate
                                135 (17.6)
##
        Primary
                                  7 ( 0.9)
##
        Secondary
                                214 ( 28.0)
##
     province_full (%)
                                              0.900
                                 90 (11.7)
##
        Alberta
```

##	British Columbia	100 (13.0)	
##	Manitoba	29 (3.8)	
##	New Brunswick	14 (1.8)	
##	Newfoundland	7 (0.9)	
##	Nova Scotia	21 (2.7)	
##	Ontario	313 (40.7)	
##	Prince Edward Island	1 (0.1)	
##	Quebec	175 (22.8)	
##	Saskatchewan	19 (2.5)	
##	chronic_multi = 0 (%)	769 (100.0) NA	١
##	$any_m_health = 1 (%)$	176 (22.9) 0.276	3
##	hoinc (%)	0.134	1
##	Bottom 3rd	153 (24.2)	
##	Middle 3rd	388 (61.5)	
##	Top 3rd	90 (14.3)	