Unhappy Metros: Panel Evidence

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Sunday 14th November, 2021 11:05

We study the effect of living in a metropolitan area on life satisfaction, or Subjective WellBeing (SWB). The literature agrees that residents of metropolitan areas tend to be less satisfied with their lives than residents of smaller settlements in the developed world. This is the first study using longitudinal dataset to test the "unhappy metro" hypothesis. Using the 2009-2019 US Panel Study of Income Dynamics (PSID), we find support for the corss-sectional findings: metros are less happy than nonmetros.

Panel Study of Income Dynamics (PSID), urban-rural happiness gradient, urban, cities, happiness, life satisfaction, Swubjective WellBeing (SWB)

For over 95% of our evolutionary history humans have lived without cities as hunter-gatherers usually in small bands of 50-80 people. In 1800 a mere 1.7% of the world population lived in cities larger than 100k Maryanski and Turner (1992), White and White (1977), Davis (1955) Humans have not evolved to live in settlements of millions at high densities, in cities. Human nature is unlike that of bees: by one estimate we're 90% chimp and only 10% bee (Haidt 2012).

Urbanism is not just built environment, but a way of life (Wirth 1938). Urbanism affects humans in multiple and profound ways, indeed urbanism is arguably the most significant disruption of human habitat in our species history (Okulicz-Kozaryn 2015). World is urbanizing at an astonishing pace–urban population will explode from .75b in 1950 in to 6.75b in 2050 (`https://population.un.org/wup`)–6 billion people put in urban areas over just 100 years.

At the same time an agreement has emerged that in addition to the traditional development measures such as Gross Domestic Product (GDP) and Human Development Index (HDI), it is useful to measure human development as Subjective WellBeing (SWB) (Stiglitz et al. 2009, Diener 2009).

There are multiple studies finding lowest happiness in largest cities (e.g., Gurin et al. 1960, **?**, Senior 2006, Office for National Statistics 2011, Chatterji 2013, Lu et al. 2015, Lenzi and Perucca 2016, Morrison 2015, Morrison and Weckroth 2017, Okulicz-Kozaryn and Valente 2021, Lenzi and Perucca 2021). Yet all studies to date are cross-sectional and panel evidence is missing.

Few studies that use panel data do not actually test the urban unhappiness hypothesis. White et al. (2013b) and White et al. (2013a) use British panel (BHPS) but test green space (such as gardens, parks, and proximity to coast), not size of a place. Similarly, Alcock et al. (2014) is a panel (BHPS) but also examining green space, not size of a place.

Hoogerbrugge and Burger (????) also using BHPS tests green space effect, not urbanism. The size of a place cutoff is at 10,000 people or even 3,000 people for Scottland. Hence, much of the places above the cutoff, such as large villages and small towns are not really "urban." They are lacking defining features of urbanness: size, density, and heterogeneity Wirth (1938). The build envirnment in villages or small towns lacks tall bildings, urban transit, airports, etc. Way of life in such places is not urban either, as it is not: shalow, transitory, superficial, or conspicious (Tönnies [1887] 2002, Park 1915, Wirth 1938, White and White 1977). Urbanicity, ideally, should be approached as a gradient, but if a binary cutoff is necessary it should be at several hundred thousand (Okulicz-Kozaryn 2016), not at 3 or 10 thoudsand as in Hoogerbrugge and Burger (????).

Rehdanz and Maddison (2008) uses a German panel dataset (GSOEP), properly defining urban rural happiness gradient with multiple cutoffs including at several hundred thousand, but without panel modelling techniques such as fixed or random effects.

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I thank Gordon D. A. Brown for sharing STATA code. All mistakes are mine.

1 Data and model

We use the 2009-2019 US Panel Study of Income Dynamics (PSID) from psidonline.isr.umich.edu. We cannot use earlier waves than 2009 because the SWB question only started in 2009. We use the family files and only retain household reference person (or head, as it used to be called). This is the same practice as in (Brown and Gathergood 2019).

The SWB question reads: "Please think about your life as a whole. How satisfied are you with it? Are you completely satisfied, very satisfied, somewhat satisfied, not very satisfied, or not at all satisfied?" on scale from 1 (low) to 5 (high).

The key independent variable is the metro dummy variable as defined in table 1. Summary statistics of metro and all other variables are in Supplementary Online Material (SOM).

metro	beale code	rural-urban	description
1	1		Metro: Counties in metro areas of 1 million population or more
1	2		Metro: Counties in metro areas of 250,000 to 1 million population
1	3		Metro: Counties in metro areas of fewer than 250,000 population
0	4		Nonmetro: Urban population of 20,000 or more, adjacent to a metro area
0	5		Nonmetro: Urban population of 20,000 or more, not adjacent to a metro area
0	6		Nonmetro: Urban population of 2,500 to 19,999, adjacent to a metro area
0	7		Nonmetro: Urban population of 2,500 to 19,999, not adjacent to a metro area
0	8		Nonmetro: Completely rural or less than 2,500 urban population, adjacent to a metro area
0	9		Nonmetro: Completely rural or less than 2,500 urban population, not adjacent to a metro area

Table 1: metro variable: Metropolitan/Non-metropolitan Indicator: This indicator is derived from the 2013 Beale-Ross Rural-Urban Continuum Codes published by USDA based on matches to the FIPS state and county codes: 1. Metropolitan area (Beale-Ross Code ER775923= 1-3); 0. Non-metropolitan area (Beale-Ross Code ER775923= 4-9). Each county in the U.S. is assigned one of the 9 codes.

We control for a usual set of SWB predictors following Okulicz-Kozaryn and Valente (2018). In addition, following Brown and Gathergood (2019) we also control for distress.

There are three variables that not only predict SWB, but also are likely to be confounded with metro: race, political views, and religiosity–yet, as they are mostly constant over short period of time such as that considered here, they are irrelevant in fixed effects model. Race is definitely almost always constant over time, and while political views and religiosity do change, they raraely change much over just several years as studied here. Furthermore, there are no measures of political views in PSID.

The US is a geographically diverse country with a multitude of regional differences that may affect the results, notably urban areas differ in their character greatly depending on the region, and hence, we include state dummies. Following Brown and Gathergood (2019) we also add year dummies.

We use a standard Fixed Effects model. Although OLS assumes cardinality of the outcome variable, and SWB measures are technically ordinal, cardinality can be assumed. Ferrer-i-Carbonell and Frijters (2004) has shown that linear model results are substantially the same as those from discrete models (and OLS is the default method in happiness research (Blanchflower and Oswald 2011)). Aside from practical estimation, even theoretically, while there is still debate about the cardinality of SWB, there are strong arguments to treat it as cardinal (Ng 1996, 1997, 2011).

A standard fixed effects model is given by:

$$SWB_{it} = \gamma METRO_{it} X_{it} \beta + \alpha_i + u_{it} \tag{1}$$

Where, $METRO_{it}$ is a metro dummy for person i at time t. γ is the main coefficient of interest on the metro dummy. α_i (i=1...n) is the unknown intercept for each person (n person-specific intercepts). SWB is the dependent variable, where i = person and t = wave (2009, 2011, 2013, 2015, 2017, 2019). X_{it} is a vector of control variables as listed in the Supplementary Online Material. β is the vector of coefficients for control variables. u_{it} is the error term.

In Supplementary Online Material (SOM), we also present Random Effects, 2015 and 2015-2019 pooled OLS results.

2 Results

Fixed effects regressions of SWB on metro are in table 2. Regression coefficient on `metro` is not significant without controling for predictors of SWB in model a1. But addition of even most basic SWB predictors in model a2 makes `metro` negative and significant at -.04. This is an important result–metro-nonmetro happiness gap only emerges when controlling for other SWB predictors. Addition of further controls in a3 attenuates `metro` coefficient only slightly down to -.03. Addition of control for distress in model a4 and further addition of state and year dummies in a5 yields the same estimate as only controlling for basic SWB predictors in a2 at -.04.

Table 2: Fixed Effects regressions of SWB.

	a1	a2	a3	a4	a5
metro	0.01	-0.04*	-0.03*	-0.04**	-0.04*
age		0.02***	0.02***	0.01***	0.00
age sq		-0.00**	-0.00	-0.00	-0.00
last year total family income		0.00*	0.00	0.00	0.00
unemployed		-0.18***	-0.18***	-0.16***	-0.16***
male		0.27	0.21	0.07	0.08
health		0.13***	0.13***	0.10***	0.10***
kids			-0.01	-0.01	-0.01
college			-0.08*	-0.07	-0.07
married			0.18***	0.17***	0.17***
family unit size			0.04***	0.03***	0.03***
distress				-0.05***	-0.05***
constant	3.71***	2.37***	2.45***	2.90***	3.60***
state and year dummies	no	no	no	no	yes
N	37567	37489	36285	36142	36142
*** p<0.01, ** p<0.05, * p<0.1					

3 Conclusion and Discussion

REPHRAZE: We study the effect of living in a metropolitan area on life satisfaction, or Subjective WellBeing (SWB). The literature agrees that residents of metropolitan areas tend to be less satisfied with their lives than residents of smaller settlements in the developed world. This is the first study using longitudinal dataset to test the "unhappy metro" hypothesis. Using the 2009-2019 US Panel Study of Income Dynamics (PSID), we find support for the corss-sectional findings: metros are less happy than nonmetros.

This is the first panel data investigation of metro-nonmetro happiness gap. The results confirm crosssectional evidence of urban unhappiness.

While the estimate of -.04 on 1-5 SWB scale may seem small, such effect size is not irrelevant. Even a finding of no effect would be useful and counterintuitive amid current pro-urbanism (Glaeser 2011, Glaeser et al. 2016, Burger et al. 2020).

Regression coefficients on `metro` are not significant without controling for predictors of SWB, so it is important to adjust the metro non-metro happiness gap with happiness predictors, unlike in Burger et al. (2020).[1]

Time invariant person-level characteristics, such as personality traits do matter–the metro unhappiness disadvantage is only about half in fixed effects model v single-year or pooled data (SOM).

Future research can improve in a number of ways. Use finer classfication than binary metro-nonmetro. As more waves become available, it will be possible to estimate SWB from moving across urbanicity.

CP/REPHRAZE TO ABS: About 50% of our traits are genetically determined (Ridley 2000), including happiness (Lykken and Tellegen 1996, **?**). Then person level characterists such as health and unemployment matter, and only small proportion of SWB variation is due to environmental factors such as urbanness. Health is one of the most important predictors of SWB (**??**). In full

[1]Burger et al. (2020) also uses faulty Gallup data as elaborated in Okulicz-Kozaryn and Valente (2021)–in general, one should steer away from Gallup happiness data–Gallup charges $30,000 for access (per one year), clearly "happiness industry", not happiness research Davies (2015).

model, a5, the coefficient on 5-step `health` is .10, hence, for instance, the negative effect of metro at -.04 is equivalent to the effect of one's health detriorating about third or half way from "fair" to "poor."

Again, urban population will increase by 6 billion, from .75b in 1950 in to 6.75b in 2050 (`https://population.un.org/wup`). Even an apprently small effect of -.04 on 1-5 SWB scale, but mutiplied by billions of humans urbanized, results in remarkable human unhappiness. Say, given an urbanization of 1m of people, the unhappiness effect is equivalent to, for instance, 40k people falling on SWB from say "very satisfied" to "somewhat satsified," or 10k people falling 4 steps from "very satisfied" to "not at all satisfied"

Supplementary Online Material (SOM)

[note: this section will NOT be a part of the final version of the manuscript, but will be available online instead]

3.1 Variables' Definitions

Table 3: Variable definitions.

name	description
swb	"Please think about your life as a whole. How satisfied are you with it? Are you completely satisfied, very satisfied, somewhat satisfied, not very satisfied, or not at all satisfied?" 1 (lo) - 5 (hi)
metro	"Metropolitan/Non-metropolitan Indicator. This indicator is derived from the 2013 Beale-Ross Rural-Urban Continuum Codes published by USDA based on matches to the FIPS state and county codes." 1 Metropolitan area (Beale-Ross Code ER775923= 1-3) 0 Non-metropolitan area (Beale-Ross Code ER775923= 4-9)
age	age
age sq	age squared
last year total family income	last year total family income
unemployed	EMPLOYMENT STATUS-1ST MENTION; We would like to know about what you do – are you working now, looking for work, retired, keeping house, a student, or what?–FIRST MENTION; 1="Looking for work, unemployed", 0 otherwhise
male	gender
health	"Now I have a few questions about your health. Would you say your health in general is excellent, very good, good, fair, or poor?" 1 (poor) to 5 (excellent)
kids	"Number of Persons Now in the FU Under 18 Years of Age"
college	"Did (you/he/she) attend college?" 1='yes', 0='no'
married	"Are you married, widowed, divorced, separated, or have you never been married?" 1='married'; 0 otherwhise
family unit size	Number of Persons in FU at the Time of the Interview
white	"What is (your/his/her) race? (Are you/Is [he/she]) white, black, American Indian, Alaska Native, Asian, Native Hawaiian or other Pacific Islander?–FIRST MENTION" 1='white', 0 otherwhise
distress	The K-6 Non-Specific Psychological Distress Scale

3.2 Summary statistics

```
      id:  2, 3, ..., 14365                              n =      10108
      yr:  2009, 2011, ..., 2019                         T =          6
           Delta(yr) = 1 unit
           Span(yr)  = 11 periods
           (id*yr uniquely identifies each observation)

Distribution of T_i:   min      5%     25%       50%       75%     95%     max
                         1       1       2         4         6       6       6
```

```
    Freq.  Percent    Cum. |  Pattern*
-------------------------+----------
     3179     31.45   31.45 |  111111
      723      7.15   38.60 |  ....11
      672      6.65   45.25 |  .....1
      548      5.42   50.67 |  ...111
      505      5.00   55.67 |  ..1111
      502      4.97   60.64 |  1.....
      481      4.76   65.39 |  .11111
      480      4.75   70.14 |  111...
      450      4.45   74.59 |  11....
     2568     25.41  100.00 | (other patterns)
-------------------------+----------
    10108    100.00         |  XXXXXX
-------------------------------------
*Each column represents 2 periods.
```

```
Variable          |      Mean   Std. Dev.       Min        Max |    Observations
------------------+--------------------------------------------+----------------
swb       overall |  3.718723   .8759134          1          5 |     N =   37767
          between |             .7136601          1          5 |     n =   10091
          within  |             .5603667   .5187227   6.552056 | T-bar = 3.74264
                  |                                           |
met       overall |  .7801749   .4141335          0          1 |     N =   37730
          between |              .385049          0          1 |     n =   10073
          within  |             .1878218  -.0531584   1.613508 | T-bar = 3.74566
                  |                                           |
age       overall |  44.85923   16.82858         16         99 |     N =   37928
          between |             17.23457         17         99 |     n =   10107
          within  |             2.911229   37.19257   51.60923 | T-bar = 3.75265
                  |                                           |
age2      overall |  2295.544   1698.311        256       9801 |     N =   37928
          between |             1728.178        289       9801 |     n =   10107
          within  |             285.6776   1268.044   3368.044 | T-bar = 3.75265
                  |                                           |
inc       overall |  61242.84   81095.25          0    3316000 |     N =   37912
          between |             66126.72          0    1883797 |     n =   10108
          within  |             39658.52 -937554.6    2052160 | T-bar = 3.75069
                  |                                           |
une       overall |  .0907629   .2872754          0          1 |     N =   37923
          between |             .2197753          0          1 |     n =   10108
          within  |             .2116276  -.7425705   .9240962 | T-bar = 3.75178
                  |                                           |
male      overall |  .5491432   .4975856          0          1 |     N =   37930
          between |             .4994373          0          1 |     n =   10108
          within  |             .0058544  -.2508568   1.049143 | T-bar = 3.75247
                  |                                           |
hea       overall |  3.436374   1.046857          1          5 |     N =   37862
          between |               .92175          1          5 |     n =   10100
          within  |             .5731675   .4363742   6.603041 | T-bar = 3.74871
                  |                                           |
kid       overall |  .6846296   1.119852          0         11 |     N =   37930
          between |             1.061457          0         11 |     n =   10108
          within  |             .4720193  -3.148704    5.18463 | T-bar = 3.75247
                  |                                           |
col       overall |  .6264205   .4837605          0          1 |     N =   36608
          between |             .4803487          0          1 |     n =    9674
          within  |             .0744979  -.2069129   1.459754 | T-bar = 3.78416
                  |                                           |
mar       overall |  .2802942   .4491489          0          1 |     N =   37928
          between |              .412416          0          1 |     n =   10107
          within  |             .1586708  -.5530391   1.113628 | T-bar = 3.75265
                  |                                           |
nFU       overall |  2.281413   1.412387          1         14 |     N =   37930
          between |             1.317328          1         13 |     n =   10108
          within  |              .615575  -3.468587   8.081413 | T-bar = 3.75247
                  |                                           |
whi       overall |  .5256386   .4993489          0          1 |     N =   37697
          between |             .4985538          0          1 |     n =   10038
          within  |             .0213918  -.2743614   1.192305 | T-bar = 3.75543
                  |                                           |
k         overall |  3.608904   4.151942          0         24 |     N =   37689
          between |             3.629813          0         24 |     n =   10083
          within  |             2.339743  -10.05776    22.6089 | T-bar = 3.73788
```

```
(obs=5.00  ,55  8.00  )

             |      swb      met      age     age2      inc      une     male      hea      kid      col      mar      nFU      whi
```

```
-------------+------------------------------------------------------------------------------------------------------------------
         swb |   1.00
         met |  -0.08     1.00
         age |   0.09    -0.05     1.00
        age2 |   0.09    -0.06     0.98     1.00
         inc |   0.13     0.06     0.10     0.06     1.00
         une |  -0.12     0.02    -0.19    -0.18    -0.13     1.00
        male |   0.09    -0.06    -0.01    -0.03     0.29    -0.02     1.00
         hea |   0.27     0.02    -0.24    -0.23     0.20    -0.01     0.15     1.00
         kid |  -0.01     0.02    -0.29    -0.30     0.01     0.09    -0.10     0.05     1.00
         col |   0.04     0.08    -0.08    -0.09     0.24    -0.12     0.06     0.17    -0.04     1.00
         mar |   0.20    -0.06     0.17     0.14     0.43    -0.12     0.55     0.13     0.10     0.14     1.00
         nFU |   0.04     0.01    -0.16    -0.19     0.16     0.05     0.08     0.06     0.86    -0.03     0.35     1.00
         whi |   0.09    -0.19     0.16     0.17     0.26    -0.16     0.26     0.12    -0.16     0.19     0.29    -0.09     1.00
           k |  -0.37    -0.00    -0.12    -0.12    -0.17     0.12    -0.14    -0.30     0.04    -0.10    -0.18    -0.02    -0.09     1.00


(obs=6,294)

             |      swb      met      age     age2      inc      une     male      hea      kid      col      mar      nFU      whi
-------------+------------------------------------------------------------------------------------------------------------------
         swb |   1.0000
         met |  -0.0233   1.0000
         age |   0.0701  -0.0482   1.0000
        age2 |   0.0704  -0.0482   0.9850   1.0000
         inc |   0.1675   0.0793   0.0604   0.0308   1.0000
         une |  -0.0931   0.0118  -0.1420  -0.1345  -0.1376   1.0000
        male |   0.0619  -0.0174  -0.0316  -0.0407   0.2897  -0.0217   1.0000
         hea |   0.3035   0.0486  -0.1854  -0.1776   0.2135  -0.0393   0.1189   1.0000
         kid |   0.0501  -0.0036  -0.2768  -0.2929   0.0566   0.0246  -0.0676   0.0553   1.0000
         col |  -0.0072   0.1033  -0.0532  -0.0633   0.2552  -0.1330   0.0317   0.1209  -0.0449   1.0000
         mar |   0.2059  -0.0181   0.1509   0.1293   0.4559  -0.1102   0.5009   0.1282   0.1246   0.1368   1.0000
         nFU |   0.1095  -0.0064  -0.1650  -0.1919   0.2014  -0.0005   0.0708   0.0593   0.8656  -0.0266   0.3526   1.0000
         whi |   0.0585  -0.1388   0.1392   0.1496   0.2572  -0.1132   0.2024   0.0756  -0.0782   0.1494   0.2623  -0.0181   1.0000
           k |  -0.3863  -0.0110  -0.1877  -0.1813  -0.1506   0.1098  -0.1076  -0.3022   0.0164  -0.0556  -0.1855  -0.0381  -0.0161   1.00
```

3.3 Panel Structure of Metro Variable

```
xttab met

                Overall            Between            Within
     met |    Freq.  Percent       Freq.  Percent        Percent
---------+-----------------------------------------------------
 Inap.:  |    8294     21.98       2947     29.26          77.39
 Metropol |   29436     78.02       8362     83.01          93.19
---------+-----------------------------------------------------
    Total |   37730    100.00      11309    112.27          89.07
                          (n = 10073)

xtsum met

Variable         |      Mean   Std. Dev.       Min        Max |    Observations
-----------------+--------------------------------------------+----------------
met      overall |  .7801749   .4141335          0          1 |     N =   37730
         between |              .385049          0          1 |     n =   10073
         within  |             .1878218  -.0531584   1.613508 | T-bar = 3.74566
```

3.4 Single Year And Pooled Results V FE Results

Table 4: Regressions of SWB: FE v OLS 2015

	c1-FE	c1-2015	c2-FE	c2-2015	c3-FE	c3-2015	c4-FE	c4-2015	c5-FE	c5-2015
metro	0.01	-0.11***	-0.04*	-0.12***	-0.03*	-0.10***	-0.04**	-0.09***	-0.04*	-0.08***
age			0.02***	-0.00	0.02***	-0.01**	0.01***	-0.01***	0.00	-0.01***
age sq			-0.00**	0.00**	-0.00	0.00***	-0.00	0.00***	-0.00	0.00***
last year total family income			0.00*	0.00***	0.00	0.00**	0.00	0.00*	0.00	0.00*
unemployed			-0.18***	-0.23***	-0.18***	-0.24***	-0.16***	-0.18***	-0.16***	-0.18***
male			0.27	0.08***	0.21	-0.05*	0.07	-0.06**	0.08	-0.06**
health			0.13***	0.26***	0.13***	0.26***	0.10***	0.18***	0.10***	0.18***
kids					-0.01	-0.04*	-0.01	-0.03	-0.01	-0.03
college					-0.08*	-0.12***	-0.07	-0.13***	-0.07	-0.13***
married					0.18***	0.28***	0.17***	0.24***	0.17***	0.24***
family unit size					0.04***	0.06***	0.03***	0.05***	0.03***	0.05***
distress							-0.05***	-0.06***	-0.05***	-0.06***
constant	3.71***	3.82***	2.37***	2.80***	2.45***	2.93***	2.90***	3.63***	3.60***	3.74***
state and year dummies	no	no	no	no	no	no	no	no	yes	yes
N	37567	6256	37489	6250	36285	6092	36142	6068	36142	6068
*** p<0.01, ** p<0.05, * p<0.1; robust std err (OLS)										

Table 5: Regressions of SWB: FE v OLS Pooled 2015-2019.

	d1-FE	d1-09-19	d2-FE	d2-09-19	d3-FE	d3-09-19	d4-FE	d4-09-19	d5-FE	d5-09-19
metro	0.01	-0.08***	-0.04*	-0.09***	-0.03*	-0.07***	-0.04**	-0.08***	-0.04*	-0.08***
age			0.02***	-0.00	0.02***	-0.01***	0.01***	-0.01***	0.00	-0.01***
age sq			-0.00**	0.00***	-0.00	0.00***	-0.00	0.00***	-0.00	0.00***
last year total family income			0.00*	0.00***	0.00	0.00***	0.00	0.00***	0.00	0.00***
unemployed			-0.18***	-0.25***	-0.18***	-0.25***	-0.16***	-0.20***	-0.16***	-0.20***
male			0.27	0.05***	0.21	-0.08***	0.07	-0.11***	0.08	-0.10***
health			0.13***	0.25***	0.13***	0.25***	0.10***	0.17***	0.10***	0.17***
kids					-0.01	-0.03***	-0.01	-0.02***	-0.01	-0.02***
college					-0.08*	-0.10***	-0.07	-0.11***	-0.07	-0.11***
married					0.18***	0.29***	0.17***	0.26***	0.17***	0.26***
family unit size					0.04***	0.04***	0.03***	0.04***	0.03***	0.04***
distress							-0.05***	-0.06***	-0.05***	-0.06***
constant	3.71***	3.78***	2.37***	2.77***	2.45***	2.91***	2.90***	3.60***	3.60***	3.66***
state and year dummies	no	no	no	no	no	no	no	no	yes	yes
N	37567	37567	37489	37489	36285	36285	36142	36142	36142	36142
*** p<0.01, ** p<0.05, * p<0.1; robust std err (OLS)										

3.5 Random Effects

Table 6: RE regressions of SWB.

	b1	b2	b3	b4	b5
metro	-0.04***	-0.05***	-0.04***	-0.05***	-0.06***
age		0.00	-0.01***	-0.01***	-0.01***
age sq		0.00***	0.00***	0.00***	0.00***
last year total family income		0.00***	0.00***	0.00***	0.00***
unemployed		-0.22***	-0.22***	-0.19***	-0.19***
male		0.07***	-0.05***	-0.08***	-0.08***
health		0.19***	0.19***	0.14***	0.14***
kids			-0.02**	-0.02**	-0.02**
college			-0.06***	-0.08***	-0.08***
married			0.27***	0.24***	0.25***
family unit size			0.04***	0.04***	0.04***
distress				-0.05***	-0.05***
constant	3.74***	2.92***	3.03***	3.59***	3.68***
state and year dummies	no	no	no	no	yes
N	37567	37489	36285	36142	36142

*** p<0.01, ** p<0.05, * p<0.1

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