

# Unhappy Metros: Satisfaction With Life Scale (SWLS)

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CP as first para in summary/discussion:

There are dozens, possibly hundreds, of studies on urban-rural happiness gradient, but all studies use a simplistic single item measurement of SWB. Such limitation is understandable and common, as multi-item or scale measurement is typically restricted to small sample laboratory settings. And urbanicity deriving from place of residence by definition requires wide geographical coverage and large sample. This is the first study of urban rural happiness gradient using elaborate multi-item and scale (SWLS) measurement of SWB. SWLS scale confirms earlier single-item finding of urban rural happiness gradient. Urbanites fail especially on last item "If I could live my life over, I would change almost nothing" indicating that urban way of life may result in regrets.

XXX TODO ADD TO EBIB AS KEYWORD PAPER-CODE-NAME AND TAG WITH EBIB KEYWORDS

The evidence of urban-rural happiness gradient is mounting. urban unhappiness is common and some morrison stuff and couple others like 10 from that boilerplate in recent cities article about least happy places around the world specific cities but guess The urban-rural happiness gradient states that happiness raises from its lowest in largest cities to highest in smallest places, little towns, villages, and open country.

Yet all studies to date use simple measurement of SWB, typically a single measure, this the first comprehensive study to use an elaborate set of measures including multi-item SWSL scale

## 1 Data

boilerplate on psid from first paper

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All mistakes are mine.

**Table 1:** Variable definitions.

name	description
A1 SATISFIED W/ LIFE AS WHOLE	"How satisfied are you with your life as a whole these days?"
A2 WHICH STEP OF LADDER	"Suppose that the top of the ladder below represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder do you feel you personally stand at the present time?"
life is close to ideal	"How much do you agree or disagree with each of the following statements: In most ways, my life is close to my ideal."
conditions of life excellent	"(How much do you agree or disagree with each of the following statements:) The conditions of my life are excellent."
satisfied with life	"(How much do you agree or disagree with each of the following statements:) I am satisfied with my life."
gotten the important things	"(How much do you agree or disagree with each of the following statements:) So far, I have gotten the important things I want in life."
would change almost nothing	"(How much do you agree or disagree with each of the following statements:) If I could live my life over, I would change almost nothing."
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
employment status	"We would like to know about what (you/HEAD) (do/does) – (are/is) (you/HEAD) working now, looking for work, retired, keeping house, a student, or what?–FIRST MENTION"
race	"What is (your/his/her) race? (Are/Is) (you/he/she) white, black, American Indian, Alaska Native, Asian, Native Hawaiian or other Pacific Islander?–FIRST MENTION" NOTE: "latino" category derived from ER64809: " In order to get an idea of the different races and ethnic groups that participate in the study, I would like to ask you about (your/your spouse's/[HEAD]'s) background. (Are/Is) (you/he/she) Spanish, Hispanic, or Latino? That is, Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or other Spanish?"
kids	"Number of Persons Now in the FU Under 18 Years of Age"
college	"Did (you/he/she) attend college?" 1='yes', 0='no'
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)
male	gender
married	"Are you married, widowed, divorced, separated, or have you never been married?" 1='married'; 0 otherwise
family unit size	Number of Persons in FU at the Time of the Interview
A4B HOW IMPORTANT CITY I LIKE	"(Below is a list of things that may or may not be important to you. How important are each of the following to you: ) Living in a city or place that I like."

this is the one using 2016 wellbeing module and regress on urbanicity do all these scales from well being module on urb rur, also see like negative affect shit—maybe cities increase neg affect as opposet to lowering positive, like there is a lot of positive but maybe more negative than in smallest places

and using 2016 module, megered with 2015 family file, which helps a bit with causality/endogeneity as SWB is observed in 2016, and all other covariates in 2015. Still, of course, as any non-experimental study, the present study is observational or correlational.

Diener's Satisfaction With Life Scale (SWLS) (Diener et al. 1985) consists of 5 items as swhown in table ?? . SWLS is the most popular scale for measurment of life satisfaction, eg the original paper (Diener et al. 1985) is cited over 30k.

More recently, Diener concludes that SWLS has "good convergent validity with other scales and with other types of assessments

of subjective well-being. Life satisfaction as assessed by the SWLS shows a degree of temporal stability (e.g., 0.54 for 4 years), yet the SWLS has shown sufficient sensitivity to be potentially valuable to detect change in life satisfaction during the course of clinical intervention. Further, the scale shows discriminant validity from emotional well-being measures." (Pavot and Diener 2009, p. 101).

Let's look closer at items. Pavot and Diener (2009): rephrase "the last item is the weakest in terms of convergence with other items. This may be because most of the items refer primarily to the present, whereas the fifth item refers primarily to the past, although this interpretation will require empirical testing."

A similar point is made by Slocum-Gori et al. (2009) that in terms of unidimensionality of SWLS it holds up reasonably well, except the last item.

Oishi (2006) points out that: first three items focus on external living conditions or the present level of satisfaction: life is close to ideal, conditions of life excellent satisfied with life

last two items assess one's satisfaction with past accomplishments gotten the important things would change almost nothing

we have used alpha command in Stata to make a scale, reliability of ???

## 2 Results

We proceed as follows. sts lif, ladder, swls, and then dig dipper and look at each SWLS item separately

we start with basic controls in columns a1\*, and can see that  $\chi^2$

//TODO regA regB discuss magnitudes side by side

Summary	statistics	mean			
by	categories	of	met	(metro)	
met	WB16A3A	WB16A3B	WB16A3C	WB16A3D	WB16A3E
nonmetro	3.710	3.660	3.860	3.880	3.320
metro	3.650	3.630	3.880	3.800	3.170

**Table 2:** means of swb by metro

**Table 3: OLS regressions of SWB.**

	a1a	a1b	a1c	a2a	a2b	a2c	a3a	a3b	a3c
	satisfied	life	satis-	satisfied	life	satis-	satisfied	life	satis-
	with life as a	fraction	ladder	with life as a	fraction	ladder	with life as a	fraction	ladder
	whole			whole			whole		
metro	-0.08+	-0.09	-0.07+	-0.11**	-0.19*	-0.10*	-0.14**	-0.23**	-0.12**
age	-0.00	0.00	-0.02*	-0.00	-0.00	-0.02*	-0.00	-0.01	-0.02**
age sq	0.00	0.00	0.00**	0.00	0.00	0.00**	0.00	0.00	0.00***
last year total	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***
family income									
temp not working	-0.15	-0.56	-0.36	-0.18	-0.64	-0.37	-0.15	-0.58	-0.34
unemployed	-0.21**	-0.47**	-0.32***	-0.22**	-0.51**	-0.33***	-0.20**	-0.46**	-0.30***
retired	0.17***	0.19+	0.14**	0.17***	0.20+	0.15**	0.15**	0.17+	0.13**
disabled	-0.05	-0.23	-0.22**	-0.07	-0.28+	-0.23**	-0.07	-0.26+	-0.22**
housekeeping	-0.03	-0.05	-0.02	-0.04	-0.07	-0.02	-0.03	-0.05	-0.02
student	-0.18	-0.39	-0.21	-0.20	-0.44	-0.21	-0.21	-0.46	-0.23
kids	-0.07*	-0.08	-0.03	-0.06*	-0.07	-0.03	-0.06*	-0.07	-0.03
college	-0.07*	-0.20**	-0.09**	-0.05	-0.16*	-0.08*	-0.06+	-0.17*	-0.08**
health	0.28***	0.56***	0.26***	0.28***	0.57***	0.26***	0.27***	0.54***	0.25***
male	-0.09*	-0.18*	-0.11**	-0.07+	-0.13	-0.10**	-0.05	-0.08	-0.08*
married	0.19***	0.51***	0.32***	0.21***	0.56***	0.33***	0.21***	0.54***	0.32***
family unit size	0.08**	0.08	0.04+	0.07**	0.06	0.04	0.07**	0.06	0.04
black				0.18***	0.46***	0.09*	0.16***	0.42***	0.07+
other				0.45**	0.36	0.24	0.44**	0.34	0.22
asian				0.10	0.11	0.09	0.13	0.16	0.12
latino				0.09	-0.54	0.00	0.13	-0.45	0.05
rac==Other				0.17	0.53*	0.18+	0.17	0.53*	0.18+
important to live in a city/place that one likes							0.16***	0.32***	0.17***
constant	2.79***	4.84***	3.06***	2.68***	4.54***	3.00***	2.15***	3.43***	2.42***
state dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	3707	3696	3722	3694	3683	3710	3685	3673	3700

+ p<0.10,  
 \* p<0.05,  
 \*\* p<0.01,  
 \*\*\* p<0.001;  
 robust std err

**Table 4:** OLS regressions of SWB.

	b2a life is close to ideal	b2b conditions of life excellent	b2c satisfied with life	b2d gotten the important things	b2e would change almost nothing	b3a life is close to ideal	b3b conditions of life excellent	b3c satisfied with life	b3d gotten the important things	b3e would change almost nothing
metro	-0.07	-0.09+	-0.01	-0.11*	-0.16**	-0.10+	-0.12*	-0.04	-0.13**	-0.19**
age	-0.01	-0.01+	-0.01	-0.03***	-0.03**	-0.01	-0.02*	-0.01	-0.03***	-0.03**
age sq	0.00	0.00+	0.00	0.00***	0.00**	0.00+	0.00*	0.00	0.00***	0.00**
last year total	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***
family income										
temp not working	-0.34	-0.40	-0.59	-0.14	-0.38	-0.31	-0.37	-0.56	-0.11	-0.35
unemployed	-0.33***	-0.28***	-0.30***	-0.39***	-0.33***	-0.31***	-0.26**	-0.27**	-0.37***	-0.31**
retired	0.07	0.12+	0.12*	0.20***	0.20**	0.06	0.10	0.11+	0.18**	0.18*
disabled	-0.22**	-0.23**	-0.24**	-0.24**	-0.25*	-0.21*	-0.23**	-0.23*	-0.23*	-0.24*
housekeeping	-0.21*	0.06	-0.06	0.07	0.01	-0.20*	0.07	-0.05	0.08	0.02
student	-0.15	-0.18	-0.15	-0.35+	-0.23	-0.16	-0.19	-0.16	-0.37+	-0.25
kids	-0.02	-0.05	-0.03	-0.00	-0.02	-0.02	-0.05	-0.03	-0.00	-0.02
college	-0.07+	-0.05	-0.09*	-0.00	-0.17***	-0.07+	-0.06	-0.10*	-0.01	-0.17***
health	0.28***	0.32***	0.27***	0.20***	0.24***	0.27***	0.30***	0.26***	0.19***	0.22***
male	-0.06	-0.03	-0.11*	-0.18***	-0.13*	-0.04	-0.01	-0.09*	-0.15***	-0.11+
married	0.33***	0.28***	0.31***	0.37***	0.35***	0.33***	0.27***	0.30***	0.37***	0.34***
family unit size	0.02	0.03	0.04	0.04	0.04	0.02	0.03	0.05	0.04	0.04
black	0.08+	0.08+	0.17***	-0.03	0.14**	0.06	0.05	0.14***	-0.05	0.12*
other	0.38	0.31	0.20	0.33+	-0.00	0.36	0.29	0.18	0.31+	-0.02
asian	0.18	0.02	0.08	0.09	0.08	0.21	0.05	0.10	0.12	0.11
latino	-0.01	-0.01	0.45	-0.20	-0.19	0.04	0.04	0.49+	-0.15	-0.13
rac==Other	0.14	0.20	0.16	0.06	0.36*	0.14	0.21	0.16	0.07	0.36*
important to live in a city/place that one likes						0.16***	0.19***	0.17***	0.16***	0.18***
constant	2.84***	2.73***	2.87***	3.36***	3.01***	2.34***	2.11***	2.31***	2.81***	2.40***
state dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	3694	3689	3683	3688	3695	3684	3679	3673	3678	3685

+ p<0.10,  
\* p<0.05,  
\*\* p<0.01,  
\*\*\* p<0.001;  
robust std err

### 3 Conclusion and Discussion

summary boilerplate main points

in regressions: The largest diff on last item “If I could live my life over, I would change almost nothing” and similar 3/2 of 4th one which also has similar meaning: “So far I have gotten the important things I want in life”

about 2x of first two “In most ways my life is close to my ideal.” and “The conditions of my life are excellent.” and ?x of third (and insig) “I am satisfied with my life.”—about the same urb and rur

we can speculate suggests that perhaps city exposes one to various stimuli and experiences that make an urbanite regret things in life and wish it went in different direction, whereas in rural areas choices and pathways may be more limited and easier PARADOX oF CHOICE remains for future research to explore it more in detail; perhaps in a way “ignorance is a bliss”

as a sidenote: ware i wish i hadnt work so hard, and urbanites work more (rosenthal?)

# 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]

## Variables' definitions, coding, and distributions

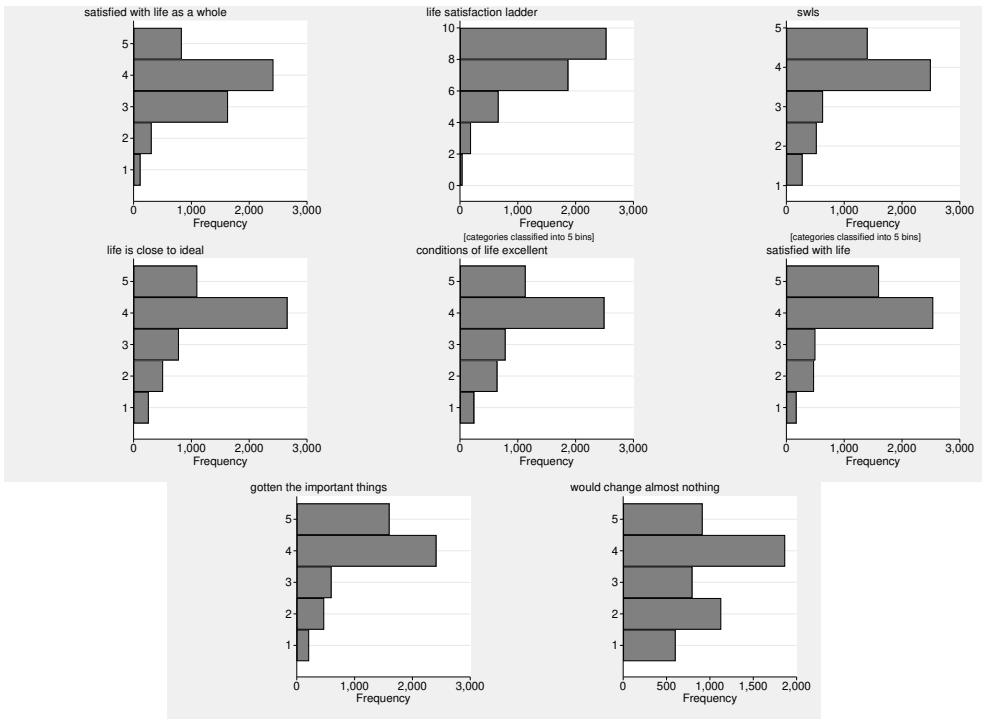


Figure 1: Variables' distribution.

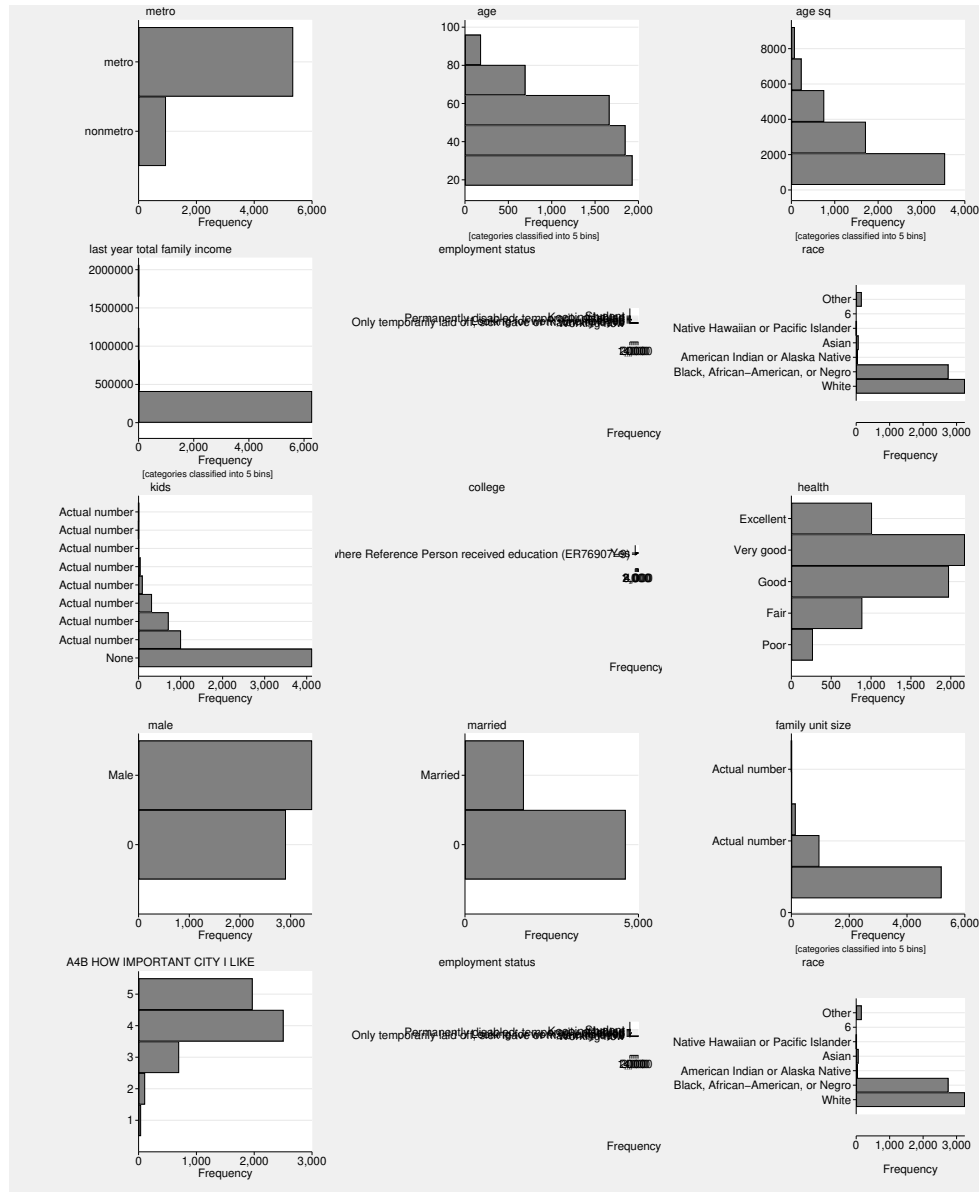


Figure 2: Variables' distribution.

## References

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