



Dissatisfaction with city life: A new look at some old questions

Brian J.L. Berry^{a,*}, Adam Okulicz-Kozaryn^b

^aSchool of Economic, Political and Policy Sciences, The University of Texas at Dallas, 800 W. Campbell Road, GR31, Richardson, TX 75080-3021, United States

^bHarvard-MIT Data Center, 1737 Cambridge St., Harvard University, Cambridge, MA 02138, United States

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ABSTRACT

Data from the World Values Survey are used in multilevel statistical models to evaluate received theory about preferences for rural versus big-city living, as evidenced by variations in life satisfaction/happiness/utility and its converse, life *dissatisfaction*. The models control for individual-level determinants of life satisfaction plus such embedding circumstances as level of development and culture region. For most parts of the world there is no evidence that either rural or big-city living are associated with variations in happiness or unhappiness; personal characteristics and level of development are the key driving forces. The exceptions are in rapidly-urbanizing Asia, where life dissatisfaction is lower in big cities than elsewhere, and in higher income countries, particularly those of Anglo-Saxon heritage, where life dissatisfaction increases with big-city residence and is significantly lower in rural areas. The Asian experience is consistent with the expectations of received urban theory for regions experiencing the upswing of the urban transition and rapid rural-to-urban migration while the higher income Anglo-Saxon experience conforms with expectations about preferences for low-density living close to nature that are traits of that culture.

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Introduction

A July 1, 2008 story in London's *Daily Telegraph* captured our attention by proclaiming that "The urge to escape the big city remains as strong as ever ... there are powerful urges ... to escape (following) well-worn migration routes ... trodden by generations before."¹ Almost simultaneously came the announcement of the latest wave of the World Values Survey (WVS), which for the last quarter-century has been exploring the factors associated with personal feelings of happiness or life satisfaction.² Earlier value surveys had pointed to cross-national differences in preferences for place of residence: "The pattern of preference is ... the reverse of the pattern of settlement. Rural living is preferred in the most urbanized parts of the world, whereas urban living is seen as most desirable in the least urbanized parts" (Angst, 1978, quoted in Veenhoven (1994, p. 42)) but using the earliest waves of the WVS, Veenhoven went on to argue that what is at stake is happiness with rural life rather than with urban living: "In developed countries rural people tend to be equally satisfied with life as city-people. In the underdeveloped countries rural dwellers are markedly less happy than city-dwellers."

What are raised are some of the grand questions of urban theory. A quarter-century of WVS data can now be deployed to cast

light on the relative happiness/unhappiness (= life satisfaction/dissatisfaction) of rural as opposed to big-city residents in various parts of the world, and by extension of the residential preferences that both drive and are driven by urbanward migration. That is what is attempted in what follows. We begin with a brief discussion of classical urban theory and follow with an overview of the WVS data and the principal findings of happiness research. We then present the results of new statistical analyses, focusing on the factors associated with variations in life *dissatisfaction*, controlling for many of the factors responsible for variations in dissatisfaction at the individual and societal levels that might affect rural/big-city preferences. We conclude by relating the findings to the "big ideas" of classical urban theory.

The roots of urban theory

Received urban theory has its roots in the great transition to urban-industrial society that took place in Europe in the 19th century, drawn together by a succession of end-of-century thinkers who attempted to understand its nature and consequences (Berry, 1973). Among these, Tönnies (1887) argued that the modern state, science, cities and large-scale trade, were the prime movers in the transition from *gemeinschaft*, in which the basic unit of organization was the family or kin-group characterized by social relations that were instinctive and habitual, to *gesellschaft*, in which social and economic relationships are based upon contractual obligations among individuals, returns to the individual are based upon com-

* Corresponding author. Tel.: +1 9728834988.

E-mail address: brian.berry@utdallas.edu (B.J.L. Berry).

¹ <http://www.telegraph.co.uk/property/main.jhtml?xml=/property/2008/07/01/pmigration101>.

² <http://www.sciencedaily.com/releases/2008/06/080630130129.htm>.

petitive bidding, and the major groups that influence the individual are no longer kin, but professional peers. Durkheim (1893) saw the accompanying increase in division of labor to be an irreversible process involving the grouping of little societies into larger aggregates, leading to increasing social division of labor, a product of increasing numbers of individuals within cities and to the multiplication of interactions and contacts. Simmel (1903) explored the psychological correlates. Before the transition there was complete immersion of the individual in an immediate small group; afterwards, the individual assumed a specialized role in mass society. Steady rhythms of habitual behavior existing at the unconscious level were replaced by the external stimuli of big-city life, requiring continual conscious response. Weber (1922) argued that an increased rationalization of society was necessary to provide order, because in big cities behavior had become dependent upon the individual who, acting with self-conscious rationality, required the certainty of rules provided by institutions and administered by a bureaucracy to function effectively.

In the first statistical assessment of the shifts, *Growth of Cities in the 19th Century*, Weber (1899) wrote that while city growth favored the development of a body of artisans and factory workmen who were more efficient than rural residents and were positioned to begin a slow ascent up the social and economic ladder, city life also produced extremes. The most hopeless poverty, as well as the most splendid wealth, were found in the cities, the danger of class antagonism was grave, and the complexity of city government made it the most difficult kind of government to watch. The industrial system was engendering egoistic, self-seeking and materialistic attitudes: the larger the town the feebler the bonds of moral cohesion and the greater the concentration of unhappiness as evidenced by increases in epidemic disease, crime, insanity and suicide.

It remained for Wirth (1938) to draw together these ideas into a theory of the effects of cities on individual life satisfaction and social relationships. To Wirth big cities were points of population concentration and high population density, their growth fed by massive migration that produced marked heterogeneity of their inhabitants. He derived from size, density and heterogeneity the consequences for social life that had been outlined by the earlier philosophers: impersonality, isolation, the decline of primary group membership and the dominance of formal organizations. Increasing size produced greater volumes of human interaction and interpersonal contacts that were progressively more impersonal, superficial and transitory, viewed simply as means to individual ends. High population density produced frequent physical contacts, high-pace living, and both class-based and ethnic segregation. For those unable to find a secure life in some specialized role or segregated sub-area, the likelihood of dysfunctional, deviant or pathological behavior was seen to increase, particularly where densities were the highest. Finally, the greater heterogeneity of the new cities made people tend to place emphasis on visual recognition and symbolism, and such things as the place of residence in a differentiated and segregated residential mosaic became status symbols. Thus size, density and heterogeneity were thought to lead sequentially to differentiation, formalization of institutions, and to anomie – to highly selective responses to the nervous stimulation and to the possibility of psychological overload (for elaboration see Fischer (1972, 1973)). While there were great opportunities for social mobility, there also was unhappiness, social isolation and deviance: big-city living, in Wirth's view, led not simply to economic and social opportunity, but also to unhappiness and to social malaise.

The World Values Survey

If we correctly interpret this theory, the transition from rural-to-urban living should initially produce rising levels of life satisfac-

tion and happiness, but big-city life should ultimately be accompanied by rising levels of dissatisfaction, by alienation, by social malaise, and by the attempt by some to recapture an imagined rural idyll (and in fact we find evidence to this effect). To probe the ideas we turn to the World and European Values Surveys. As noted at www.icpsr.umich.edu/cocoon/ICPSR/STUDY/04531.xml#bibliographic-description, which is quoted in the next three paragraphs, the

“World and European Values Surveys series were designed to enable a cross-national, cross-cultural comparison of values and norms on a wide variety of topics and to monitor changes in values and attitudes across the globe. They were carried out in 1981–1984, 1990–1993, 1995–1997, and 1999–2004 [note: as of this writing a new round has been completed], but now have been integrated into one dataset to facilitate time series analysis.”

“The surveys provide data from representative national samples of the publics of approximately 81 societies (covering 60 countries) that contain 85 percent of the world's population and cover a full range of variation, from societies with per capita incomes below 300 dollars per year, to societies with per capita incomes of more than 35,000 dollars per year, from long-established democracies to authoritarian states, and from societies with market economies to societies that are in the process of emerging from state-run economies. The surveys cover societies that were historically shaped by a wide variety of religious and cultural traditions, from Christian to Islamic to Confucian to Hindu. The societies covered range from those whose culture emphasizes social conformity and group obligations to societies in which the main emphasis is on human emancipation and self-expression. Broad topics covered in the integrated file include perception of life, family, work, traditional values, personal finances, religion and morals, the economy, politics and society, the environment, allocation of resources, contemporary social issues, national identity, and technology and its impact on society.”

“Specifically, respondents were asked whether the following acts were ever justifiable: suicide, cheating on taxes, lying, euthanasia, divorce, and abortion. Respondents were also asked about the groups and associations they belonged to, which ones they worked for voluntarily, the ethnic group(s) they would not want as neighbors, their general state of health, and whether they felt they had free choice and control over their lives. A wide range of items was included on the meaning and purpose of life, such as respondents' views on the value of scientific advances, the demarcation of good and evil, and religious behavior and beliefs. Respondents were also queried about their attitudes toward morality, politics, sexual freedom, marriage, single parenting, child-rearing, and the importance of work, family, politics, and religion in their lives. Questions relating to work included what financial and social benefits were most important to them in a job, how much pride they took in their work, if they were happy with their current position, and their views on owner/state/employee management of business. Questions pertaining to the stability of the world economy and whether respondents were happy with their financial situation were also asked. Respondents' opinions on various forms of political action, the most important aims for their countries, confidence in various civil and governmental institutions, and whether they would fight in a war for their country were also elicited. Demographic information includes family income, number of people residing in the home, size of locality, region of residence, occupation of the head of household, and the

Table 1
WVS samples used in the analysis.

Country	Year	Observations	Country	Year	Observations
Albania	2002	1000	Jordan	2001	1223
Algeria	2002	1282	Kyrgyzstan	2003	1043
Argentina	1999	1280	Latvia	1999	1013
Armenia	1997	2000	Lithuania	1999	1018
Australia	1995	2048	Luxembourg	1999	1211
Austria	1999	1522	Macedonia	2001	1055
Azerbaijan	1997	2002	Malta	1999	1002
Bangladesh	2002	1500	Mexico	2000	1535
Belarus	2000	1000	Morocco	2001	2264
Belgium	1999	1912	Netherlands	1999	1003
Bosnia & Herzegovina	2001	1200	New Zealand	1998	1201
Brazil	1997	1149	Nigeria	2000	2022
Bulgaria	1999	1000	Pakistan	2001	2000
Canada	2000	1931	Peru	2001	1501
Chile	2000	1200	Philippines	2001	1200
China	2001	1000	Poland	1999	1095
Colombia	1998	2996	Portugal	1999	1000
Croatia	1999	1003	Puerto Rico	2001	720
Czech Republic	1999	1908	Republic of Korea	2001	1200
Denmark	1999	1023	Republic of Moldova	2002	1008
Dominican Republic	1996	417	Romania	1999	1146
Egypt	2000	3000	Russian Federation	1999	2500
Estonia	1999	1005	Saudi Arabia	2003	1502
Finland	2000	1038	Serbia & Montenegro	2001	2260
France	1999	1615	Singapore	2002	1512
Georgia	1996	2008	Slovakia	1999	1331
Germany	1999	2036	Slovenia	1999	1006
Great Britain	1999	1000	South Africa	2001	3000
Greece	1999	1142	Spain	2000	1209
Hungary	1999	1000	Sweden	1999	1015
Iceland	1999	968	Switzerland	1996	1212
India	2001	2002	Tanzania	2001	1171
Indonesia	2001	1004	Turkey	2001	4607
Iran	2000	2532	Uganda	2001	1002
Iraq	2004	2325	Ukraine	1999	1195
Ireland	1999	1012	United States	1999	1200
Israel	2001	1199	Uruguay	1996	1000
Italy	1999	2000	Venezuela	2000	1200
Japan	2000	1362	Viet Nam	2001	1000
			Zimbabwe	2001	1002

respondent's age, sex, occupation, education, religion, religiosity, political party and union membership, and left-right political self-placement."

We selected the WVS data for the period 1995–2004, the surveys centering on the year 2000, the year for which such national-level data as real per capita gross domestic product at purchasing power parity were available on a consistent basis. The WVS sample coverage is outlined in Table 1.³ Of particular interest was one WVS question: "All things considered, how satisfied are you with your life as a whole these days?" Respondents were asked to answer this question on a scale from 1 to 10, where 10 is the most satisfied. Their responses have been used as a dependent variable in individual investigations of happiness and mean responses have typically become the dependent variable in cross-national analyses. Psychologists, in particular, have probed the reasons for variations in individual happiness/unhappiness. Their investigations have a typical form: the dependent variable is operationalized as the self-reported rating of life satisfaction, and the array of variables used to help explain individual variations in happiness has included operational forms of:

1. *Biological needs*: you cannot be happy if you are undernourished.
2. *Leisure*: once biological needs are met, leisure time increases happiness.

3. *Personal income* (and personal income change): money does buy happiness, but only to a point.
4. *Goals vs. needs*: goals that are congruent with needs promote happiness.
5. *Cultural factors*: culture moderates the impact of other happiness determinants.
6. *Personality*: extroverts have a temperamental predisposition to happiness.
7. *Health*: healthy people are happy people, but not if they are poor.
8. *Religion*: helps to make sense of life and counters unhappiness.
9. *Marriage*: a form of social capital that promotes social well-being.
10. *Age*: the young are optimistic, the old are accomplished, and the middle-aged are unhappy.
11. *Gender*: women tend to be more depressed, but also have more positive affect than men.
12. *Education*: increases social status and feelings of self-worth.

Two major articles summarize this research, Myers (2000) and Diener and Seligman (2004). Myers, recognizing that many of these variables are not independent of each other, concluded that happiness comes from three sources:

1. *Personal characteristics/activities*: traits and temperaments (e.g. extroversion) and leisure, but, disagreeing with findings

³ Seventy-five percent of the observations were taken in the period 1999–2001.

reported by others, not gender, age, or personal income (assuming that one can afford the necessities).

2. *Characteristics of the collectivity*: affluent culture, political freedom/rights, per capita gross national product (GNP) up to \$8000.
3. *The relationship between people and groups*: social capital (e.g. friendship and religion).

Diener et al. (1993) offer cautionary notes about causation, arguing for example that it is not a strong economy that leads to well-being, but rather the other way round: well-being leads to desirable societal outcomes such as health, longevity, and productivity. Another problem with emphasizing economic well-being is that the positive effect of greater income is offset by increasing wants. This is not a new idea. Durkheim puts it this way: “The more one has the more one wants, since satisfactions received only stimulate instead of filling needs” (Durkheim, 1950, p. 110). The notion has been extended by Easterlin (1974, 1995, 2001, 2003, 2005), who argues that a more complete happiness function should be composed of both aspirations and achievements. People have aspirations that they try to satisfy. Once aspirations are satisfied, happiness should follow. However new achievements result in new and greater aspirations, because through a process of hedonic adaptation people adapt to new circumstances, whether good or bad, quite rapidly; hence, their life satisfaction is impacted by increasing income in the short run only. The gains are lost as new aspirations open a gap with achievement. Thus, personal income may be a poor measure of well-being in developed nations; it matters only in poor nations. At higher levels of income it is other factors that make people happy: life in a democratic and stable society that provides material resources to meet needs; presence of supportive friends and family; rewarding and engaging work; good health, and available treatment if there are mental problems; goals related to values; and a philosophy or religion that provides guidance, purpose, and meaning to life. What is clear from this is that in any complete investigation of life satisfaction both individual and contextual/societal variables must be considered, as must the cross-level interactions between them. This is the strategy we use in what follows, controlling for selected individual and contextual variables to see whether big-city or rural residence have separable effects on satisfaction/dissatisfaction.

Factors associated with life dissatisfaction

Thus, the WVS life satisfaction variable is used as the dependent variable in what follows, but in contrast to previous research we invert the 1–10 scale to 10–1 to create a measure of *dissatisfaction*, or *unhappiness*.

To capture the effects of big-city versus rural living on life dissatisfaction we selected as right-hand variables the extreme size categories used by WVS to describe the settlements in which respondents lived: places of less than 2000 population and cities with more than 500,000 residents. As a precautionary measure, models were run with other size specifications, but the results were robust and we therefore only report the coefficients associated with the extreme size specifications here.

Following Myers (2000), we then added controls for personal characteristics, characteristics of the collectivity and relationships between the individual and the collectivity. This was done to determine whether, in the presence of the individual and cross-national influences captured by these controls, there still was evidence of rural vs big-city differences in life satisfaction. The individual traits included are age, income, marital and employment status, the first two with quadratic specification to capture effects that have already been well documented. For safety models

Table 2
Description of variables.

Variable	
Settlement < 2K	Live in a place with population less than 2000: 1; otherwise 0
City >500K	Live in a city with population more than 500,000: 1; otherwise 0
Age	Age of respondent
Age ²	The square of age, for nonlinearity
Income	Self-reported income on scale 1–10
Married	If married: 1; otherwise 0
Divorced	If divorced: 1; otherwise 0
Unemployed	If unemployed: 1; otherwise 0
GDP/cap in 0000 s of \$PPP	Gross domestic product per capita in \$10,000 s at purchasing power parity
(GDP/cap) ²	To account for nonlinearity
Income*GDP/cap	The cross-level interaction of personal income and national GDP per capita

were run with other individual covariates – educational level, health status, gender, leisure – and while a number were statistically significant their presence in the models did not change the results for the two variables of interest, so to economize on space we chose not to report them here. The nation-state characteristics (i.e. characteristics of the collectivity) are captured by a quadratic term for real per capita gross domestic product at purchasing power parity, representing not simply wealth and level of development, but many other highly correlated variables as well – the nonlinearity captures the toll taken of life satisfaction by rapidly increasing aspirations at greater levels of wealth (i.e. the Easterlin effect). Finally, by including the cross-level interaction of individual-level income and country-level per capita GDP we sought to determine whether higher personal income is more or less important at different levels of development. Such interaction of person-level and country-level variables is becoming standard in multilevel modeling (e.g. Rabe-Hesketh and Skrondal, 2008), as well as in the life satisfaction literature (e.g. Inglehart et al., 2008). Other measures of social capital have been proposed, with both Lane (2001) in the case of developed democracies and Putnam (2001) in the case of the US arguing that social capital has declined, but the WVS data do not permit a comprehensive cross-national investigation of the role of this variable.

The dependent variable is ordinal. It is natural then to use ordinal logistic/probit regression, a practice adopted by most of the economics literature (e.g. Alesina et al., 2004; Di Tella et al., 2001a,b; Van Praag et al., 2003). But it turns out that discrete choice modeling of life satisfaction is of little importance: most of the psychological literature uses ordinary least squares (OLS) and hence assumes cardinality of the life satisfaction measure and comparison of OLS and ordinal logistic regressions finds differences to be negligible (Ferrer-I-Carbonell and Frijters, 2004). The reason is that there are ten categories on the dependent variable, and hence it approaches continuity.

Consistent with the foregoing we might have started by running an OLS regression of life dissatisfaction on the independent variables listed in Table 2 using the entire sample of 68,361 observations. However, the structure of both data and our model is multilevel. Hence, Maximum Likelihood Estimation of the resulting Hierarchical Linear Model (MLE/HLM) is the more appropriate method to use. The HLM results for the entire dataset appear in the first column of Table 3. A positively signed coefficient indicates that as an independent variable increases in value or a trait is present, life dissatisfaction increases, as with age, divorce and unemployment. A negative sign indicates that as the variable increases or the trait is present, life dissatisfaction decreases (satisfaction increases), as with personal income, marriage and national wealth. The significant positive coefficient for the interaction of personal

Table 3

Factors associated with life dissatisfaction.

	Entire sample	High income countries ^a	Lower income countries ^b
Intercept	5.76***	5.67***	5.59***
Settlement < 2000	0.01	-0.15***	0.04
City>500,000	0.04	0.07*	-0.01
Income	-0.29***	-0.21***	-0.35***
Married	-0.28***	-0.43***	-0.16***
Divorced	0.21***	0.15***	0.26***
Unemployed	0.58***	0.97***	0.47***
Age	5.48***	5.50***	4.53***
Age ²	-5.48***	-5.76***	-4.16***
GDP/cap in PPP (0000)	-1.45***	-1.47***	0.87
GDP/cap ²	0.11	0.15*	-2.73
Inc. x GDP/cap	0.07***	0.04*	0.18*
N	68,361	27,784	40,577

* $p < 0.05$.** $p < 0.01$.*** $p < 0.001$.^a GDP/cap > \$10,000.^b GDP/cap < \$10,000.

income and GDP shows, consistent with Easterlin, that higher incomes in richer countries are associated with increased dissatisfaction, presumably because of rapidly rising aspirations. All of the personal characteristics are significant and have the expected signs, but *neither rural nor big-city residence has a statistically significant association with life dissatisfaction at the global scale.*

Received theory suggests that there may be contrasting patterns that are cancelled out at global scale, however: as countries develop there should initially be a preference for urban living that is pushed aside by the problems of urban life and an increasing preference for rural living as development progresses. To examine this question countries were divided into two groups, those with per capita gross domestic products exceeding \$10,000 at purchasing power parity and those with less – Appendix 1 contains the lists.⁴ HLM regressions were repeated for these two groups, as shown in the second and third columns of Table 3. Once again individual-level determinants of dissatisfaction/satisfaction are all significant with the expected signs, with marriage, unemployment and age more potent where per capita GDP is higher, and personal income more important where it is lower.⁵ Per capita GDP (i.e., level of development) itself is a significant source of life satisfaction in higher income countries, but not where levels of wealth are lower, and in both cases higher personal incomes where per capita GDP is greater bring greater life dissatisfaction, as Easterlin would have predicted. And what of place of residence? *Where per capita GDP exceeds \$10,000, residence in large cities is associated with higher levels of dissatisfaction and rural residence with greater life satisfaction.* The latter coefficient is double the former, indicating that satisfaction with rural life is the more potent force, consistent with Berry's notion of counterurbanization (Berry, 1980). Where per capita GDP is less than \$10,000, however, neither place of residence nor national wealth are statistically significant: life dissatisfaction is driven by personal income, divorce, unemployment and age. The preference for rural living only appears at higher levels of development and income.

Might there be other variables at work? Choay (1965) argued that the preference for rural living was an Anglo-Saxon trait not shared by European regions of Latin heritage. To assess this argument HLM regressions were repeated for the subsets of Anglo-Sax-

⁴ We tried a range of cutoff points between \$9000 and \$11,000 and the results were robust.

⁵ This variation in parameters between the two groups is the reason we did not estimate a single equation with dummy variables for the two groups of countries: such a formulation would have assumed that the effects of, for example, age were constant across the entire sample.

Table 4

Test of the Choay hypothesis.

	Anglo-Saxon	Latin
Intercept	4.13	3.74**
Settlement < 2000	-0.41***	-0.02
City>500,000	0.05	0.08
Income	-0.04	-0.45***
Married	-0.63***	-0.45***
Divorced	0.02	0.24***
Unemployed	0.52***	1.30***
Age	6.38***	6.96***
Age ²	-7.56***	-5.99***
GDP/cap in PPP (0000)	-0.65	1.53*
GDP/cap ²	0.10	-0.75***
Inc. x GDP/cap	-0.63***	-0.45***
N	5260	14,258

* $p < 0.05$.*** $p < 0.001$.

on and of Latin nations described in Appendix 1. The results are set down in Table 4. *Rural living is a potent source of life satisfaction for the Anglo-Saxon group, but place of residence is not statistically significant in the Latin case.* Both personal income and per capita GDP are significant individually in Latin Europe, but not in the already-affluent Anglo-Saxon group and in both regions, contrary to Easterlin's expectations, higher personal incomes when per capita GDP is greater result in greater life satisfaction.

What of the possibility that there are different preferences for place of residence in culture regions other than the two just addressed, as comparative urbanists increasingly argue? Some descriptive statistics may be revealing. The countries with the lowest and the highest average levels of life dissatisfaction among residents of rural areas are:

	Lowest	Highest	
Netherlands	2.25	Ukraine	6.37
United States	2.33	Romania	6.38
Malta	2.40	Egypt	6.39
Switzerland	2.61	Macedonia	6.42
Denmark	2.64	Bulgaria	6.45
Canada	2.73	Pakistan	6.55
Ireland	2.78	Belarus	6.60
Iceland	2.89	Morocco	6.67
		Russia	6.73
		Moldova	6.78

Similarly, the lowest and highest mean scores for dissatisfaction with living in large cities are:

Lowest		Highest	
Colombia	2.56	Belarus	5.72
Finland	2.91	Egypt	5.73
Mexico	2.94	Turkey	5.74
Great Britain	3.05	Pakistan	5.78
Ireland	3.07	Moldova	6.03
Denmark	3.08	Russia	6.12
Austria	3.21	Romania	6.30
United States	3.30	Ukraine	6.35
Sweden	3.40		

Subtracting mean dissatisfaction levels with rural living from those of big-city residents yields the countries with the greatest relative unhappiness with rural life:

Dominican Republic	-2.05
India	-1.89
Vietnam	-1.73
Morocco	-1.73
Bulgaria	-1.23
Macedonia	-1.16
Bangladesh	-1.14
Belarus	-0.88
Nigeria	-0.88
Pakistan	-0.77

The same differencing yields the countries where relative dissatisfaction with big-city living is greatest. Although the spreads are not as extreme they are as follows:

Netherlands	+1.18
United States	+0.97
Kyrgyzstan	+0.85
Canada	+0.78
Spain	+0.60
Australia	+0.45
Denmark	+0.44

Major regional/cultural differences are suggested. To probe these, separate HLM regressions were run dividing the respondents into five groups, as listed in the Appendix: Latin America, the former Soviet bloc, Islam, Asia and Africa. The results are set down in Table 5. Place of residence is a source neither of dissatisfaction nor satisfaction in any of these groups, with one exception: *in Asia life satisfaction increases with big-city residence*.⁶ It is the individual-level cross-national differences that are the important sources of life dissatisfaction: age is not a significant factor in Asia or Africa, but is a potent source of unhappiness in the former Soviet bloc; in contrast, per capita GDP is highly significant and personal income insignificant in Asia and Africa, with the opposite true for the former Soviet bloc, etc. – all variations that should be of interest to comparative happiness researchers.

⁶ To satisfy reviewers of an earlier draft we also ran a pooled model that interacted the city size variables with each of the groups of countries reported in Tables 4 and 5 and the results did not change, except that the variations in parameters of the individual and contextual variables in the model were lost.

Overview

Where do these results leave us? To what extent is there support for received urban theory? We offer the following conclusions:

- Happiness is primarily an individual trait. Globally, life dissatisfaction is driven by personal characteristics. It is ameliorated by such characteristics of the collectivity as level of development and influenced by important cross-level interactions: higher personal incomes in richer countries elevate dissatisfaction, evidence of rapidly rising expectations. *There is no evidence that either rural or big-city residence raise or reduce unhappiness at the global level.* To the extent that there are cross-national spatial variations in life dissatisfaction other than those associated with level of development, they result from cross-national differences in age structure of the population, unemployment rates, etc.

This is not the end of the story, however. When the WVS data are split into higher and lower income subsets the personal characteristics remain significant but:

- At higher levels of development place of residence does influence life dissatisfaction, which is higher in large cities and much lower in rural areas. Rural residence increases happiness at double the rate that big-city residence boosts malaise.
- At lower levels of development only the personal characteristics are statistically significant: neither level of development nor place of residence are significant cross-nationally.

Probing further, among the wealthier countries of the world it is those of Anglo-Saxon heritage that display a strong level of satisfaction with rural living and dissatisfaction with big-city residence. On the other hand, European countries of Latin heritage display no preference for either rural or urban living. Elsewhere, the only group in which location is significant is Asia, where life dissatisfaction decreases with big-city residence. The Latin America group mirrors the European Latins. Life dissatisfaction among residents of the countries of the former Soviet bloc and in Islam is driven by personal characteristics and decreases with development, although in Islam there is also some evidence that dissatisfaction increases with rising personal incomes in the more affluent nations, and age is a potent source of dissatisfaction in post-Soviet societies. Finally, in Asia and Africa, personal characteristics vanish as drivers of unhappiness, save for unemployment. However, life dissatisfaction rises with per capita GDP, a sure sign that development is not keeping pace with rising expectations.

So to return to the beginning, recent observations and received theory are, like the proverbial Curate's egg, good only in parts. The *Daily Telegraph* correctly captured the upper-income Anglo-Saxon preference for rural life, but Angst's notion that the pattern of preference is the reverse of that of settlement needs to be rethought. With the exception of rapidly-urbanizing Asia there is no evidence of any greater satisfaction with urban living at lower levels of development. Veenhoven, in particular, is off target: in developed countries life satisfaction is greatest among rural residents. Elsewhere the rural variable is not significant, and only in Asia is there evidence of decreases in life dissatisfaction with big-city residence.

With respect to received urban theory, in the world's higher income countries residents of big cities do display greater levels of dissatisfaction with big-city life and Asia does evidence higher levels of life satisfaction in its big cities, the two contexts marking the beginning and the end of the rapid urbanization story. The pattern

Table 5
Regional variations in determinants of life dissatisfaction.

	Latin America	Former Soviet Bloc	Islam	Asia	Africa
Intercept	3.02***	4.94***	7.38***	-11.12*	4.71***
Settlement < 2000	0.00	0.02	0.10	0.09	0.59
City>500,000	0.07	0.06	-0.10	-0.39**	0.07
Income	-0.18***	-0.35***	-0.37***	-0.48	-0.23
Married	-0.15***	-0.18**	-0.20**	-0.17	-0.10
Divorced	0.08	0.31***	0.01	0.08	0.09
Unemployed	0.28	0.59***	0.45***	0.42**	0.56***
Age	3.83*	8.46***	3.47***	0.89	0.53
Age ²	-4.62**	-7.59***	-3.49**	-0.78	-0.12
GDP/cap in PPP (0000)	1.57***	0.81	-5.16*	144.42***	6.18***
GDP/cap ²	-0.80***	-1.51*	2.00	-291.25***	-7.74***
Inc. x GDP/cap	0.05	0.12	0.14*	0.57	0.07
N	2826	18,619	7534	3787	6993

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

is not universal, however: it is absent from both South America, from Islam, and from the countries of the former Soviet bloc. At the extreme, in Africa, the only factors driving dissatisfaction are unemployment and the development process itself. It is the lack of universality of expectations based upon received urban theory that should be a matter for concern: what the results presented here reveal is that the Wirth-based account of urbanism as a way of life is both developmentally and culturally specific and that different concepts may be essential for different places, hardly a new conclusion, but one that needs reiteration.

Appendix A. Group membership

Countries with PCGDP >\$10,000: Argentina, Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Greece, Hungary, Iceland, Iraq, Ireland, Israel, Italy, Japan, Luxembourg, Malta, Netherlands, New Zealand, Northern Ireland, Portugal, Puerto Rico, Republic of Korea, Saudi Arabia, Serbia and Montenegro, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan Province of China, United States.

Countries with PCGDP <\$10,000: Albania, Algeria, Armenia, Azerbaijan, Bangladesh, Belarus, Bosnia and Herzegovina, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Dominican Republic, Egypt, Estonia, Georgia, India, Indonesia, Iran, Jordan, Kyrgyzstan, Latvia, Lithuania, Macedonia, Mexico, Morocco, Nigeria, Pakistan, Peru, Philippines, Poland, Moldova, Romania, Russian Federation, South Africa, Tanzania, Turkey, Uganda, Ukraine, Uruguay, Venezuela, Viet Nam, Zimbabwe.

Countries in Latin group: France, Greece, Italy, Portugal, Spain.

Countries in Anglo-Saxon group: Australia, Canada, Great Britain, United States.

Latin America group: Argentina, Brazil, Chile, Peru, Puerto Rico, Venezuela.

Africa group: Algeria, Egypt, Morocco, Nigeria, South Africa, Tanzania, Uganda, Zimbabwe.

Asia group: China, India, Indonesia, Singapore, Taiwan, Viet Nam.

Islamic group: Indonesia, Iran, Iraq, Jordan, Morocco, Pakistan, Saudi Arabia.

Former Soviet Bloc group: Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Czech Republic, Estonia, Georgia, Hungary, Kyrgyzstan, Latvia, Lithuania, Macedonia, Poland, Moldova, Romania, Russian Federation, Serbia and Montenegro, Slovakia, Slovenia, Ukraine.

Appendix B. Summary statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
Life dissatisfaction	115,600	4.561548	2.580478	1	10
Settlement < 2000	83795	0.135605	0.342370	0	1
City > 500,000	83795	0.215598	0.411239	0	1
Unemployed	113,743	0.094881	0.293051	0	1
Income	102,750	4.577236	2.434490	1	10
GDP/cap in PPP (0000)	110,420	1.198690	1.019929	0.054097	4.979294
Married	116,261	0.618264	0.485814	0	1
Divorced	116,261	0.121382	0.326572	0	1
Age	116,509	0.409044	0.162215	15	101

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